

VDOT
Virginia Department of Transportation

I-64 Hampton Roads Express Lanes (HREL)
Segment 1A

Contract ID No. C00117840DB112

Technical Proposal - Volume I

Electronic Submission

Date
August 17, 2022

Submitted by
Wagman-Fay SE JV
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York, PA 17406

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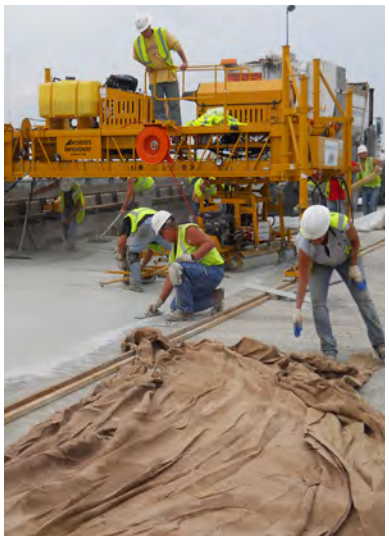
Joint Venture

WAGMAN
General Construction | Heavy Civil | Geotechnical

FAY SOUTHEAST
S&B USA CONSTRUCTION

Lead Engineer

WALLACE MONTGOMERY
ENGINEERS | PLANNERS | SURVEYORS | CONSTRUCTION MANAGERS



4.1
Letter of Submittal

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August 17, 2022

Bryan W. Stevenson, PE, DBIA
Alternative Project Delivery Division
Virginia Department of Transportation
1401 East Broad Street
Richmond, VA 23219

RE: I-64 Hampton Roads Express Lanes (HREL) Segment 1A
A Design-Build Project | C00117840DB112

4.1 Letter of Submittal

Dear Bryan Stevenson:

Wagman – Fay SE, a Joint Venture (the JV) is pleased to submit our Technical Proposal for the I-64 Hampton Roads Express Lanes (HREL) Segment 1A Design-Build (DB) project. In accordance with the Letter of Submittal requirements for Section 4.1, we offer the following additional information for review:

4.1.1 Legal Offeror Name and Address: Wagman – Fay SE, a Joint Venture, with an address of 3290 North Susquehanna Trail, York, PA 17406, is defined as the legal entity who will execute the contract.

4.1.2 Declaration of Offeror's Intent: If selected, Wagman – Fay SE, a Joint Venture intends to enter into a contract with VDOT for the Project in accordance with the terms of this RFP.

4.1.3 Validity of Offeror: Wagman – Fay SE, a Joint Venture, affirms that our offer represented by the Technical and Price Proposals will remain in full force and effect for one hundred twenty (120) days from the date the Price Proposal is actually submitted to VDOT.

4.1.4 Authorized Representative/Point of Contact:
Glen Mays, DBIA, Design-Build Project Manager
26000 Simpson Road, North Dinwiddie, VA 23803
(P) 804.631.0000; (F) 804.733.6281
(E) gkmays@wagman.com

4.1.5 Principal Officer Information:
Greg Andricos, PE, President & COO
3290 North Susquehanna Trail, York, PA 17406
(P) 717.767.8292; (F) 717.767.5546
(E) gmandricos@wagman.com

4.1.6 Final Completion: Wagman – Fay SE, a Joint Venture proposes a final completion date of December 15, 2025.

4.1.7 Unique Milestone Dates: Wagman – Fay SE, a Joint Venture proposes to open all lanes to traffic in final configuration by November 25, 2025.

4.1.8 Executed Proposal Payment Agreement: Wagman – Fay SE, a Joint Venture has included an executed Proposal Payment Agreement in the Appendix.

4.1.9 Certificates Regarding Debarment: Signed Certificates Regarding Debarment Forms from all team members are included as an attachment in the Appendix.

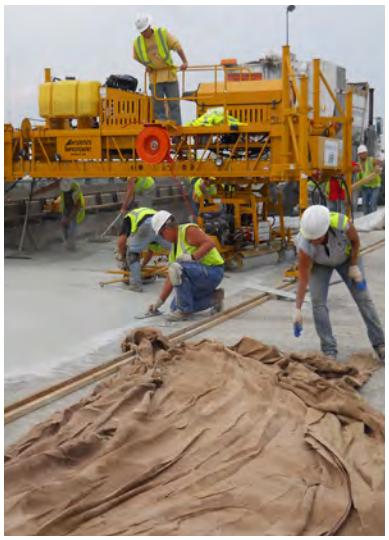
4.1.10 Commitment to DBE Participation: Wagman – Fay SE, a Joint Venture commits that we will achieve the 12% DBE participation goal for the entire value of the contract.

4.1.11 Team Registration Requirements Statement: Wagman – Fay SE, A Joint Venture, confirms that all commercial and professional registration requirements contained in our Statement of Qualifications, including, but not limited to those requirements of the Virginia State Corporation Commission (SCC) and the Virginia Department of Professional and Occupational Regulations (DPOR) are complete and accurate and that the JV, and business entities on our Team, remain in good standing with all applicable regulatory bodies and are eligible to provide the services required on the Project.

The JV has a successful history serving Virginians on numerous projects. As a single, integrated DB Team, we will design and construct this project and ensure the greatest opportunity for success, including the potential for an expedited delivery. Thank you for the opportunity to submit our Technical Proposal.

Sincerely,
Wagman – Fay SE, a Joint Venture

Glen Mays, DBIA, Design-Build Project Manager



4.2

Offeror's Qualifications

Joint Venture

WAGMAN

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SAB USA CONSTRUCTION

Lead Engineer

WALLACE MONTGOMERY

4.2.1 Confirmation of True and Accurate Information

The offeror confirms the information in the SOQ remains true and accurate with the following exceptions.

The **Wagman – Fay SE, a Joint Venture Design-Build Team** (hereafter referred to as the DBT) confirms that the Key Personnel have not changed since the submission of the DBT's Statement of Qualification (SOQ) on March 3, 2022. However, the organizational chart and narrative have been updated to identify the new key positions, addition of Deputy Design Manager position, and non-key personnel changes. The DBT submitted a letter to VDOT requesting the staff changes in accordance with Part 1, Section 11.4 of the RFP and received appropriate approval via letter from VDOT dated August 1, 2022.

Additional Key Staff Positions per Part 1 – 4.2.1 of the RFP Documents – Our DBT had anticipated a need for and included the Environmental Compliance Manager and Incident Management Coordinator (non-Key Personnel) positions in our SOQ submittal. These staff have been replaced as follows:

- Environmental Compliance Manager (ECM, per RFP Part 2 – Section 2.4.9.2): Replace **Anne Giehuki** (Wagman-Fay SE JV) with **Julia Conners** (Wetland Studies and Solutions, Inc.). As ECM, Julia will actively participate in development of the project-specific Environmental Management Plan (EMP). She will be responsible for proper implementation of the EMP, including conformance of the construction means, methods and associated activities with all the applicable environmental requirements, project-specific environmental permit conditions, and all other applicable contractual commitments and requirements such as the environmental commitment requirements and applicable Road/Bridge Specifications.
- Contractor Incident Management Coordinator (CIMC, per RFP Part 2 – Section 2.10.2): Replace **Tyler Lenox** (Wagman-Fay SE JV) with **Robert "Danny" Plott** (Wagman-Fay SE JV). As CIMC, Danny will actively participate in development of the project-specific Incident Management Plan (IMP) and will be responsible for implementation of it. As the main Point-of-Contact in the case of an incident, Danny will be on site for the duration of the construction and will respond to all incidents within the project limit. Danny is familiar with and has significant experience with application of National Incident Management System (NIMS) principles and practices to projects with similar characteristics and complexities.

Addition of Deputy Key Personnel per Part 1 – 4.2.1 of the RFP Documents

- Deputy Design Manager (DDM): Julia Simo, PE (Wallace Montgomery), resume included in Appendix 4.2.1.

Non-Key Personnel Replacements Identified on the Organizational Chart

- ITS Infrastructure Design: Replace Tiger Harris (Iteris), voluntarily terminated employment with Patrick Ramirez, EE, PE (Iteris) with 27 years of relevant experience.
- Latex Superintendent: Replace Dave Baker (Wagman-Fay SE JV), retired-voluntary terminated employment, with Ryan Luttenberger (Wagman-Fay SE JV) with 13 years of relevant experience.

Updates to the Organizational Chart shown in Figure 4.2.1 are shown in red and reflect the addition of the Deputy Key Personnel and replacement of the positions as indicated above.

Availability of Full-Time Key Staff

- Richard Allen (Quinn Consulting Services), Quality Assurance Manager: Richard is currently assigned full-time to the I-66 Outside the Beltway P3 Project through 12/3/2022. He will be on-site full-time when construction commences.
- Scott Rhine, PE, DBIA (Wayman-Fay SE JV), Entrusted Engineer in Charge: Scott is currently working on pursuits based out of the corporate office and shall be assigned to the Project full-time for the duration of the Project once design activities begin. Scott's assignment to the Route 234 Brentsville Interchange DB project will be complete 08/2022. He will be on-site full-time from commencement of construction through Final Acceptance.
- Durant Walters, PE, DBIA (Wayman-Fay SE JV), Construction Manager: Durant is currently overseeing various Norfolk Shipyard projects and the EFLHD Ft. Eustis Bridge Reconstruction. Durant will be available during the design and preconstruction phases for I-64 IA and will be on-site full-time when construction operations commence in the 2nd quarter of 2023. After which time he will remain on-site full-time until the Project is completed in December 2025.

4.2.2 Organizational Chart and Revised Narrative

As previously mentioned, the DBT had already included the ECM and CIMC positions in the organizational structure as part of our SOQ submittal. As such, the chain of command and the functional relationships among the positions as described in our SOQ narrative remains unchanged, true, and accurate. With the introduction of the two new key positions (ECM and CIMC), we have further enhanced the following communication lines given the roles and responsibilities of CIMC as follows:

- CIMC reports directly to DB Project Manager and has direct lines of communication to the Public Outreach Coordinator, VDOT Incident Management Coordinator, Emergency Agencies and Virginia State Police.

Provided on the following page is our revised SOQ Organizational Chart with red-line markups of the proposed changes previously approved in writing by VDOT.

Legend

- Key Personnel
- Design Team
- Construction Team
- Construction QA/QC
- Deputy Resumes Included in Appendix
- Value Add Staff
- Direct Reporting
- Communication
- * DBE/SWaM

WF = Wagman/Fay SE JV
WM = Wallace Montgomery
CC = Curtis Contracting, Inc.
BC = Bowman Consulting
DMY* = DMY Engineering Consultants
HWR* = Hassan Water Resources
EXP = EXP US Services
FT* = Floura Teeter Landscape Architects
I = Iteris
PCC* = Polizos & Co Communications
QCS = Quinn Consulting Services, Inc.
WS = Wetland Studies and Solutions, Inc.

Third Party Stakeholders

- Norfolk Naval Station
- VA Port Authority Norfolk International Terminal
- Forest Lawn Cemetery
- Norfolk Police Dept, Third Patrol Division
- Hampton Roads Connector Partners
- Federal Highway Administration
- US Coast Guard Virginia Sector
- Hampton Roads Military & Federal Facilities Alliance
- Hampton Roads Transportation Planning Organization
- Virginia Maritime Association
- City of Norfolk Officials
- Public Schools
- Adjacent Communities/Local Residents/Businesses
- Apartment Complexes/Senior Care
- Police/Emergency Agencies

Coordination with Adjacent Projects

HREL Segments 1B, Segment 2 and Segment 3 (HRBT)

VDOT Office of Communications
Hampton Roads

VDOT — I-64 Hampton Roads District Project Manager

JV Executive Committee
Greg Andricos, PE (WF)
Kevin Rihn (WF)
James McNelis (WF)
Anthony Bednarik, DBIA (WF)

Public Outreach Coordinator
Lynn Polizos (PCC*)

DB Project Manager
Glen Mays, DBIA (WF)

Entrusted Engineer In Charge
Scott Rhine, PE, DBIA (WF)

Safety Director
Andrew Weston, CSP (WF)

Incident Management Coordinator
Robert "Danny" Plott (WF)
~~Tyler Lenox (WF)~~

DBE/EEO Officer
Jeanie Jones (WF)

Design QA Manager
David Borusiewicz, PE, DBIA (WM)

Design Manager
Eric Sender, PE, DBIA (WM)

Deputy Design Manager
Julia Simo, PE (WM)

Design QC Manager
Mark Ledebur, PE (WM)
Shankar Nair, PE, SE (EXP)

Construction Manager
Durant Walters, PE, DBIA (WF)

QA Manager
Richard Allen (QCS)

Document Controls
Randy Sprinkle (WF)

QA
Lead Roadway QA Inspector
Lead Bridge QA Inspector
QA Lab
Supporting QA Inspectors

QC Manager

QC Team
Lead Bridge QC Inspector
Lead Roadway QC Inspector
Supporting QC Inspectors
AMRL/CCRL Lab Testing

Design Team

Bridge Design
Jeff Evans, PE (WM)
David LaBella, PE (WM)
Amir Arab, PhD, PE (EXP)

Roadway Design
Julia Simo, PE (WM)
Jesse Glasser, PE (WM)
Faisal Hameed, PhD, PE (EXP)

Geotechnical Engineer
Peng "Paul" Zhang, PE (DMY*)

Drainage/H&H/SWM/ESC
Diane Durscher, PE (WM)
Gamal Hassan, PE (HWR)

Environmental/Permits
Jessica Klinefelter, CEP, CWB (WM)
Curtis Hickman (WS)

Value Engineering
Ian Millikan, PE, PMP, DBIA (WM)

Constructability
Mike Lewis (WM)

Pavement Design
Endri Mustafa, PE, PMP (EXP)

Retaining/Noise Walls
Matt Davis, PE (WM)

Noise Analysis
Ray Moravec, PE (WM)

Right-of-Way
Ronnie Van Cleve (BC)

ITS Infrastructure Design
Patrick Ramirez, EE, PE (I)
~~Tiger Harris (I)~~

ITS Integration
Dwight Shank (I)

Utility Coordination/Design
Richard Bennett (BC)

Lighting/Signing/Marking
Robert Evans, PE, PTOE (WM)

TMP/MOT
Ryan Mattern, PE, PTOE (WM)

Landscape Architecture
Jeff Stump, PLS, LEED, DBIA (FT)

Survey/Subsurface Utilities
Joey Cobb, LS (BC)

Environmental Agencies
USACE, DEQ, VMRC, DGIF, NMFS, USFWS

Third Party Property Owners

Utility Owners
Verizon, Lumen Technical (Level3), Dominion Virginia Power, Cox Communications, HRSD, City of Norfolk Public Works, Segra, VA Natural Gas, Windstream

Construction Team

Geotechnical Expert
Ed Laczynski, PE (WF)

Geotechnical Superintendent
Keith Hildebrandt (WF)

Environmental Compliance Manager
Julia Conners (WS)
~~Anne Gichuki (WF)~~

Project Superintendent
Edwin Alvarado (WF)

Roadway Superintendent
Brian Blankenship (WF)

Structure Superintendent
Hardy Maeding (WF)

Latex Superintendent
Ryan Luttenberger (WF)
~~Dave Baker (WF)~~

Noise/Retaining Wall Superintendent
Mike Dugan (WF)

Innovative Materials
Brandon Zerilla (WF)

Constructability
Steve Pletcher (WF)

Paving/Grading Superintendent
Martin Harrell (CC)

Utility & ITS Coordinator
Juan Doron (WF)

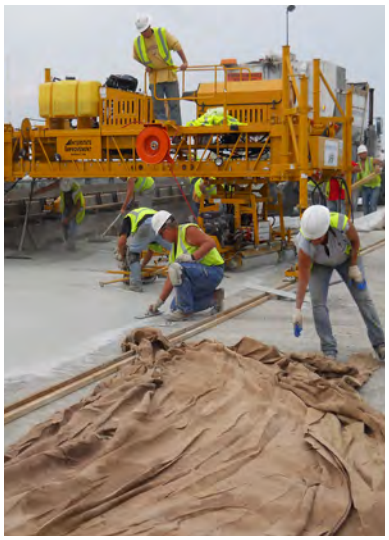
Utility & ITS Superintendent
Tracy Hare (CC)

MOT Manager
David Creasey (WF)

Project Scheduler
Jason Esser, PE (WF)

Survey Manager
Michael Hootman (WF)

Subcontractors*



4.3
Design Concept

Joint Venture

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FAY SOUTHEAST
S&B USA CONSTRUCTION

Lead Engineer

WALLACE MONTGOMERY

Introduction

The I-64 Hampton Roads Express Lanes (HREL) Segment 1A Project (Project) is a critical segment of the VDOT's HREL Program that provides direct access from the interstate network to Naval Station Norfolk and the Norfolk International Terminal. Our Design Build Team (DBT) has the experience, skill, and deep bench of local staff, equipment, and resources needed to safely deliver the project at a reasonable cost. We will open all lanes to traffic on our Unique Milestone Date of November 25, 2025, twenty days before the contract completion date.

Our DBT has decades of experience working together on projects throughout the Mid-Atlantic, such as the $105M Route 404 Dualization Design-Build project (Wagman and WM), $100M I-95 Northbound and $117M Southbound Rappahannock River Crossings (Wagman and Quinn), and the $55M Hatem Bridge Replacement Project (Fay and WM). We have learned over the years that the best way to deliver a design-build project is to "start right" by fully integrating the contractor and quality assurance firm into the design process. Our DBT's interdisciplinary collaboration began at the SOQ Phase to understand VDOT's priorities, the Hampton Roads Region, and project goals. Over the past several months, our team has become fully integrated so we can ensure that the design included in Volume II of the Technical Proposal is clear, constructible, and provides the absolute best benefit to VDOT.

Our design is completely contained within the right-of-way and easement limits shown in the RFP Conceptual Plans and does not require Design Exceptions and/or Design Waivers other than those identified in the RFP. Our Limits of Disturbance (LOD) are located within the boundary identified in the Categorical Exclusion.

In order to develop an efficient design that mitigates potential challenges within the corridor, our DBT held several risk and innovation workshops that included members of the entire team to identify areas of concern, mitigation strategies, and ways to improve the RFP Plans. As our design progressed, these workshops transitioned into full-blown task force meetings that focused on developing specific enhancements to mitigate risks and provide value:

Our enhancements maximize the benefits associated with this project for VDOT and end users by:

- Improving safety for the traveling public, construction and inspection personnel, and VDOT
- Maintaining logical traffic operations and providing lane continuity throughout construction
- Reducing schedule risk and expediting project completion, specifically opening all lanes to traffic early
- Utilizing innovative construction means and methods
- Minimizing VDOT's long-term inspection and maintenance requirements

The integrated DBT worked diligently to develop an Alternative Technical Concept (ATC) that provides every benefit listed above. By implementing this ATC, our DBT will be able to safely maintain the existing traffic operations on the I-64 HOV over I-564 and E. Little Creek Road bridge without requiring the 21-Day Full Closure allowed in the RFP. The benefits of keeping the HOV lane open during the rehabilitation of this bridge are numerous and far reaching:

- **Safely Maintaining HOV Commuter Driving Patterns and Providing Lane Continuity**: Drivers throughout the corridor will not be subjected to unexpected lane closures that suddenly alter their normal driving route and or change the directions advised by GPS mapping applications. This will be achieved with the use of the DBT's grandfathered single face barrier to separate traffic and provide additional safety for the construction crew in the work zone.
- **Maintaining Capacity on Mainline I-64**: The existing HOV lane over I-564 and E. Little Creek Road sees AADT of over 5,600 vehicles, which relieves congestion on the EB and WB I-64 general-purpose lanes during the AM and PM peak periods. The capacity on these highly traveled routes will not be degraded during rehabilitation of the bridge because traffic will still be allowed to access the HOV lane during construction.
- **Allowing for the Uninterrupted Collection of Toll Revenue**: VDOT will be able to continue collecting tolls on all existing HOV lanes throughout the construction of our project.
- **Eliminating the Schedule Risk for an Extended Closure**: Bridge rehabilitation is unpredictable because the subsurface condition of the bridge deck cannot be verified until the work begins. Our ATC will keep one lane of traffic operating on the bridge regardless of its actual condition.

DBT member Fay has recent and relevant experience performing similar construction operations that will be required for our ATC. As part of the accelerated median barrier replacement and lane reconfiguration project on US 50 over the Severn River, Fay was able to add a travel lane to the 2,856' long structure while keeping all travel lanes open. The travel lane addition was completed safely and ahead of schedule behind single face bolt-down temporary barriers.

Median Barrier Replacement on US 50 over Severn River Bridge

Exhibit 4.3.1

Summary of Structure Enhancements

ID	Enhancement	Benefits
S1	Strategic use of Micropiles	• Reduced utility impacts • Reduced construction footprint provides more travel lanes for secondary streets
S2	Reduction in number of girders on I-64EB over I-564	• Reduced steel surface area and number of bearings minimizes VDOT maintenance
S3	Strategic use of Very Early Strength Latex	• Reduced ramp/lane closure durations increasing mobility during construction
S4	Economized Wall Construction	• Reduced long-term inspection and maintenance

Summary of Drainage Enhancements

ID	Enhancement	Benefits
D1	Optimized Drainage Design	• Reduced Impacts to Utilities • Decreased Limits of Disturbance • Elimination of Conflicts with ITS
D2	Reduced number of proposed SWM facility locations	• Decreased Limits of Disturbance • Reduced Impacts to Utilities • Reduced Grading • Reduced long-term maintenance
D3	Reduced number of proposed trench drains	• Reduced long-term maintenance • Improved constructability
D4	Optimized Virginia Runoff Method (VRRM) Ratio	• Less required nutrient credits allows VDOT to apply excess nutrient credits to future projects
D5	Strategic placement of SWM facilities to use as temporary sediment traps for phased construction	• Decreased Limits of Disturbance • Reduced TCE • Safer/easier access to facilities for VDOT Maintenance
D6	Reduced storm drain crossing on I-64 Mainline and HOV lanes	• Reduced long-term inspection and maintenance • Improves trenchless operations • Improved constructability

Summary of Traffic Enhancements

ID	Enhancement	Benefits
T1	Pegasus Point-to-Point Mobile Broadband Fiber Bridge	• Redundant communications patch for uninterrupted ITS surveillance/incident management in corridor • Improved schedule adherence/reduces delays
T2	Dividing the project into 3 main segments	• Elimination of conflicts with adjacent project MOT • Reduced traffic shifts • Maximized efficient assignment and allocation of equipment and materials • Improves oversight of safety and quality • Minimizes risk for schedule delay
T3	ATC #1 - Alternate Bridge Construction Phasing/MOT for the I-64 HOV Bridge over I-564 and E. Little Creek Rd.	• Reduction in construction joints • Elimination of the permissible 21-day closure on I-64 HOV • Reversible lanes/tolling remains active during construction
T4	Use of temporary concrete barrier instead of drums for bridge rehabilitation	• Improved safety for construction & inspection workers, and VDOT
T5	Optimized the location of ITS equipment	• Improved maintenance accessibility • Removed the need for retaining walls
T6	Optimized Bridge Construction Phases for I-64EB over Granby St by introducing an option lane	• Simplified MOT • Reduced construction impacts to the traveling public
T7	Optimized Bridge Construction Phases for I-64EB/WB over Tidewater Dr by using strategic detours	• Simplified MOT • Reduced construction impacts to the traveling public
T8	Advanced integration and testing of permanent tolling devices	• Removed the integration and testing from the critical path
T9	Optimized construction access in the median for all phases	• Improved safety for traveling public, construction & inspection workers, and VDOT

Summary of Roadway Enhancements

ID	Enhancement	Benefits
R1	Optimized Tidewater Ramp C cross section and vertical alignment	• Reduced pavement buildup • Simplified MOT • Reduction of sliver fill area • Reduction of seeding • Decreased Limits of Disturbance • Reduced Impervious Area
R2	Elimination of I-564 Ramp B Retaining Wall	• Reduced excavation • Reduced materials • Simple Barrier (MGS) vs Special Design
R3	Strategic use of MGS-1 with Long Post	• Reduction of sliver fill areas • Reduced fill material • Reduces Limits of Disturbance • Reduced Impervious Areas
R4	Addition of a Pedestrian Refuge Island at East Little Creek Road	• Improved safety for pedestrians • Provided continuity between proposed and existing sidewalk • Continued operations from I-564 Off-Ramp onto E. Little Creek Rd • Adjusted medians, curbs, and lane markings to ensure existing turning movements can be maintained
R5	Reversed normal crown on I-564 Ramp B	• Reduced pavement buildup • Simplified MOT • Decreased Limits of Disturbance • Reduced Impervious Area

Legend

- HREL Segment 1A Project Corridor
- Bridges
- Roadway Enhancement
- Structure Enhancement
- Drainage Enhancement
- Traffic/ITS Enhancement

INTERSTATE 64

INTERSTATE 564

GRANBY STREET

EAST LITTLE CREEK ROAD

TIDEWATER DR

Corridor Wide Enhancements

T1 T2 T5 T8 T9 R3 S1 S3 S4 D1 D2 D3 D4 D5 D6

4.3.1 Conceptual Roadway Narrative

Our Conceptual Plans transform Segment 1A of I-64 from an interstate corridor with reversible lanes to a Transportation Systems Management & Operations (TSMO) that improves mobility, safety, and travel time reliability. To the east of I-564, the existing four-lane roadway with two general-purpose (GP) lanes in each direction is expanded to eight lanes with two GP lanes, a tolled express lane, and a part-time shoulder use lane (PTSL) in each direction. To the west, the eight-lane roadway (three GP lanes in each direction and two reversible peak-hour tolled lanes) is expanded to provide three GP lanes and a tolled PTSL in each direction while maintaining the tolled reversible lanes. While there are no changes proposed to I-564, the I-64 HREL Segment 1A project will reduce congestion and improve travel time reliability for traffic accessing the Port of Virginia. Coupled with the recently completed Intermodal Connector, this Project improves economic development in Hampton Roads, the Commonwealth of Virginia, and other states across the Mid-Atlantic region.

The requested details relating to the geometry, alignments, typical sections, drainage and SWM, noise barrier, ROW and utility impacts, lighting, barrier, pavement overlay and build-up, tolling infrastructure, and other key roadway design features are included in Volume II. A brief description of the criteria and enhancements for each are provided below.

General Geometry: The proposed improvements to the I-64 and I-564 mainline and I-64 Reversible Lanes have been designed using GS-INT criteria with a 60 mph design speed for the mainlines and a 70 mph design speed for the reversible lanes. Ramps are designed with the GS-R criteria and a design speed of 25 mph to 50 mph. In addition to the interstate improvements, the design includes improvements to Granby Street, E. Little Creek Road, and Tidewater Drive using the Urban Principal Arterial and GS-5 criteria. Our Design does not require any additional Design Exceptions or Waivers other than those identified in the RFP.

Horizontal Alignments: Horizontal alignments were designed to match the existing roadway to the greatest extent possible in an effort to promote efficient construction operations. All horizontal alignments meet RFP geometric requirements and remain within the existing and proposed ROW. The use of MGS-1 with Long Post reduces the embankment widening width and construction impacts. R3 Crown points have been verified to ensure they are not located in the wheel paths of vehicles to mitigate safety concerns and improve rideability.

Maximum Grades: Vertical profiles use spline grades everywhere possible to mimic existing conditions and minimize vertical adjustments. This improves construction operations by reducing the amount of cross-slope adjustments and temporary drainage modifications that will be required. All proposed grades are within the tolerances allowed by the RFP.

Our proposed vertical profiles generally match the RFP concept with exception of optimizations that we have designed on the Tidewater Ramp C profile. R1 We designed a spline grade at this location to reduce pavement buildup, simplify MOT, and improve temporary drainage. This profile improvement also reduces seeding, sliver fill areas, decreases limits of disturbance, and would also reduce SWM requirements; providing a project that is more constructible for the contractor and infrastructure that is easier for VDOT to maintain in the future.

Typical Sections: Typical sections for the roadways, ramps, and bridges are included in the Volume II – Conceptual Roadway Plans. Cross sectional elements required by the VDOT RDM Appendix A1 and highlighted RFP Attachment 2.2 are being followed. Cross-slope correction is implemented as required per the RFP throughout the project while matching existing conditions to the greatest extent practical. Our design improves the cross slope at the I-564 Ramp B by reversing the normal crown shown in the RFP typical sections to better match existing conditions, reduce pavement buildup, and improve constructability. R5

Conceptual Hydraulic and Stormwater Management Design:

Hydraulic Design – Our Team's hydraulic design efficiently conveys flows to adequate outfalls and/or major channels in a manner that will be safe for the contractor to build and efficient for VDOT to maintain. The use of culverts, open channels, storm sewer systems, underdrains, bridge deck drainage assemblies and structures, and downstream channel and flood protection measures were reviewed during the development of the conceptual plans so their vertical alignments could be optimized to reduce environmental impacts and conflicts with utilities and ITS facilities to the greatest extent practical. D1

The conceptual roadway and structural plans address all RFP spread requirements by spacing drainage structures to intercept pavement runoff in both final design and during all phases of construction. By reducing the amount of grading required through the use of MSG-1 with Long Post R3 and optimizing the location and length of retaining walls T5 T6, our design maintains the existing drainage patterns wherever practical. In addition, Section 2.7.1 of the RFP Technical Requirements identifies locations in which permanent trench drains are

allowed if the spread requirements cannot be met with standard VDOT inlets. We understand that trench drains are difficult for VDOT to maintain, so we challenged our drainage designers to only use them as a last resort. As a result, our design only requires 5 of the 16 conceptual trench drains D3, reducing the number of allowable trench drains by almost 70%. This significantly improves constructability and reduces VDOT's long term maintenance requirements for these facilities. Additionally, our enhanced design successfully eliminated several of the existing storm drain crossings under existing I-64 mainline and HOV, improving constructability and reducing long-term inspection and maintenance. D6

Stormwater Management (SWM) Design – To address the SWM quality requirements for the proposed improvements, several stormwater design configurations were considered. Our Team has developed an optimized solution to place two constructed wetlands near the Granby Street and I-564 interchange. These proposed facilities will not have significant impacts on the nearby existing non-jurisdictional wetlands and are designed to be easily maintained by VDOT. We have reviewed nearby wetlands to determine that the appropriate planting to be used in the constructed wetlands will naturally fit into the surrounding landscape. The locations were specifically chosen because they will be easy to maintain, provide maximum flexibility to adjust the boundaries of the constructed wetlands during final design, and allow VDOT to expand them in the future if desired. Our calculations show that the facilities will provide 0.7% more than the 20.3% requirement for post construction phosphorus reduction. D4

Flood control and channel protection are required for this project and will be addressed by the use of several different on-site techniques to avoid costly and difficult to maintain facilities. While the RFP Plans use underground detention pipes for peak discharge management, surface grading and revisions to the existing drainage patterns will be used to manage discharges in areas where topography and right of way constraints limit potential detention locations. Our drainage design was strategically optimized to meet water quantity requirements with surface storage methods wherever possible. In addition, our design will use many of the suggested stormwater locations near E. Little Creek Road and Tidewater Drive as dry detention surface storage facilities for 10-year peak discharge management and to provide energy balance. Temporary sediment basins and sediment traps will be constructed in the same location as the final surface storage facilities D5. Not only will this ensure positive drainage and compliance with permit requirements throughout each phase of construction, but it will facilitate constructability as the temporary sediment basins and sediment traps can be easily converted to their final configurations prior to project completion without additional impacts to the traveling public. The contractor will also be able to use these areas for construction staging and access before they are required for temporary stormwater management control.

Proposed Right of Way Limits: The DBT design is wholly within the permanent right-of-way (ROW) acquisition areas identified in the RFP and shown on the Volume II Roadway Plans. In addition, by optimizing the drainage design, D1 our design is able to keep almost all of the proposed drainage within the existing ROW. One short run of storm sewer near I-64 EB Station 1040 RT to I-64 EB Station 1044 RT will require a drainage easement as allowed by the RFP to replace the existing storm sewer in this area.

Proposed Utility Impacts: We have minimized utility impacts wherever possible by utilizing micropiles to support bridge widenings adjacent to existing piers near secondary roadways S1 and optimizing the drainage design D1. An itemized listing of each utility impact, as well as how each will be addressed, is described in Section 4.4.2.

Noise Barrier Locations: The project includes a new 28 to 30-foot-tall noise barrier between Stations 2834+00 LT and 2848+00 LT, along the shoulder of Ramp A of the Granby Street interchange. We have confirmed that the noise barrier will avoid utility impacts and be placed 4 feet behind an MB-7D concrete barrier. The noise barrier will be placed as close to the roadway as feasible to maximize its acoustic effectiveness and reduce the need for supplemental retaining walls. We understand that the noise barrier primarily benefits the Forest Lawn Cemetery, considered a Category C activity for noise analysis purposes.

We have reviewed the HRBT and HREL Noise Analysis Reports. Since receptor calculations for Category C activities do not have a standard quantitative procedure in the state of Virginia, both the HRBT and HREL Noise Analysis Reports appropriately determined noise impacts by utilizing a residential equivalent calculation. The HRBT Noise Analysis Report determined that the noise barrier along westbound I-64 at this location was reasonable and should be extended along the bridge over E. Little Creek Road. Interestingly, the HREL Noise Study Report analyzed a barrier that ended before the bridge over E. Little Creek Road, and found that this barrier was not reasonable.

We will reanalyze all potential noise barriers identified in the HRBT and HREL Noise Study Reports within our project limits to determine Feasibility and Reasonability based on the final alignment of our plans. We will acoustically optimize the location and size (height and width) of all noise barriers determined to be feasible and reasonable so that the costs associated with the construction of these noise barriers is as low as possible.

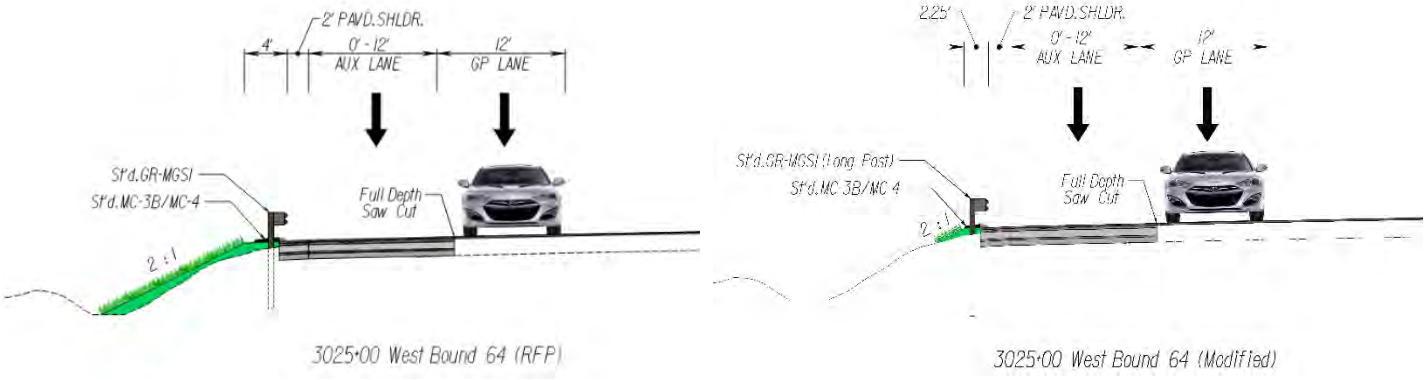
The Plan also includes removal and replacement of an existing combination retaining wall and noise wall between Stations 1023+00 and 1026+00 of eastbound I-64 that benefits several homes along Owens Lane and Naval Base Road. Wagman has recent and relevant experience performing this same activity on the I-95 NB Rappahannock River Crossing Project. To minimize noise impacts to protected residences during construction, DBT member Wagman developed an innovative solution that integrated portions of new wall with a new permanent top-down wall that allowed the majority of the existing noise walls to remain in place. We anticipate incorporating elements of this approach for this noise barrier on HREL Segment 1A.

I-95 NB Rappahannock Project Noise Barrier

Lighting: The DBT provides continuous lighting system using VDOT Standard LP-1 and/or LP-2 poles within the limits indicated in Section 2.9.5 of the RFP. Under bridge lighting systems will be provided in accordance with VDOT Manual of the Structure & Bridge Division, Part 2, Chapter 29; the VDOT Traffic Engineering Manual; and the VDOT Utility Manual of Instructions. Our design avoids impacts to the existing high-mast lighting within interchanges to maintain the functionality of the system throughout construction.

Guardrail and Barrier: All barrier and guardrail types, locations, and end treatments meet all RFP requirements. We have designed all end treatments for the reversible lanes to be "leading end." All barriers, hardware, and end treatments will be MASH compliant, MGS standard as noted in the December 2021 revision to the 2016 VDOT Road and Bridge Standards and VDOT Road Design Manual Appendix J. In addition, our design strategically incorporates the use of standard MGS-1 Long Post R3 to minimize the amount of sliver fills required throughout the project. This significantly reduces grading operations on side slopes, minimizes the limits of disturbances, reduces SWM requirements, and provides VDOT with a final product that is easier to maintain because sliver fills are prone to settlement after construction.

Figure 4.3.1 Use of MSG-1 Long Post to Minimize Sliver Fill



Locations of Mill and Overlay or Buildup of Existing Pavement: Our use of spline grades throughout the project, including the optimized layout of the Tidewater Interchange Ramp C R1 and reversing the normal crown on I-564 Ramp B R5 to minimize pavement buildup.

Tolling Infrastructure Locations: Our proposed ITS and tolling infrastructure devices and supporting infrastructure are shown in Volume II. Our DBT's approach to ITS design and installation is a direct result of the experience Iteris brings to our Team and reflects our understanding of the critical role ITS plays in supporting operational awareness at the HRTOC – especially the need to maintain continuity during construction to support safety and incident management operations in the corridor. We will extend the availability of CCTV views accessed by travelers and other users of VDOT traffic

Our exclusive DBT Member, Iteris, is a subject matter expert on ITS design and installation. They have held the VDOT ITS On-Call prime consultant contract for over ten years and have a proven track record of delivering ITS solutions for VDOT in the Hampton Roads District and throughout Virginia.

information sources to support public awareness of live traffic conditions in the corridor. This approach includes addressing sequencing and placement of fiber optic communications as an early construction priority to enhance the constructability of the project without impacting the construction schedule.

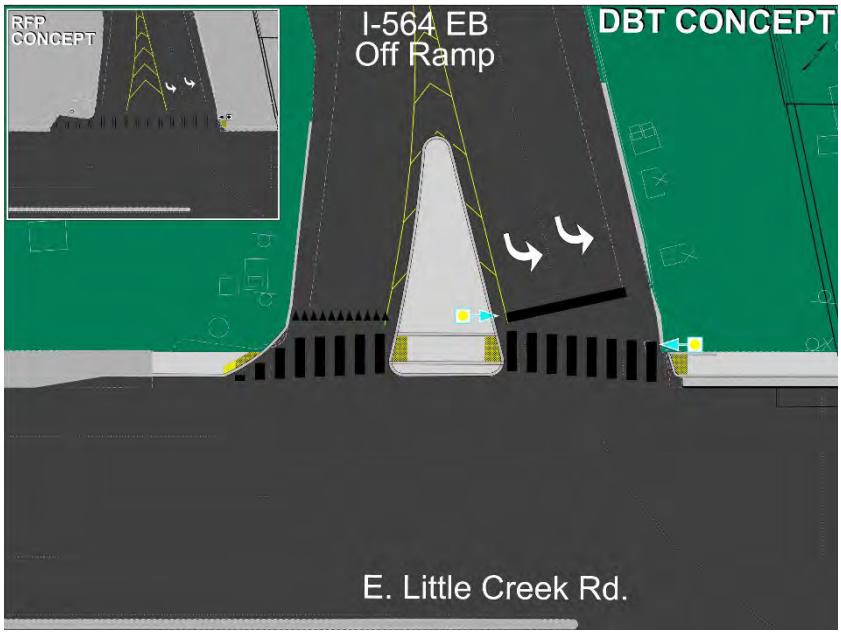
For example, the DBT proposes installation of fiber in newly installed median barrier from the western project limit extending approximately 2000 feet to near the Granby St. overpass. The DBT will utilize aerial fiber for temporary connectivity along with a point-to-point broadband fiber bridge back-up for those sections where construction activities preclude early fiber installation to maintain communications during early construction phases. Our DBT will perform early installation of fiber optic to advance integration and testing of permanent tolling devices. T1 T8 While often overlooked, our Team recognizes that ITS (and tolling devices) will require periodic maintenance. Our design will incorporate features to facilitate VDOT's maintenance providing device configurations and consistent cabinet layouts for technicians, as well as providing areas for easy device maintenance access, allowing VDOT to easily install new conduit and fiber when needed in the future by leveraging existing fiber plant. Our Utility and ITS Coordinator, Juan Doron, recently oversaw the successful integration of ITS and tolling facilities on the Texas Department of Transportation $840M SH 288 Express Toll Lane Expansion Project.


SH 288 Express Toll Lanes

Other Key Project Features: Our Roadway Design enhances the RFP Plans, while ensuring the design criteria identified in Attachment 2.2 are met and no additional Design Exceptions and Design Waivers are required other than those listed in the RFP. The DBT has ensured there are seamless transitions between the new work and the existing roadway elements that will remain, as well as identifying the coordination, means, and methods that will ensure seamless transitions with adjacent projects. The DBT's design enhancement are demonstrated in Exhibit 4.3.2 and further discussed in the following headings at the end of this section: Safety Enhancements, Operational Enhancements, Public Acceptance Enhancements, Schedule Enhancements, Construction Enhancements, and Enhancements That Reduce the Need for Future VDOT Inspection and Maintenance.

Our design includes additional key project features that are not specifically highlighted in sections above:

Pedestrian Facilities – The existing pedestrian accommodations on E. Little Creek Rd do not meet current standards for the Americans with Disabilities Act (ADA), and the concept shown in the RFP Plans does little to improve them. Our DBT reviewed this area in detail and developed a design that will significantly improve pedestrian access along E. Little Creek Rd without degrading operations of the I-564 EB off ramp. R4 As shown in the graphic to the right, our design adds a pedestrian refuge island with pedestrian signal heads to make it safer for pedestrians to cross the street. We can do this without increasing the Project's limits of disturbance or stormwater management requirements because the concrete island is simply replacing existing impervious pavement. Providing the concrete island allows the crossing of the signalized dual left turn movements to be separated from the crossing of the yield controlled right turn lane. The channelizing island will provide a pedestrian refuge area, shorten the effective crossing distance of the crosswalk and thus increase the overall pedestrian safety of the intersection.



Design Work Packages – As highlighted in section 4.5 and 4.6, the Team has divided the project into three distinct segments to maximize resource allocations, improve safety oversight, and reduce schedule risk during construction T2 . The segments were carefully chosen by reviewing existing and proposed drainage area maps to strategically determine where to best segment the project while taking stormwater management and drainage

into consideration during construction. The first segment, Segment A, aligns with the workzone overlap area for traffic operations associated with the adjacent HRBT project; segment B encompasses the middle of the project and contains the majority of bridge construction/rehabilitation; and segment C contains the Tidewater Drive Interchange and will include any workzone overlap with the adjacent HREL Segment 1B project.

In addition to improving construction operations, dividing the project up into these segments provides a significant design advantage. Our design team will initially focus on Segment A and prepare an early works package for this portion of the project. This design can be expedited because it does not include any bridge components; thereby allowing the contractor to complete the Segment A work in conjunction with the HRBT project to ensure lane continuity for the traveling public throughout the overlapping work zones. Our design team was specifically assembled with the combined resources from both WM and EXP so that the design of Segment B and Segment C can occur concurrently. Work packages associated with these segments will be assembled by independent teams focused on each Segment. Our Design Manager, Eric Sender, and Entrusted Engineer in Charge, Scott Rhine, will jointly lead weekly design coordination meetings to make sure the designs dovetail seamlessly with particular emphasis on maintenance of traffic operations and erosion and sediment control phasing. This approach will accelerate completion of the Approved for Construction (AFC) plans while making sure that each segment compliments the other to form one final contiguous project during construction and at final completion.

Retaining Wall Optimization – Our DBT design reduces the total square feet of retaining walls throughout the project by approximately 4500 square feet (a 20% reduction), considerably reducing the need for future inspection and maintenance by VDOT. S4 We also designed adjustments to retaining wall locations to avoid impacts to existing utilities and existing drainage patterns. Based on the RFP, there are a total of seventeen (17) potential retaining walls; six (6) of these are for ITS and tolling facilities and eleven (11) of these are for embankment retention. Specifically, our design was able to eliminate the I-564 Ramp B retaining wall by optimizing the roadway layout and associated grading operations in this area. R2 Our design was also able to eliminate six (6) retaining walls identified in the RFP Plans which were required to accommodate proposed cabinets for ITS equipment. T5 We were able minimize the need for these retaining walls by adjusting the location of the ITS cabinets and extending the MSE wingwall for the I-64 EB over E. Little Creek Rd bridge in a manner that also protected the existing cabinets.

4.3.2 Conceptual Structures Narrative

The Conceptual Structure Plans for the proposed widened bridges are included in Volume II. Provided below is an overall description of the structural characteristics and proposed design concept for the five (5) bridge widenings, three (3) bridge rehabs, and retaining walls. In preparation of our structural design, our DBT has prioritized the goals of improving safety, traffic operations, schedule, construction, and public acceptance. We have identified the most critical challenges and risks associated with construction of these structures to exceed the goals of the project and have incorporated these items into the development of our Concept as follows:

- The strategic use of micropiles at the piers and select abutments for the bridge widenings will avoid utility impacts at all five (5) bridges and will reduce construction impacts along the roadways below the bridges which will improve safety and operations for the traveling public. S1
- Widening of I-64 EB over I-564 will consist of two girders instead of three as proposed in the RFP, which will reduce the amount of steel area and number of bearings subject to future maintenance and inspection by VDOT. Elimination of several retaining walls will also reduce future maintenance and inspection required by VDOT. S2
- The strategic use of Very Early Strength Latex will reduce closure durations and limit impacts to the traveling public. S3
- Bridge rehabilitation on I-64 WB over Granby Street and I-64 WB over E. Little Creek Road will utilize standard concrete barrier in lieu of traffic barrels to provide positive separation between the work zone and vehicles. This will greatly improve safety for the construction crew, inspectors, and VDOT. T4
- Our ATC #1 provides improved construction phasing for the I-64 HOV bridge over I-564 and E. Little Creek Road, eliminating the 21 day full lane closure while improving safety and reducing the number of construction joints in the rehabilitated deck. This will provide VDOT with a better finished product, reducing future maintenance, and improving driver rideability. T3

The proposed rehabilitation improvements to the eight (8) structures outlined below will significantly reduce future maintenance costs and increase the service life and long-term durability of the widened and rehabilitated bridges by implementing jointless abutments at all bridges and jointless piers at six (6) of the bridges. In addition, all steel bearings will be replaced with low maintenance steel laminated elastomeric bearings.

Bridge Rehabilitation (I-64 EB & WB over Granby St.; I-64 EB over I-564; I-64 EB & WB over E. Little Creek Rd.; I-64 EB & WB over Tidewater Dr.; I-64 HOV over I-564 and E. Little Creek Rd.):

- Replacement of existing deck expansion joints with new flexible link slabs at pier locations will eliminate maintenance associated with future joint repairs/replacements, beam end repairs, and bearing replacements.
- Jacking for existing bearing replacement in accordance with VDOT Manual of the Structure and Bridge Division, Part 2, File No. 28.03.
- Miscellaneous bridge repairs performed in accordance with Section 412 of the VDOT Specifications.
- Bearing replacements will consist of steel laminated elastomeric bearings, providing a low maintenance bearing type compared to other bearing types.
- Type A milling and hydro-demolition and placement of a 2" minimum thickness Latex Modified Concrete Overlay to match the grade and alignment of the existing bridge deck will provide a durable and improved riding surface, alleviating safety concerns for the traveling public. Very early strength latex (VESL) will be strategically used at specific bridges, such as at I-64 EB over Granby St., and I-64 EB and WB over Tidewater Dr. to reduce lane/ramp closure durations and impacts to traffic. It will also be used on I-64 HOV Bridge over I-564 and E little Creek in conjunction with ATC #1 to avoid the required 21-day closure. S3
- Existing abutment retrofits will utilize a VDOT Micro-Abutment per VDOT Manual of the Structure and Bridge Division, Part 2, Section 32.09-4, to provide a jointless low maintenance substructure.
- Modification of existing approach slabs will reduce future maintenance at the approach roadway transitions.
- As a safety enhancement, all bridge rehabilitation work will be performed behind TCB to provide positive separation between the traveling public and construction operations. T4

DBT members Wagman and Wallace Montgomery collaborated in the successful use VESL at critical ramp locations on the MDTA's $55M project to rehabilitate 22 bridges on a tolled section of I-95 at the Fort McHenry Tunnel in Baltimore. Requiring over 15,000 CY - this was one of the largest domestic latex projects in America and safely achieved the maximum early completion incentive.

Bridge Widening (I-64 EB over Granby St.; I-64 EB over I-564; I-64 EB over E. Little Creek Rd.; I-64 EB & WB over Tidewater Dr.):

- Partial demolition will be performed along the outside shoulder of five (5) existing bridges to accommodate widening for a new managed lane to improve mobility along the limits of the corridor.
- Widened piers and Abutment B of the I-64 EB Bridge over I-564 will be supported on micropile foundations to facilitate construction, reduce lane closures, improve mobility, and avoid utility impacts. S1
- Placement of new CIP Concrete Deck along the widened portion of bridges, including new 42" F-Shape Concrete Parapet (BPB-4).
- New steel girders/beams will conform to ASTM A709W, Grade 50W, weathering steel, and will be painted in accordance with the RFP requirements. Beams/girders will be simply supported, composite sections connected with new steel channel diaphragms or cross frames and will be designed to accommodate future jacking needs.
- Flexible link slabs will be used at pier locations for bridge deck widening to a provide jointless, low maintenance superstructure.
- Proposed bearings will consist of steel laminated elastomeric bearings (BBD-9), providing a low maintenance bearing type compared to steel plate bearings.
- Widened sections of abutments will utilize a VDOT Micro-Abutment per VDOT Manual of the Structure and Bridge Division, Part 2, Section 32.09-4, to provide a jointless low maintenance substructure.
- Installation of new approach slabs will reduce future maintenance at the approach roadway transitions.
- Bridge lighting systems will be provided on all bridges carrying I-64 to light all roadways passing under I-64 for pedestrian and traffic safety and visibility.
- Girders and substructures are designed to accommodate future jacking for bearing maintenance/replacement.

Exhibit 4.3.2

B1: I-64 EB over Granby St

Geometry	Superstructure Improvements	Substructure Improvements
Total Bridge Length: 243'-10"	Bridge deck widening with erection of 2 new steel beams/girders	Widened abutments will utilize VA Micro Abutment Detail supported on prestressed concrete piles
Number of Spans: 4	Elim. 5 deck joints and replace with VA Micro Abutments and Flexible Link Slabs	New hammerhead type piers will be supported on micropile foundations to avoid utility impacts
Total Bridge Width: 69'-6"	Type A Milling & Hydro-Demolition	
Min. Vertical Clearance: 16'-6"	Placement of VESL	
Lanes Provided: 5	Bearing Replacement with Steel Laminated Elastomeric Bearings	

B2: I-64 EB over I-564

Geometry	Superstructure Improvements	Substructure Improvements
Total Bridge Length: 421'-1"	Bridge deck widening with erection of 2 new steel girders in lieu of 3 girders specified in the RFP to reduce total steel area for future VDOT maintenance & inspection	Widened Abutment A will utilize VA Micro Abutment Detail supported on prestressed concrete piles
Number of Spans: 4		Widened Abutment B will utilize VA Micro Abutment Detail supported on micropiles to avoid impacts to the high mast ITS facility at Abutment B
Total Bridge Width: 57'-3"	Elim. of 2 deck joints and replace with VA Micro Abutments	New piers will consist of multi-column and cap type piers supported on micropile foundations to reduce lane closures
Min. Vertical Clearance: 16'-3"	Type A Milling & Hydro-Demolition with placement of Latex Modified Concrete Overlay	Widened pier caps will utilize CRR steel reinforcement to extend the service life and durability of the reinforced pier cap and reduce VDOT's maintenance requirements
Lanes Provided: 4	Bearing Replacement with Steel Laminated Elastomeric Bearings	

B3: I-64 EB over E Little Creek Rd

Geometry	Superstructure Improvements	Substructure Improvements
Total Bridge Length: 186'-5"	Bridge deck widening with erection of 2 new steel beams/girders	Widened abutments will utilize VA Micro Abutment Detail supported on prestressed concrete piles
Number of Spans: 4	Elim. 5 deck joints and replace with VA Micro Abutments and Flexible Link Slabs	New piers will consist of hammerhead type piers supported on micropile foundations to reduce utility impacts and lane closures
Total Bridge Width: 80'-4"	Type A Milling & Hydro-Demolition with placement of Latex Modified Concrete Overlay	
Min. Vertical Clearance: 16'-3"	Bearing Replacement with Steel Laminated Elastomeric Bearings	
Lanes Provided: 5		

B-4: I-64 EB over Tidewater Dr

Geometry	Superstructure Improvements	Substructure Improvements
Total Bridge Length: 227'-8"	Bridge deck widening with erection of 2 new steel beams/girders	Widened abutments will utilize VA Micro Abutment Detail supported on prestressed concrete piles
Number of Spans: 4	Elim. 5 deck joints and replace with VA Micro Abutments and Flexible Link Slabs	New piers will consist of hammerhead type piers supported on micropile foundations to reduce utility impacts and lane closures
Total Bridge Width: 70'-8"	Type A Milling & Hydro-Demolition	
Min. Vertical Clearance: 14'-11"	Placement of VESL	
Lanes Provided: 5	Bearing Replacement with Steel Laminated Elastomeric Bearings	
	Deck drain system will control spread on bridge deck to mitigate safety concerns due to hydroplaning	

B5: I-64 WB over Tidewater Drive

Geometry	Superstructure Improvements	Substructure Improvements
Total Bridge Length: 200'-2"	Bridge deck widening with erection of 2 new steel beams/girders	Widened abutments will utilize VA Micro Abutment Detail supported on prestressed concrete piles
Number of Spans: 4	Elim. 5 deck joints and replace with VA Micro Abutments and Flexible Link Slabs	New piers will consist of hammerhead type piers supported on micropile foundations to reduce utility impacts and lane closures
Total Bridge Width: 85'-8"	Type A Milling & Hydro-Demolition	
Min. Vertical Clearance: 14'-7"	Placement of VESL	
Lanes Provided: 6	Bearing Replacement with Steel Laminated Elastomeric Bearings	
	Deck drain system will control spread on bridge deck to mitigate safety concerns due to hydroplaning	

B6: I-64 WB over Granby St

Geometry	Superstructure Improvements
Total Bridge Length: 280'-0"	Elim. 5 deck joints and replace with VA Micro Abutments and Flexible Link Slabs
Number of Spans: 4	Type A Milling & Hydro-Demolition with placement of Latex Modified Concrete Overlay
Total Bridge Width: 42'-8"	Bearing Replacement with Steel Laminated Elastomeric Bearings
Min. Vertical Clearance: 16'-6"	
Lanes Provided: 2	

B7: I-64 WB over E Little Creek Rd

Geometry	Superstructure Improvements
Total Bridge Length: 474'-8"	Elim. 10 deck joints and replace with VA Micro Abutments and Flexible Link Slabs
Number of Spans: 9	Type A Milling & Hydro-Demolition with placement of Latex Modified Concrete Overlay
Total Bridge Width: 42'-8"	Bearing Replacement with Steel Laminated Elastomeric Bearings
Min. Vertical Clearance: 17'-4"	
Lanes Provided: 2	

B8: I-64 HOV over I-564 & E Little Creek Rd

Geometry	Superstructure Improvements
Total Bridge Length: 474'-8"	Placement of VESL
Number of Spans: 9	Alternate bridge construction phasing will reduce construction joints in the rehabilitated deck to provide a better finished product, reduce future maintenance, and improve driver rideability.
Total Bridge Width: 42'-8"	
Min. Vertical Clearance: 17'-4"	Alternative rebar connection for the median barrier to rehabilitated deck will minimize time-intensive hand chipping demolition and maximize hydro-demolition efforts.
Lanes Provided: 2	

Safety Enhancements

Our DBT design improves safety for motorists, non-motorized users, construction and inspection personnel, and VDOT in the following ways:

The DBT is committed to Secretary Miller and Commissioner Brich's initiatives for safer work zones as evidenced in our TMP. We go above and beyond the minimum requirements by utilizing full length acceleration and deceleration lanes so construction vehicles can safely access the job site. In addition, we strategically place temporary concrete barrier (TCB) to separate all bridge construction activities from the traveling public to provide positive protection and do not simply rely on standard channelizing devices.

- The existing pedestrian accommodations at the intersection of E. Little Creek Road and the I-64 off-ramp currently operates with a yield controlled right turn. After evaluating several options, our DBT will provide a safer alternative that includes pedestrian signals and a refuge island for pedestrians. These accessible pedestrian signals, pushbuttons and crosswalk markings will provide an ADA-compliant pedestrian access route that not only is an enhancement, but also falls in line with the overall pedestrian plan for the region. R4
- Our ATC will keep the HOV lane open on the bridge over I-564 and E. Little Creek Road during construction, eliminating the 21-day shutdown allowed in the RFP. This will align with driver expectations throughout the corridor because commuters will be able to maintain their traditional driving routes without being interrupted during the shutdown. This will eliminate driver confusion in the workzone. T3
- The strategic use of micropiles for all pier foundations and select abutment foundations provides additional workspace for construction and inspection personnel. One area to highlight is the use of micropiles at Pier 3 for the I-64 EB Bridge over Tidewater Drive. The use of micropiles at this location reduces the height of installation equipment compared to standard rigging for pile driving and will provide additional clearance so Dominion Energy's existing overhead facility does not require relocation to accommodate means and methods. S1
- By fully integrating our designers, constructors, quality assurance staff, and safety professionals, we have designed a TMP that incorporates numerous safety enhancements:
  - Dividing the project into 3 segments to maintain lane continuity and meet driver expectations for traveling through the corridor. T2
  - Coordinating direct communication with the adjacent HRBT project to align our early work package (Segment A) with the HRBT traffic shift.
  - Providing positive separation between the travelling public and our work zones at all bridge structures by using TCB. This includes the use of ATC #1 – Alternate Bridge Construction Phasing/MOT for the I-64 HOV Bridge over I-564 and E. Little Creek Rd. T4
  - Designing job site access points that provide a safe refuge for construction vehicles to decelerate and accelerate when entering and exiting the work zone. This has proven to be successful on the I-95 SB and NB Rappahannock River Crossing Projects and is a positive lessons learned that we will carry over to HREL Segment 1A. T9

Full Length Acceleration & Deceleration Lanes for Construction Vehicles on II-95 NB & SB RRC Projects

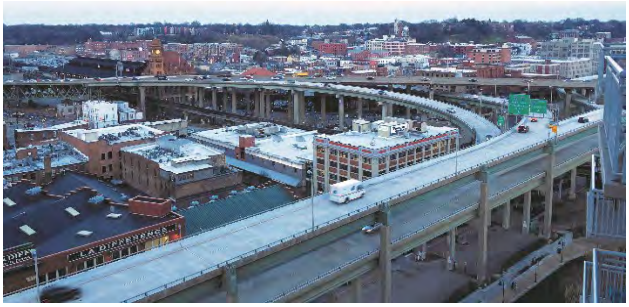
- Installing a Pegasus point-to-point mobile broadband fiber bridge throughout the corridor to provide a redundant communications patch to ensure there is no down time related to the ITS surveillance and incident management systems throughout the corridor during construction. T1
- Optimized drainage layout for drainage depth and locations of culverts that reduces the need for hazardous trenching operations required to install temporary and permanent storm drains, thereby minimizing the need for complex construction operations that are higher risk for construction workers. D1

Operational Enhancements

As soon as the RFP Information package was available, our DBT reviewed the RFP plans and the design year traffic models to understand how we could improve traffic operations during construction and after final

completion of the HREL Segment 1A project. We have incorporated the following enhancements that will improve corridor and intersection operations within the project area:

- Optimizing the Tidewater Ramp C profile to reduce impacts to the traveling public during construction by minimizing pavement buildup and simplifying the MOT. R1
- Committing to the use of micropile foundations at bridge pier widenings and select abutment locations to reduce utility impacts and minimize required lane closures for the secondary roadways below the bridges. S1
- Utilizing very early-strength latex-modified concrete (VESL) in critical bridge overlays to reduce closure durations associated with curing of standard latex-modified concrete (LMC). S3
- Installing the Pegasus point-to-point mobile broadband fiber bridge early in the project to ensure uninterrupted operations of the existing ITS and tolling facilities throughout construction. We will turn over this equipment to VDOT upon completion of the project so they can maintain a redundant system after construction. T1
- Dividing our project into three segments and coordinating construction of HREL Segment 1A with the HRBT and HREL Segment 1B to allow for a smooth transition with the adjacent projects with no interruptions to the traveling public. T2



DBT Member Wagman successfully used VESL in the rehabilitation of seven bridge structures owned and operated by the Richmond Metropolitan Authority in downtown Richmond, Virginia to maintain peak traffic flow on all ramps and reduce the need for weekend closures.

- Implementing our ATC to reconstruct the I-64 HOV Bridge over I-564 and E. Little Creek Rd without the permissible 21-Day Full Closure so the existing capacity on the I-64 eastbound and westbound general purpose lanes is not degraded. Closing the bridge would divert HOV traffic, current AADT of over 5,600 vehicles per day, onto the general purpose lanes, causing additional congestion during AM and PM peak period that could result in additional rear end collisions while the shutdown was in effect. T3
- Optimizing the I-64 EB Bridge over Granby Street sequence by providing an option lane for ramp access to I-564 HOV Reversable lanes will accelerate completion of the bridge rehabilitation, while limiting mobility traffic impacts. The reduced number of phases for construction will reduce the number of construction joints, alleviating future maintenance concerns, while also improving overall rideability. T6
- Optimizing bridge sequence of construction for bridges on I-64 EB and I-64 WB over Tidewater Drive by implementing alternative traffic patterns at the entrance and exit ramps to accelerate completion of the bridge rehabilitation while reducing traffic impacts along I-64. The reduced number of phases for construction will also reduce the number of construction joints, alleviating future maintenance concerns, while also improving overall rideability. T7
- Optimizing the drainage layout to reduce the number of roadway crossings, thereby reducing potential roadway settlement. D1 D6

Public Acceptance Enhancements

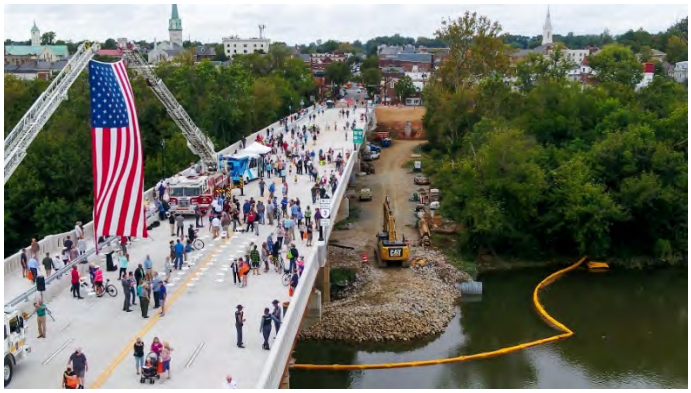
We understand that there are a lot of interested stakeholders that are invested in the success of the HREL Segment 1A project. The Norfolk Naval Station and the Virginia Port Authority Norfolk International Terminal are located nearby and the I-64/I-564 interchange, located within our project limits serves as a gateway for access to these incredibly important facilities that are vital to national security and the economic vitality of Virginia. In addition, this section of I-64 is located in the City of Norfolk (2020 population of 224,300) and carries a high volume of seasonal traffic during the summer months because it is a primary route for vacationers to access Virginia Beach, Sandbridge, and the North Carolina Outer Banks. I-64 is also designated as a hurricane evacuation route that may be used. Interruptions to existing and emergency traffic patterns must be minimized to the greatest extent possible to garner public support for the project during construction. Our DBT is committed to this mission, as evidenced by the following:

- Identifying a specialty subconsultant for public outreach, Polizos & Company Communications, that knows how to communicate transportation improvement projects located within the Hampton Roads region to the public. Our Public Outreach Coordinator, Lynn Polizos, has been instrumental in developing and executing public relations plans for project such as the Gilmerton Bridge Replacement Project in the City of Chesapeake,

the I-564 Intermodal Connector Project in the City of Norfolk, and the I-64/I-264 Pavement Rehabilitation Project in the Cities of Norfolk and Virginia Beach. She has experience communicating with all stakeholders involved on this project and will help deliver a positive narrative to the public.

- Utilizing the Pegasus point-to-point mobile broadband fiber bridge will not only provide redundancy for ITS and tolling operation VDOT, but it will also make sure that traffic cameras remain in operation throughout construction. These cameras are linked to VDOT's 511 system that the public relies on to monitor real time traffic conditions along the heavily congested I-64 corridor. T1
- Keeping the HOV bridge over I-564 and E. Little Creek Road in operation without requiring the 21-day shutdown will eliminate a public perception nightmare for VDOT. The Hampton Roads region is very attuned to lane closures that impact their regular driving patterns, and even with a robust public outreach campaign, closing the HOV bridge could cause a negative perception of the project. T3

Our DBT will create a positive narrative on HREL Segment 1A by regularly communicating traffic impacts during construction and focusing on the benefits the public will receive once the project is complete. We have done this successfully on many projects, including the recent reconstruction of the Chatham Bridge for VDOT's Fredericksburg District, the Route 35 Nottaway Bridge Replacement Design-Build project for VDOT's Hampton Roads District, and the I-95 Southbound Rappahannock River Crossing in VDOT's Fredericksburg District.



Schedule Enhancements

Our DBT is committed to opening HREL Segment 1A to traffic on November 25, 2025, two days ahead of Thanksgiving and 20 days ahead of the RFP final completion date. We have been able to accelerate our schedule and provide float for long lead time items, that are typically on the critical path, by optimizing the design of the project, improving constructability, and utilizing materials that expedite construction. Specifically, our design:

- Eliminates construction of a Retaining Wall at I-564 Ramp B by reducing excavation and construction operations in this location. R2
- Utilizes MGS-1 Long Post in lieu of standard MGS-1 to reduce grading operations by eliminating sliver fill areas. R3
- Deploys Very Early Strength Latex (VESL) modified concrete to reduce the curing time needed for standard LMC. S3
- Logically divides the project into three distinct segments to expedite design and construction activities. We have identified an early works package, Segment A, so we can begin coordination efforts with the overlapping HRBT workzones early on and eliminate potential schedule impacts caused by the adjacent project. T2
- Eliminates construction of several retaining walls identified in the RFP adjacent to ITS infrastructure by adjusting the location of the ITS cabinets to avoid conflicts with existing drainage patterns and utilities. T5
- Reduces the number of construction phases required to rehabilitate the existing bridges on I-64 eastbound and I-64 westbound by implementing alternative traffic patterns and flows at the entrance and exit ramps to accelerate completion of the bridge rehabilitation.

The DBT integrates the existing, highly skilled work forces of both Wagman and Fay SE which have a shared sense of urgency as evidence in the recent successful delivery of VDOT's $117M I-95 SB Crossing DB and $18M Chatham Bridge over the Rappahannock River, both of which achieved maximum early completion incentives.

- Reduces utility relocation timeframes by eliminating utility impacts adjacent to bridge piers and abutments through the use of micropiles S1 and by optimizing the drainage design to reduce impacts and maintaining the existing drainage pattern to the greatest extent practical. D1

Construction Enhancements

The following enhancements that our DBT has designed will allow construction operations to be performed safely and efficiently:

- Optimization of the Tidewater Ramp C R1, extending guardrail along Patrol Road, using MGS-1 with Long Post in lieu of standard MGS-1 R3, and eliminating the I-564 Ramp B Retaining Wall R2 simplifies construction by removing work activities, such as the sliver fills which would be needed to bench slopes if MGS-1 with Long Post was not used.
- Strategic use of micropiles at all bridge piers, and Abutment B for the I-64 EB bridge over I-564 S1 will eliminate problems caused by vibration that are frequently associated with traditional pile driving activities, minimizes the construction footprint required for pile driving installation equipment, reduces noise impacts to adjacent properties, mitigates utility impacts, and reduces the number of long-term closures in adjacent lanes. Our DBT will be able to construct Pier 3 on the I-64 EB Bridge over Tidewater Dr. without impacting Dominion Energy's existing overhead facility because the contractor will be able to use low-overhead equipment.

Micropiles will be used at all bridge piers so that the new foundations can be installed within the constrained site without requiring the long-term lane closures on adjacent roadways. DBT member Wagman safely installed micropiles on VDOT's $42M Route 7 DB Project without any long-term lane closures on the Dulles Toll Road or Dulles International Highway.

- By implementing our ATC, the DBT will be able to maintain one lane of traffic during the rehabilitation of the I-64 HOV Bridge over I-564 and E. Little Creek Rd. This allows the contractor to uncover the surface of the superstructure, determine the extent of the repairs that are required, and complete the rehabilitation without concern that the repairs will take more than 21 days to complete. T3
- The type, size, and location of our permanent stormwater management facilities has been reduced D2 and coordinated with the contractor to optimize construction efficiency. Temporary sediment traps and temporary sediment basins will be constructed when necessary (depending on construction sequencing and E&S phasing) in the exact location of the permanent facilities to expedite construction operations by reducing the amount of work required to construct the permanent basins. D5 In addition, the contractor will utilize these locations for staging areas before they are needed for temporary E&S controls to make it easier to access materials and equipment required for construction without impacting the traveling public.
- Minimizing construction activities required to install ITS cabinets. Our DBT has already performed extensive multi-disciplinary coordination to determine adjustments that can be made to the location of ITS cabinets to facilitate construction. This includes eliminating conflicts with retaining walls, utilities, and the existing drainage patterns. One such location is the ITS cabinet between I-64 HOV and I-64 EB at E. Little Creek Road. The RFP plans propose an ITS cabinet that requires an adjacent retaining wall and a proposed storm sewer pipe near the existing ditch. Our design removes this conflict by adjusting the location of the ITS cabinet to an area with less conflicts. T5

ITS Cabinet Locations are Optimized

Materials and Methods Chosen to Reduce Future VDOT Inspection and Maintenance

Our DBT's design has strategically considered the materials we will use on the HREL Segment 1A project, and the methods in which they will be placed to maximize the ultimate functionality of the system and reduce VDOT's need for future inspection and maintenance. Our considerations and enhancements include:

- Self-performing the installation of all permanent and temporary support of excavation, including the installation of phase line shoring, to eliminate impacts to existing structures and utilities that would potentially be caused by excavation.
- Installing MSG-1 with Long Post to reducing the amount of sliver fills throughout the corridor that are prone to settlement and cause maintenance concerns after construction. R3
- Eliminating retaining walls that will require future VDOT inspection and maintenance on the I-564 Ramp B R2 and those associated with ITS cabinets. T5
- Reducing the number of steel plate girders required for the widening of the I-64 EB over I-564 bridge to reduce the total steel area and number of associated bearings that will require future VDOT painting, maintenance, and inspection. S2
- Minimizing the number of construction joints on the HOV Bridge over I-564 and E. Little Creek Road T3, the I-64 EB over Granby Street bridge T6, and both the I-64 EB and I-64 WB bridges over Tidewater Drive bridges T7 to provide a better finished deck product, alleviate future maintenance concerns and improve overall rideability.
- Optimizing the project's drainage layout D1 and stormwater management design by maximizing the surface storage area to reduce subsurface peak detention. This provides VDOT with additional flexibility when considering resiliency for future impacts caused by climate and coastal system changes and reduces the number of stormwater management facilities that need to be maintained. D2
- Reducing the number of concept trench drains by almost 70% to dramatically increase safety for VDOT's maintenance personnel by minimizing their exposure to high-speed traffic. D3

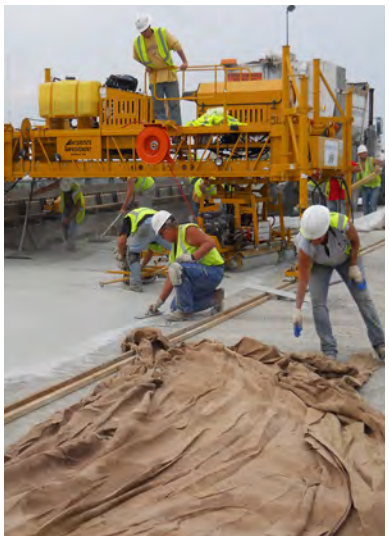
The DBT's wholly integrated approach to design, safety, quality, and construction led us to segmenting HREL Segment 1A into three distinct segments, providing maximum ability to mitigate risks and accelerate project delivery while improving safety and operations during construction. DBT members, Wagman, Fay, and Wallace Montgomery used this same approach in the successful delivery of recent projects.

MD 404 Design-Build

Wagman and Wallace Montgomery worked together on MDOT SHA's fast-track $112M MD 404 Design-Build roadway project. We segmented the project to complete design, permit acquisition, utility relocation, and construction in less than 18 months while achieving the maximum interim and final milestone incentives.

Fay and Wallace Montgomery used this approach on MDOT MDTA's $55M Hatem Memorial Bridge Rehabilitation completing 3 months ahead of schedule, and being named by Roads and Bridges Magazine as the #5 USA Bridge Project. Fay provided a resequencing plan, saving MDTA more than $350,000 and allowed the project to finish significantly early.

Hatem Memorial Bridge



4.4
Project Approach

Joint Venture

WAGMAN

FAY SOUTHEAST
SAB USA CONSTRUCTION

Lead Engineer

WALLACE MONTGOMERY

4.4.1 Environmental Management

Our DBT employs a diverse group of environmental experts who will ensure success throughout design and construction, guaranteeing compliance and eliminating schedule delays associated with environmental risks. Our approach to environmental management will address and carry out commitments considering Noise Impacts, Air Quality, Water Quality, Hazardous Materials, Cultural Resources, Threatened and Endangered Species, NEPA Studies, and other Natural Resources. Our proposed design and construction techniques also include enhancements that minimize or eliminate potential environmental impacts that could be caused by the Project without proper due diligence. In partnership with VDOT and permitting agencies, we will implement an environmental risk management program by taking the following approach during design and construction:

Table 4.4.1.1 – Approach to Environmental Risk Management

Design Mitigations
• Develop a comprehensive Environmental Management Plan (EMP) to provide team organization/contacts, identify risks and appropriate mitigation strategies, overview of all permits/commitments, environmental milestones/schedule, inspection schedules, environmental inspection checklists/reports, process for correction actions, and environmental training for project staff. A critical element of the EMP will be our Environmental Compliance Manager (ECM), an electronic data base of all permits and NEP commitments and conditions. The database will provide GIS & DGN layers for our designers to use to potentially reduce environmental impacts during design and by our construction and quality teams to track compliance.
• Confirm the design meets or exceeds all commitments of the NEPA documentation completed and approved by VDOT and the Federal Highway Administration (FHWA).
• Minimize the Limit of Disturbance (LOD) in the RFP plans by reducing the Project footprint wherever practical (we have reduced the amount of sliver fills required by placing MGS-1 with Long Post).
• Ensure that temporary and permanent stormwater management facilities are properly considered.
• Identify available mitigation credits in the U.S. Army Corps of Engineers Regulatory In-lieu fee and Bank Information Tracking System (RIBITS) database during development of our conceptual design to avoid unnecessary delays caused by stream and wetlands impacts.
• Reduce stream and wetland impacts to the greatest reasonable extent possible by identifying these areas in the design phase and during constructability review to best design around them.
• Incorporate time of year restrictions (TOYR) into the Project's schedule to meet crucial environmental commitments. A calendar for the TOYR associated with the Northern Long-Earned Bat is already incorporated in or schedule provided in Section 4.6.
• Avoid additional encroachments within Norfolk Naval Base Historic District to avoid time-consuming coordination and approvals.
Construction Mitigations
• Leverage the use of micropiles for bridge foundations to minimize environmental disturbance. Micropiles benefit noise, vibration, debris, spoils, land disturbance, and air quality because they allow for smaller, more fuel-efficient equipment.
• Our ECM will perform joint C-107 inspections with VDOT, QA/QC, DEQ, and E&S inspection staff in the field, document corrective actions, and follow up on their status until corrected. Our Drainage Design Lead will regularly participate in these inspections to ensure all SWM facilities and controls are functioning in accordance with her design.
• Maintain hydrology to the existing wetlands during construction.
• Monitor and document compliance with all commitments, considerations, permit conditions, and approval requirements during construction.
• Track the status of the change to federal listing of the Northern Long-Eared Bat (NLEB) and maintain a back up plan to accommodate possible changes in forest clearing restrictions and the need for acoustical surveys.

APPROACH DURING DESIGN | Our DBT has experience avoiding and minimizing impacts to the environment and natural resources on previous VDOT Design-Build (DB) projects such as the I-95 SB and NB Rappahannock River Crossings (RRC) projects for VDOT's Fredericksburg District and the Route 35 Bridge Replacement project for VDOT's Hampton Roads District. Using this experience, we have already hosted several environmental workshops during the development of our conceptual design for HREL Segment 1A to identify and assess the existing environmental conditions within the Project footprint. We specifically focused on methods to avoid and minimize impacts and mitigate the potential for delays in the following areas:

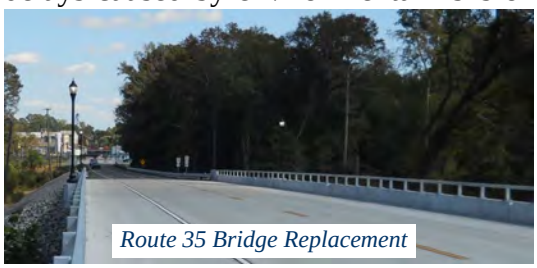
- **Cultural Resources** – Avoiding impacts to the two historic properties located within the Project's Area of Potential Effects (APE): Norfolk Naval Base Historic District & Forest Lawn Cemetery.
- **Stream and Wetland Impacts** – Reducing impacts to the approximately 0.28 acres of Waters of the US (which include jurisdictional roadside drainage ditches) and wetlands identified in the NEPA document.
- **Threatened and Endangered (T&E) Species** – Understanding the coordination requirements, potential time of year restrictions, and other special provision requirements associated with the Northern Long-Eared Bat (Myotis septentrionalis) and predicted habitat for Eastern Big-eared Bat (Corynorhinus rafinesquii macrotis) which were identified in the vicinity of the Project. TOYR are included in our Proposal Schedule.

- **Hazardous Materials** – Minimizing or eliminating impacts to the twelve properties within the Project corridor or right-of-way have that have been identified by the Department to have the potential for hazardous materials or contamination associated with them based on past or current use of the property.
- **Air Quality** – Identifying reasonable precautions to limit emissions of volatile organic compounds (VOC) and nitrogen oxides (NOx) during construction.

Managing the environmental process throughout the contract will be critical for ensuring the timely and successful completion of the I-64 HREL Segment 1A Project. Our DBT of designers and contractors worked with environmental staff to identify and assess all potential risk factors that could affect the Team's ability to deliver the Project on time and within budget. We have already performed site visits to familiarize our team members with the requirements, constraints, and development of strategies to avoid and minimize impacts to environmental resources. We are committed to implementing a comprehensive Environmental Management Approach that will provide an overarching system by which the Team will design and monitor the approved Environmental Commitments. This will include:

- Development of a comprehensive **Environmental Commitment Matrix** (ECM) – Our DBT will develop a comprehensive ECM that dovetails perfectly with the Project's Environmental Management Plan (EMP) to provide a decision-making flowchart and establish a set of protocols for all environmental compliance activities. The ECM will prescribe how to display environmental-related information on plans and will outline the Environmental Commitments, permits, and NEPA requirements with which the design, construction, and maintenance must conform. The design team will use the ECM to guide and verify that the design conforms with Environmental Commitments, permits, mitigation, and re-evaluations. Design QC and QA reviewers will use the ECM to ensure environmental commitments are met before plans are submitted to VDOT for review and/or approval.
- Hosting an **Environmental Kickoff Meeting** – We will hold a kickoff meeting between the environmental, design, QA/QC, and construction personnel before final design commences to review the EMP, provide an opportunity for project staff to ask questions and obtain clarification regarding environmental commitments from the team's environmental subject matter experts, and develop a schedule for future environmental reviews during design of the Project.
- Regular **Interdisciplinary Reviews** during design that involve environmental team members – The design team will include environmental team members (such as the contractor's ECM and the designer's environmental permit specialists) in their weekly interdisciplinary review meetings and constructability reviews. As part of this process, the environmental team will perform over-the-shoulder reviews of design work packages to confirm compliance with applicable environmental commitments and permits. We will pay special attention to project features that are often overlooked from an environmental perspective: temporary ESC measures, permanent SWM features, geotechnical boring locations, and utility relocations.

This process has proven to be a successful way to mitigate potential delays caused by environmental risks on many projects led by members of the DBT. For example, on the I-95 SB RRC DB project, Wagman worked hand-in-hand with the design and environmental teams to develop a detailed schedule for all in-stream activities to avoid TOY restrictions due to lack of access to the Rappahannock River. Similarly, on the Route 35 Bridge Replacement project, Fay coordinated with the designer so demolition work could be performed from a temporary bridge to avoid major environmental impacts. Both projects were completed ahead of schedule due to the DBT's ability to anticipate and mitigate potential environmental risks.


Route 35 Bridge Replacement

Minimizing the Limits of Disturbance (LOD): Another component of our DBT's approach to design is a concentrated focus on the LOD identified in the NEPA Document. Our DBT's design does not expand the LOD or require changes to the NEPA Document. We understand the delay this would cause to the Project's schedule and we will never consider expanding the LOD as a viable solution to any potential issues encountered during final design and construction of the Project. In fact, our DBT has already identified areas where we can reduce construction activities and either minimize the LOD or reduce the potential for construction activities to inadvertently extend beyond the LOD. This includes using the MGS-1 with Long Post to eliminate sliver fills on side slopes and using micropiles where feasible to reduce the Project's footprint during construction. Our optimized stormwater management design also reduces environmental impacts by placing temporary controls in the same location as permanent facilities and reducing the total number of permanent basins that will be required. We will also be able to reduce construction operations by maintaining the existing drainage patterns to the maximum extent possible and minimizing deep trenching activities.

APPROACH DURING CONSTRUCTION | The real environmental work is just beginning once permits and construction plans are approved. Our environmental staff have excellent relationships with the permitting agency staff because of our familiarity with regulations and ability to anticipate agency questions or concerns. These relationships are strong because our permit applications are perfectly organized, and our construction compliance paperwork is thorough. We will work together during construction to ensure permit requirements are adhered to, monitoring is completed as required and necessary, and documentation is kept up to date at all times. We have successfully completed multiple DB projects with involvement from all possible permitting agencies. We will bring the same spirit of partnering and environmental stewardship that we implement on every project to HREL Segment 1A to ensure the Project is constructed to the highest environmental compliance standards. Our commitment to the environment occurs at the beginning of the Project's lifecycle and continues through every step of construction:

Empowering an Environmentally Conscientious Workforce: We understand that stopping work in environmentally sensitive areas can sometimes reduce our risk for schedule delays caused by regulatory agencies. To emphasize this point, our DBT has developed and initiated an innovative Stop Work Program on all our construction projects. As part of this program, all employees assigned to the jobsite are issued "**STOP WORK**" cards that can immediately be handed out to anybody performing a construction activity that is potentially endangering the environment. Once a "**STOP WORK**" card is issued, work must stop in that area until the Construction Manager (CM) and ECM review the conditions in the field and determine whether permitted activities have been breached. It isn't easy to encourage employees to blow the whistle and stop work, so we've established procedures as part of our Stop Work Program that incentivize employees for correctly identifying environmental concerns, stopping work immediately, and swiftly beginning corrective actions. This process has proven effective on many projects we have worked on and may have kept the High Rise Bridge project in environmental compliance during construction if a similar program was in place.

Environmental Training for All Field Staff: Our DBT includes many team members that are already DEQ certified Registered Land Disturbers (RLDs) with VDOT ESCCC and we will have more project personnel certified prior to construction commencing to ensure that all land disturbing activities are properly managed. In addition to this formal training, all project personnel will complete mandatory Environmental Training as part of their orientation before beginning work. The project specific Environmental Training will be video recorded and include a presentation by the ECM, Jessica Klinefelter, and Curtis Hickman, who will review environmental requirements, denote environmentally sensitive areas within the Project footprint, and discuss lessons we have learned over the years to keep projects in environmental compliance. This will ensure that project personnel are aware of and adhere to the sequence of construction, E&S phasing plans, and significantly reduce the likelihood of impacts to environmental resources that could delay our project.

Proactive C-107 Compliance Reviews and Transparent Compliance Reporting: C-107 compliance checks are completed twice weekly by QA/QC, and construction staff to identify deficiencies in erosion control measures and areas where additional attention is necessary. Any deficiencies denoted on the formal C-107 discussed directly with the environmental staff participating in the bi-weekly walkthrough discussed above. Our Team will proactively report any unanticipated environmental issues to the appropriate agencies and identify remediation efforts, and quickly implement them in the field. One way that our DBT will do this is by committing a hydroseeder permanently onsite, readily available with trained operators. This will allow us to proactively and immediately address any disturbed soils that need stabilization. This has been a critical component of our environmental compliance success on both I-95 SB and NB Rappahannock River Crossing projects. Another example of our Team's proactive approach related to Compliance Reviews is providing the C-107, photographs, and follow-up actions required to address deficiencies electronically so the entire project team (including QA/QC personnel and VDOT representatives) can remotely monitor environmental compliance digitally from anywhere with internet access. We have successfully performed this on recent projects in Virginia by transparently uploading the C-107 documentation onto a software platform like PlanGrid or Fieldwire as soon as the field reviews are completed.


Hydroseeding on I-95 Rappahannock River Crossing

We digitally time and date stamp each submission and provide instant access to all pertinent project and VDOT staff so there is never a question about when or where C-107 reviews were completed, and issues were corrected.

Engaging a Strong Environmental Compliance Manager (ECM): Our DBT's ECM, Julia Conners, will report directly to the CM and coordinate with our design team members responsible for ESC and SWM as well as the environmental agencies. She will regularly review QC and QA Inspector daily work reports and C-107 forms to make sure that any environmental issues encountered are appropriately tracked and expeditiously addressed within seven days or less. As part of this role, she will maintain an electronic log of environmental activities that need to be performed on the project and communicate them with the CM daily so he can make sure construction crews are appropriately assigned to monitor and maintain environmental controls. As part of this effort, our CM will appoint an ESC Foreman for every shift of construction throughout the life of the project. The ESC Foreman will be onsite and communicate directly with the ECM to ensure all environmental precautions are taken and all E&S measures are well maintained and fully operational before construction activities begin in the area that day.

24/7/365 Availability to Address Environmental Concerns: Even though our CM, ECM, and ESC Forman will be onsite for the duration of construction activities, we know that mother nature is unpredictable and many times storms that impact the Project will occur in the middle of the night or at other times when construction personnel are not present on the job site. Our E&S controls will be well prepared for predicted rain events, but experience has proven that this may not be enough due to the increased frequency of short-duration high-intensity storms that have plagued the Hampton Roads region in recent years. For that reason, our DBT will provide VDOT with an 24/7/365 emergency hotline number to call for any condition that requires immediate attention. Your calls will be answered, and your concerns will be addressed expeditiously. In addition, our environmental staff will be available during construction to meet onsite, review specific concerns, and discuss corrective actions.

Proactive Permit Reporting: Our DBT's environmental staff will proactively complete monthly and quarterly reporting to document permit compliance, construction progress, and identify the anticipated timing of upcoming work in permitted areas. The reports will be prepared digitally, reviewed by the ECM, and submitted to each permitting agency, VDOT, QA/QC personnel, and construction staff simultaneously.

ENVIRONMENTAL AREAS OF CONCERN | Our DBT has anticipated many potential environmental risks associated with HREL Segment 1A and determined specific efforts that we will undertake during design and construction to avoid and/or minimize the likelihood that the environmental impact will delay project completion.

Table 4.4.1.2 – Planned Efforts to Avoid Delays Associated with Environmental Risks

Environmental Risk	Design Mitigation	Construction Mitigation
NEPA Clearance	All design elements will remain within the proposed LOD, and we will minimize the LOD wherever practical.	NEPA Document included in the EMP. ECM will ensure all commitments are tracked and satisfied during construction.
Cultural Resources	DBT will stay within the design footprint reviewed by DHR, including SWM, so that no additional studies/ coordination is needed.	Orange construction fencing will be placed around environmentally sensitive areas. ECM will ensure all construction activities stay within the LOD.
Water Quality	DBT will obtain NWP 23 Permit from USACE, and early coordination efforts will begin immediately upon NTP.	ECM will ensure all environmental requirements and general/special permit conditions are met.
Wetlands	Our design will stay within the footprint identified in the RFP, including SWM facilities, so that no additional mitigation is required.	Orange construction fencing will be placed around wetlands. Mitigation credits will be purchased well in advance of construction.
Threatened and Endangered (T&E) Species	DBT will coordinate with the USFWS regarding the potential presence of suitable habitat for the NLEB through the self-certification process. Bat surveys may be conducted to avoid TOYRs if acceptable by the USFWS and VDOT. The Eastern Big-eared Bat was listed by VDOT as having predicted habitat within the Project area. DBT to conduct an onsite reconnaissance for suitable roosting and nesting habitat (i.e., hollow trees, snags) within the Project area.	A TOYR calendar has been included in our Proposal Schedule such that tree removal activities are outside of any TOYR imposed by the USFWS or VDOT and are not on the Project's critical path. Our ECM will ensure all environmental requirements are met. Prior to nesting period for migratory birds, unoccupied or old nests will be removed. Deterrents may be placed, if necessary, to prevent new nests from being established during construction.
Hazardous Materials	Phase II Environmental Site Assessments will be completed for properties where RECs were identified within or adjacent to the design footprint to determine the presence of soil or	Develop specifications detailing appropriate methodologies for handling contaminated media, including treatment system design as applicable.

	groundwater contaminants in areas where excavation is proposed.	Apply for VPDES General Permit for Discharges from Petroleum Contaminated sites, if warranted, and complete sampling required.
Asbestos and Lead Based Paint	Structures (including bridges) to be demolished, rehabilitated, or subjected to selective demolition to support widening or tie-ins will be inspected for asbestos-containing materials and lead based paint. Sample collection will be conducted if any suspected Asbestos Containing Material (ACM) or lead based are identified on a structure based on visual assessment.	If any ACM or lead based paint is confirmed, and abatement is necessary, monitoring will be conducted as detailed in VDOT's Special Provisions. Monitoring will include observations of the abatement during setup, ACM and/or lead based paint removal, and de-regulation of the work area. Air sampling will be conducted inside and outside of the work area during any abatement activities.

SCHEDULE INTEGRATION | Our DBT integrated environmental staff from the design and construction team into the development of the Proposal Schedule. The result was a project schedule that accurately and realistically incorporates time for environmental studies, permits and approvals, TOYRs, and compliance activities. We specifically assessed the risk associated with each environmental activity and applied an appropriate amount of float to ensure that environmental compliance does not drive the Project's critical path. Anticipated timeframes for the acquisition of environmental approvals and permits/approvals and the amount of time we have allowed in the proposal schedule are identified in the following table:

Table 4.4.1.3 – Anticipated Major Permits/Approvals and Timelines

Agency	Permit Type/Approval	Anticipated Timeframe	Schedule Allowed Timeframe
VDOT	Environmental Management Plan	2 months	3 months
VDEQ	VPDES	2 months	3 months
VDOT	Right-of-Way Reevaluation (EQ-201)	1 month	2 months
VDOT	PS&E Reevaluation (EQ-200)	1 month	2 months
USFWS	Section 7 Concurrence	2 months	5 months
USACE	Nationwide #23	3 months	6 months

The schedule we have developed (see Volume II) accounts for finalizing NEPA re-evaluations before PS&E authorization, securing the environmental permits prior to construction, and appropriately incorporating construction TOYR. We have also included environmental milestones such as submission of permit applications and securing the required permits to ensure they are in-hand well in advance of the corresponding construction activities. As demonstrated in the table above, our DBT has allotted a considerable amount of float to the environmental permitting and approval activities. This gives us a chance to react should responses from permitting agencies take longer than anticipated, without delaying the overall project. We also understand that obtaining water quality permits and accommodating T&E TOYR are two of the environmental considerations that can result in significant project delays. Our DBT has specifically reviewed these critical areas to determine the following mitigations for delay:

Water Quality Permits – As soon as we are issued NTP, our DBT will begin work coordinating with the USACE to confirm the Preliminary Jurisdictional Determination (PJD) and determine if there are any other options for impact avoidance and minimization that have not already been considered in our conceptual plans. We will prepare the Joint Permit Application (JPA) for wetland and stream impacts identified in Segments B and C of our Project with the initial Segment B Right-of-Way Plan submittal. (Since we do not anticipate any wetland or stream impacts in Segment A, activities associated with the Early Works Package can advance before the permit is approved by the USACE.) The plans provided to the USACE for the JPA will show the LOD, staging/storage areas, temporary and permanent SWM facilities, E&S controls, and the PJD resource boundaries. Our DBT's environmental permitting team used a similar approach on VDOT's Albemarle Intersection Bundling DB project to successfully received two permit approvals for VDOT's in less than three months. The team received accolades from the regulatory agency representative, stating that the permit approval process could be expedited because our packages were very well organized and thorough.

T&E Species – Even though our DBT's proposal schedule proactively accounts for TOYR for forest clearing activities to accommodate the Northern Long-Eared Bat (NLEB), we know that it is possible that the NLEB is re-listing as federally-endangered species and will require expanded TOYRs and possible acoustical surveys. Our DBT is prepared for this possibility. We identified this risk early in the procurement process for this Project and added WSSI to our DBT because of their national expertise and local availability to perform bat acoustical surveys. They are ready, willing, and able to perform bat habitat surveys and acoustical surveys whenever needed so that this potential requirement does not impact the Project's critical path.

4.4.2 Utilities

Our DBT has decades of experience avoiding, mitigating, and relocating every type of utility that may be encountered on the HREL Segment 1A Project. We know that utility owners in the Hampton Roads region are stretched thin due to the massive amount of construction work happening in the area and utility relocation timeframes are being drawn out to lengths never seen before due to the lack of material resources and personnel required to perform them. This is compounded by the higher likelihood for severe weather in the region, such as hurricanes that cause utility relocation crews to be redirected to clean up efforts overnight. To combat this risk to our schedule, we have identified "**Avoidance Wherever Possible**" as our resolution for utility conflicts.

We have reviewed the subsurface utility designating (SUE) files provided by VDOT side-by-side with the impacted utility owners to verify their accuracy, identify opportunities for avoidance, and already began coordination for relocations that are unavoidable. We will continue coordination efforts while the design is finalized so utility companies are aware of any changes we have implemented that further avoid their facilities. During every coordination meeting, we will discuss the proposed utility relocation schedule and emphasize the importance of relocating their facilities on time so that our proposed sequence of construction is not interrupted.

EXISTING UTILITY OWNERS AND PREVIOUS EXPERIENCE WORKING WITH THEM

Table 4.4.2.1 –Utility Companies with Facilities Within the HREL Segment 1A Corridor

Utility Owner	Contact
City of Norfolk Water/Sanitary Sewer	Forrest Robertson | forrest.robertson@norfolk.gov
City of Norfolk – Transit/Traffic	Chris Dinger | chris.dinger@norfolk.gov
Cox Communications	Anthony Crush | Anthony.crush@cox.com
Crown Castle	Nathan Karras | Nathan.karras@crowncastle.com
Dominion Energy Distribution	Belinda Winstead | Belinda.winstead@dominionenergy.com John Packard | john.packard@dominionenergy.com
Dominion Energy Transmission	Rebecca Suther | rebecca.a.suther@dominionenergy.com
Hampton Roads Sanitation District	Corey Kendall | ckendall@hrsd.com
Lumens (Level 3/Century Link)	National Desk | relocations@lumen.com
Segra (Lumos)	Jared Morris | Jared.morris@segra.com
Verizon Virginia	Jim Fulton | Jfulton@tecllc.com
Virginia Natural Gas	Coltan McWain | cmcwain@southernco.com
Windstream	Jerry Richardson | Jerry.richardson@windstream.com

Bowman Consulting (BC) has just completed coordinating relocations with Crown Castle, Dominion Energy, Lumens, and Segra on the Albemarle Intersection Bundling Design-Build project. In addition to this experience, Richard has specifically coordinated relocations with Forrest Robertson and Jim Fulton for decades. Leveraging existing relationships with utility owners will be critical to ensure relocations are completed on time. For this reason, our DBT has identified Richard Bennett, the same Utility Manager on the Albemarle Intersection Bundling project, as our Utility Manager. Richard brings over 50 years of utility relocation expertise to our DBT. Prior to joining BC, he served as VDOT's State Right-of-Way and Utility Manager, State Utilities Engineer, and Assistant State Utilities Engineer. During his tenure at VDOT, Richard managed all utility relocations in the Hampton Roads District. His familiarity with VDOT's utility relocation processes as well as knowledge of the utility companies in the Hampton Roads region is unmatched. Richard will help our DBT minimize impacts where conflicts cannot be avoided and mitigating potential conflicts with unexpected utilities.

APPROACH TO UTILITY COORDINATION, ADJUSTMENTS, AND RELOCATIONS | Our DBT has developed a comprehensive approach to utility coordination that we have used and refined on previous successful DB projects as outlined in Figure 4.4.2.1. Since utility relocations increase project costs and can have disastrous impacts to the project schedule when they hit the critical path, we have optimized our design and identified specific construction methods that will avoid utility impacts to the greatest extent possible. In addition to our DBT's Utility Manager, Richard Bennett, our project specific Utility Coordinator, Juan Doran, that has experience working with the field crews of the utility companies on transportation projects similar to HREL Segment 1A. Juan will serve as Richard's eyes and ears in the field to:

- Perform on site constructability reviews of the design to ensure utility impacts are avoided or minimized
- Walk the Project site to identify and investigate unexpected utilities that were not located by the SUE survey
- Inspect/as-built, using geospatial survey equipment, all utility relocations as they are being performed to ensure they are in compliance with P&Es the and allowable tolerances.

Our DBT has developed five distinct phases for utility coordination, adjustments, and relocations: **Utility**

Validation, **Preliminary Design**, **Final Design**, **Utility Relocation**, and **Construction**. This process will improve our DBT's ability to quicky identify conflicts, determine avoidance (or mitigation) strategies, track the status of utility relocations, and work with the DBT to ensure that utility relocations never impact the Project's critical path. An example of how we have already successfully implemented this approach on the HREL Segment 1A Project is in regard to the potential underground utility impacts to utilities adjacent to Granby Street, E. Little Creek Rd, and Tidewater Dr. Widening the bridges over these roads could result in significant utility conflicts caused by the foundations associated with the widenings. During our Technical Proposal Design Team Meetings, he encouraged our DBT to investigate innovative design techniques and construction methods that would avoid as many of these utility impacts as possible. We were able to avoid most of these impacts by strategically using micropiles instead of traditional piles for pier foundations because the micropiles can be precisely placed avoiding conflicts with nearby utilities. Our DBT will perform the following during utility coordination phases:

Utility Validation Phase: Our DBT has already begun preliminary coordination efforts with all impacted utility owners located within the Project limits. As part of this coordination, Segra (Lumos) has advised that their buried fiber cables have already been relocated as part of another project and are no longer in conflict. Crown Castle has also provided our DBT with the location of their recently placed new fiber optic along the east side of Granby St which was not identified on the SUE files provided by VDOT. **We understand that early coordination is important because the location of private utilities is always changing**. Utilities are often abandoned, and new utilities are always being installed. For this reason, we will perform designation validation for all utilities and identify locations that need additional test holes as soon as we are issued NTP. Our DBT will use this information to assemble a Utility Investigation Plan that includes confirmation from all utility companies that their facilities are completely identified and includes timelines for relocations. As part of this plan, we will also identify any utility company's planned capital improvements that could add additional utilities within our Project limits for a period that extends for three years beyond our Project's anticipated completion date. These utilities will be added to our DBT's comprehensive utility conflict matrix to make sure all existing and potential utilities are appropriately addressed. We have already accounted for all known utility relocations in our proposal schedule and Richard will coordinate any additional utility information discovered with the DBPM, Glen Mays, and CM, Durant Walters, to update the Project's baseline schedule to keep all utility relocations off the Project's critical path.

Figure 4.4.2.1 Approach for Utility Relocation Coordination

Utility Validation Phase
- Obtain Additional Utility Designations, Test Hole Data, and Develop Utility Investigation Plan

Preliminary Design Phase
- Identify Options for Utility Avoidance
- Review Plans for Relocations and Prepare UT-9

Final Design Phase
- Hold UFI Meeting and Establish Utility Relocation Plan, Budget, and Schedule
- Obtain Final P&Es from Utility Companies
- Confirm Compatibility Using 3D Model

Utility Relocation Phase
- Confirm Utility Relocations are Accurate and On Schedule
- Assist Utility Owners to Expedite Relocations

Construction Phase
- Immediately Engage to Address Unexpected Utility Conflicts During Construction

Upon award of contract, the Team will follow the process shown to minimize conflicts and expedite utility relocations.

Preliminary Design Phase: Richard has been integrated into the design team and has already helped our designers identify ways to avoid many of the utilities located throughout the corridor. This integration will continue once we are issued NTP and the design team begins preliminary design activities. **Richard will participate in the weekly design review meetings to provide advice for utility conflict avoidance, evaluate potential utility conflicts, and develop solutions that we avoid, mitigate, or minimize impacts.** He will determine potential impacts, complete the conflict analysis, and begin relocation designs. Early and regular communication between the design and utility team will strengthen our DBT's ability to further avoid utility conflicts and reduce the likelihood of experiencing delays associated with utility relocations.

Final Design Phase: Once the preliminary design is complete and all utility impacts have been identified, Richard will distribute our plans and 3D Model with specific utility visualizations to the utility companies and schedule a Utility Field Inspection (UFI) to review the utility conflicts in the field, review draft utility relocation designs, and identify potential areas for relocations. **Our CM will attend the UFI and discuss the Project's sequencing with the utility owners so that we have a comprehensive understanding of how our Project will be divided into Segment A, Segment B and Segment**. The CM will emphasize the importance of advancing Segment A as an Early Works Package to ensure that any utility relocations required in this Segment are prioritized. Richard will remain in constant contact with each utility owner to ensure their final plans and estimates (P&Es) are

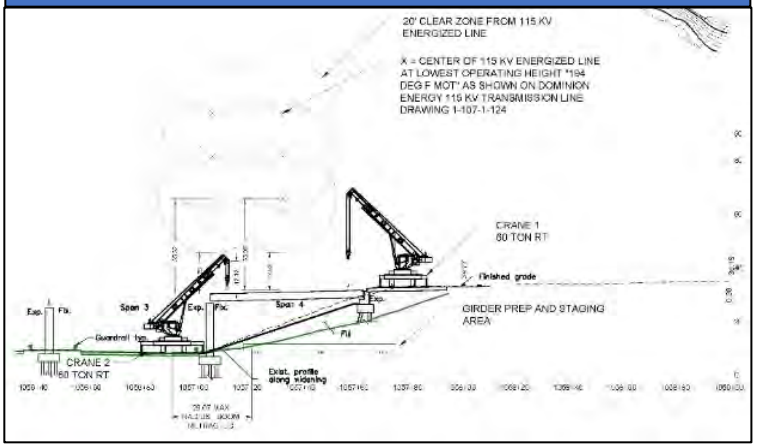
progressing on schedule and will resolve any discrepancies between the project plans and the utility plans using the 3D Model to ensure conformance and compatibility.

Utility Relocation Phase: Juan will monitor the utility relocations in the field to make sure they are being placed in accordance with approved relocation plans and are progressing on schedule. As with any design-build project, we anticipate utility relocations to be performed concurrently with construction to expedite the project schedule. We will provide assistance to utility contractors as necessary to expedite their relocations. Specifically, on HREL Segment 1A, our schedule anticipates utility relocations in Segment B adjacent to Granby St, E. Little Creek Rd, and in Segment C adjacent to Tidewater Dr occurring concurrently with construction in Segment A. **Juan will coordinate with the CM on a daily basis to ensure that the utility relocations never conflict with construction operations**. We have purposely sequenced our schedule so that utility relocation crews and construction crews are not in the same place at the same time. Should an issue arise, Juan will immediately contact Richard as well as the CM, DBPM, and utility company to expedite resolution. A detailed Utility Status Report will be developed and discussed at Monthly Progress Meetings to communicate the status of utility relocations.

Construction Phase: Even after utility relocations have been completed on the Project, Richard will remain active in team meetings and available to discuss potential utility concerns at a moment's notice. He will review any design changes for utility impacts, secure as-built drawings of utility relocations. **Prior to any excavation, our project Health and Safety Plan requires the crew submit a "Dig Ticket." issued by our safety team prior to the start of work.** The "Dig Ticket" provides all information of known utilities in the area. We understand that the Project is located within the vicinity of the United States Naval Station Norfolk. Should a situation arise regarding an unexpected utility conflict (such as an unmarked dark fiber optic cable), Richard and Juan will immediately engage to help the Team identify the utility owner, determine the extent of the conflict, discuss avoidance options, and coordinate with the utility owner if a relocation is required.

POTENTIAL UTILITY CONFLICTS AND RESOLUTIONS | As our "**Avoidance Wherever Possible**," motto suggests, our DBT has eliminated as many utility conflicts as possible by using the test hole data provided by VDOT to identify utility depths in the 3D design model our DBT developed and implemented design innovations and construction techniques that avoid them. We identified a total of 21 potential utilities in conflict with the RFP Plans and have already completely avoided 9 of the conflicts (43%) with our proposed design as shown in Table 4.4.2.2. We focused our avoidance strategy on utilities that would be relocated by the private utility owner because we have the least amount of control over their utility relocation schedules. Our design was able to avoid 60% (6 out of 10) of the privately owned utilities potentially in conflict with the RFP Plans. Most notably our design avoids impacts to the Verizon, Crown Castle, Lumen, and Windstream Fiber Optic Ductbank adjacent to Pier 3 of the Granby Bridge. Impacts to this ductank would be costly and add incredible risk for delay to the project schedule. Another example of utility avoidance that our DBT has identified is the use of innovative construction techniques to avoid impacts to the overhead Dominion transmission lines while setting the girders for the Tidewater Drive bridge widening. As shown in Figure 4.2.2.2, the Contractor will utilize a two-crane pick utilizing smaller cranes to stay below the power lines. The cranes we will be using have an audible warning system that will sound an alarm if the operator approaches the safety zone limit. Avoiding utilities in these areas will not only reduce costs, but will substantially reduce the risk for delays often caused by utility relocations.

Figure 4.4.2.2 I-64 EB over Tidewater Drive Girder Placement Impacts



Our DBT has established a mitigation plan to minimize impact to utilities that we were not able to avoid. The publicly owned facilities that will be relocated by the DBT (waterline and electric for streetlights, signals, and ITS) will remain online and operational throughout the duration of the Project. Switchovers associated with the relocated waterline and power sources will be minimized to the greatest extent possible and communicated with the utility owners and end users weeks in advance. Since the DBT will perform these relocations, we will control their schedules and have made sure they are not on the project's critical path. There are four (4) remaining relocations that will be performed by the private utility company. In each instance, we have minimized the impact by optimizing the design of the bridge foundation and/or drainage structures in these areas. Specifically at

Location #19 below, we believe we can avoid impacts to this gas line through the strategic use of micropiles, but need to verify the depth of the gas line at this location before we can confirm avoidance.

Table 4.4.2.2 – Utility Avoidance & Resolution Matrix

Location	Potential Utility in Conflict	Our DBT Resolution
1. Granby Br. Pier 1	Fiber Optic	✓ Avoided by Footing Design & Micropiles
2. Granby Br. Pier 1	Electric for Streetlight	✓ Avoided by Footing Design & Micropiles
3. Granby Br. Pier 2	City of Norfolk 16" Watermain	DBT to Relocate 16" Watermain
4. Granby Br. Pier 3	Verizon, Crown Castle, Lumen, and Windstream Fiber Optic Ductbank	✓ Avoided by Special Footing Design
5. Granby Br. Pier 3	Electric for Streetlight	DBT to Relocate Streetlight Electric Cable
6. I-564 Br. Pier 1	VDOT Electric for Signal	DBT to Relocate VDOT Electric
7. I-564 Br. Pier 3	City of Norfolk 4" Watermain	N/A. Watermain is Already Abandoned
8. EBL I-64 Sta 102+45	HRSD 20" Sanitary Force Main	✓ Avoided 20" Sanitary Force Main by Design
9. E. Little Creek Br. Pier 1	Fiber Optic	Lumen to Relocate Fiber Optic
10. E. Little Creek Br. Pier 1	Electric for Streetlight	DBT to Relocate Streetlight Electric
11. E. Little Creek Br. Pier 1	Electric for ITS	DBT to Relocate Electric for ITS
12. E. Little Creek Br. Pier 1	Fiber Optic	Lumen and Segra Relocate Fiber Optic
13. E. Little Creek Br. Pier 1	Virginia Natural Gas Line	✓ Avoided by Footing Design
14. E. Little Creek Br. Pier 2	City of Norfolk 16" Watermain	✓ Avoided by Footing Design & Micropiles
15. EB Tidewater Br. Pier 1	Virginia Natural Gas 6" Gas Line	Virginia Natural Gas to Relocate 6" Gas
16. EB Tidewater Br. Pier 1	Electric for Streetlight	DBT to Relocate Streetlight Electric Cable
17. EB Tidewater Br. Pier 1	Electric for ITS	DBT to Relocate ITS Electric Service
18. EB Tidewater Br. Pier 3	Overhead Electric Transmission	✓ Avoided by Construction Methods & Micropiles
19. WB Tidewater Br. Pier 1	Virginia Natural Gas 6" Gas	Test Hole Required to Verify Depth. Virginia Natural Gas to Relocate 6" Gas Line if Needed
20. WB Tidewater Br. Pier 1	Unknown Fiber Optic	✓ Avoided by Protection During Construction
21. WB Tidewater Br. Pier 2	Verizon Fiber Optic	✓ Avoided by Design

SCHEDULE INTEGRATION AND CONSTRUCTION SEQUENCING | The DBT considered public utility relocations and private utility relocations differently for scheduling purposes. Public utilities, such as the City of Norfolk's 16" watermain and electric servicing streetlights, signals, and ITS, will be designed and relocated in-plan by the DBT. As such, we are fully in control of the schedule associated with these relocations and have multiple options at our disposal to keep them on track (advance purchase of materials, resequencing other activities, accelerating the schedule with additional resources, etc.). Private utility relocations that can not be avoided, however, present a much higher risk for schedule delays because the DBT is not in control of the utility owners' materials and crews. Richard Bennett was instrumental in helping us assess the risk for schedule delays associated with each private utility relocation so we could apply an appropriate amount of float to ensure that private utility relocations do not drive the Project's critical path. This float will be critical so our DBT can react if Juan Doran notifies the DBT that private utility relocations are not progressing on schedule and we need to react. Anticipated timeframes for the private utility relocations and the amount of time we have allowed in the proposal schedule are identified in the following table:

Table 4.4.2.3 – Anticipated Private Utility Relocations and Timelines

Utility Owner	Type of Facility	Location	Anticipated Timeframe	Schedule Allowed Timeframe
Lumen	Fiber Optic	L. Creek Br. Pier 1	30 days	70 days
Lumen and Segra	Fiber Optic	L. Creek Br. Pier 1	45 days	70 days
Virginia Natural Gas	6" Gas Line	EB Tidewater Br. Pier 1	30 days	36 days
Virginia Natural Gas	6" Gas Line	WB Tidewater Br. Pier 1	30 days	70 days

The four private utility relocations referenced in the table above were specifically considered when our DBT made the strategic decision to divide the Project into three segments for the sequence of construction. One of the primary reasons that our DBT's Early Works Package, Segment A, can be expedited is because it does not require any private (or public) utility relocations. The private utility relocations associated with Segment B are isolated to telephone and fiber optic, and the private utility relocations associated with Segment C are isolated to the gas line. This provides our DBT with an additional layer of flexibility in our schedule because we can switch our crews from Segment B to Segment C if the Fiber Optic relocations are progressing much slower than the gas line relocations (or vice versa) to keep the overall project on time.

4.4.3 Geotechnical

Our DBT has reviewed the available subsurface information presented in the RFP, available soil geologic maps, and internal information garnered through nearby projects. The Project is located within the Atlantic Coastal Physiographic Province which presents an inherent risk for poor soils. Upon further investigation, the natural soils in the Project area consist of loose sands and gravels interlayered with seams of soft clays and decomposing organics of marine origins. These types of soils are known to present geotechnical challenges for highway infrastructure projects because they increase the risk for encountering unsuitable material, are poor for deep foundations, and often are prone to settlement.

GEOTECHNICAL INVESTIGATIONS | Subsurface data in the RFP and RFQ was extensive, however, we will obtain additional subsurface data during the Scope Validation Period to complete the design and confirm the data and design recommendations. **Our DBT has already developed the boring and access plan for this additional subsurface investigation and will be ready to submit it to VDOT upon receiving NTP**. Our field exploration will be performed in accordance with VDOT Materials Division's Manual of Instructions (MOI). We will perform continuous Standard Penetration Test (SPT) sampling at select soil strata and borings for embankments and bridges to accurately characterize the thickness of soil layers. Undisturbed samples of the fine-grained soils will be used for both one-dimensional consolidation testing and strength testing (direct shear and/or tri-axial shear). Within the anticipated stress ranges of the soils, consolidation testing will be long enough to estimate secondary consolidation. In-situ Dilatometer testing (DMT) and Cone Penetrometer Testing with pore pressure measurements (CPTu) will be used at critical slopes, bridges, and embankments. Pressuremeter testing (PMT) may be performed at select boring locations to characterize strength and deformation parameters. At proposed infiltration facilities, a temporary groundwater monitoring well will be installed to establish long-term groundwater levels.

UNDERSTANDING OF GEOTECHNICAL RISKS | The majority of the subsurface data provided in the RFP was performed within the existing pavement travel lanes and shoulders. Although most of these borings indicate that the top 5 feet of material below pavement will consist of medium dense sands, we anticipate that the grass median and existing drainage channels, where some of the widening for our Project will occur, may contain loose and soft soils with variable amounts of organic material. Additionally, loose sands and clays are likely to be present near the project terminus, where the project alignment is closer to historic grades.

Due to the width and height of fill placement, the very loose sands and very soft clays we have identified in the area could settle significantly. Additionally, based on the consolidation testing in the RFP, the fine-grained soils are expected to require significant time for primary consolidation with moderate amounts of secondary (long term) consolidation settlement, particularly where organic soils are present. It is also possible that the existing roadway is experiencing long term settlement because some of the testing indicates that the in-stu soils are normally under-consolidated. Where widening will require fill placed near the bridges, the fill can impact both the existing and proposed bridge foundations. The additional weight of the fill may induce settlement of subgrade soils, and if sufficient movement has occurred, will induce a downdrag force on the existing and new piles.

DESIGN ENHANCEMENTS AND CONSTRUCTION TECHNIQUES THAT OVERCOME GEOTECHNICAL CHALLENGES | Underlying soils have very low pH (as low as 2.9), low resistivity (as low as 560 ohm-cm), and high sulfates (up to 3,332 ppm). Corrosive soils were encountered between depths of 6 to 50 feet below current grades. Due to coastal proximity of the Project, we anticipate the saline environment will impact steel structures. In order to limit this risk, all substructure elements will be concrete or designed with sacrificial steel to account for corrosion loss, including the use of pre-cast concrete piles and micropiles.

Our DBT has also introduced several enhancements that will eliminate or reduce geotechnical risk throughout the Project limits. This includes significantly reducing the amount of retaining walls that will be required; thereby, reducing the number of structures that have the potential to settle and require maintenance throughout their useful life. We will also be utilizing MGS-1 with Long Post to avoid introducing sliver fills on side slopes wherever practical. Sliver fills are prone to shallow slope failure because it is difficult to properly compact these narrow layers of soil. Our design has also optimized the geometrics of Ramp C at the I-64/Tidewater Drive interchange and Ramp B of the I-64/I-564 interchange to reduce pavement buildup in these areas. This will reduce the weight of the pavement structure along these ramps to mitigate the risk for future pavement settlement. Last but not least, our DBT will utilize micropiles at all bridge piers as well as Abutment B for the I-64 EB bridge over I-564. The smaller size of micropile equipment will reduce traffic impacts and provide greater flexibility for site access.

In addition, our DBT has identified specific design and construction mitigations that will address geotechnical challenges and mitigate geotechnical risks on the Project associated with the soils we are likely to encounter:

Table 4.4.3.1 – Geotechnical Risks, Challenges, and Mitigations

Unsuitable Soils	Risk Impact	• Lack of data in the new pavement widening in existing grass median and slopes • The likely presence of highly plastic, organic, wet, and/or low strength soils in the grass median
	Design Mitigation	• Additional field exploration in the widening areas • Additional CBR and Resilient Modulus testing during Scope Validation Period
	Construction Mitigation	• Mechanically drying the soils to optimum moisture content • Adding a drying additive such as cement to reduce the moisture • Install drains or a drainage layer during construction to relieve any temporary water pressures due to construction activities • Complete or partial undercut of unsuitable subgrade soils and replace with suitable soils or select material
Poor Soils for Deep Foundations	Risk Impact	• The presence of highly compressible, possibly organic clays and sands of Tabb Formation in the widening areas • Potential downdrag force on new and existing piles
	Design Mitigation	• Increase pile size as required for consideration of downdrag when calculating required pile resistance
	Construction Mitigation	• Utilizing light weight fill material • Surcharge/preload embankment fills to induce/accelerate settlement • Use sheet piles between existing and new piles to shield downdrag forces from existing piles • Pile supported or ground improvement for support of the embankments • Install cans around piles
Settlement Prone Soils	Risk Impact	• Pile driving rig has significant impact to existing traffic and is potentially infeasible • Vibrations caused by pile driving can damage adjacent utilities • I-64EB over Tidewater Drive conventional pile driving equipment will not fit under existing DVP overhead facilities • Pile driving vibration increases potential for liquification causing slope and structure instability
	Design Mitigation	• Spanning existing utility ducts with pier footer at Granby and Little Creek to avoid utility impacts • Prior to construction, an attenuation analysis will be performed to determine the possible impact from vibrations
	Construction Mitigation	• Use micropiles for all bridge pier foundations, and I-64/I-564 Abutment B • Low overhead micropile equipment eliminates conventional crane booms and pile leads working adjacent to active I-64 and secondary road traffic; thereby, reducing visual distractions to drivers • Vibrating wire piezometers may be used to monitor pore pressure dissipations where new fill or significant vibrations may impact existing structures
Corrosive Soils and/or High Groundwater Table	Risk Impact	• Low pH and resistivity and/or high sulfate and chlorides
	Design Mitigation	• Perform additional corrosion potential tests at the proposed structure locations • Avoid the use of corrosion prone materials • Increase the gross section area of the steel casings to accommodate section loss from corrosion. • Appropriate SWM design
	Construction Mitigation	• Use of corrosion resistant materials such as concrete piles or micropiles with permanent casing • In-situ soil stabilization/improvement
Working in the Vicinity of Foundations	Risk Impact	• Downdrag on existing piles and nearby foundations • Differential settlement
	Design Mitigation	• Determine the zone of influence using vibration and settlement criteria • Perform additional CPTu and DMT testing at critical locations
	Construction Mitigation	• Pre-drilling through the existing embankment fills to mitigate vibration risk • Install displacement monitoring points and tiltmeters at each bridge abutment, pier, and retaining wall adjacent to the proposed construction • Install extensometers at critical locations and depths
Maintaining Existing Structures	Risk Impact	• Liquification during pile driving activities
	Design Mitigation	• Perform field survey and review inspection reports to determine condition of existing structures • Identify action level vibration limits depending on the condition of existing structures
	Construction Mitigation	• Drill deep foundations around existing structures to transfer the load deep down to the appropriate bearing location where it will not affect the performance of the existing foundation
Reconstructing Existing Slopes	Risk Impact	• Slope failure
	Design Mitigation	• Adjust vertical profile to minimize embankment height • Perform probabilistic analysis related to shear strength parameters
	Construction Mitigation	• Install temporary groundwater monitoring wells to record long-term groundwater levels • Construct slopes using appropriate material and compaction based on shear strength parameters • Bench into existing slopes and ensure ESC are properly installed

4.4.4 Quality Assurance/Quality Control (QA/QC)

Every member of our DBT has a history of providing quality services for both the design and construction of transportation facilities. The DBT has purposefully identified QA/QC team members who have experience working together on successful projects, reviewing project designs, and evaluated construction sequencing for quality, efficiency, constructability, and safety. Our commitment to quality has been independently validated by VDOT's Construction Quality Improvement Program (CQIP) as evidenced by the high CQIP scores that VDOT has recently graded our teams on the following projects:

- Chatham Bridge Rehab and Replacement: CQIP Score of 97.7% in February 2021
- I-95 Southbound Rappahannock River Crossing (RRC): CQIP Score of 97.23 in June 2021
- I-95 Northbound RRC: CQIP Score of 97.29 in January 2022

The effective QA/QC program that we implement on every project includes proven procedures that expedite construction and reduce the amount of resources and time devoted by VDOT to ensure projects meet the QA/QC requirements included in the Contract Documents. To accomplish this mission, we assign experienced and technically knowledgeable senior staff to important QA/QC positions.

APPROACH TO QA/QC | Our QA/QC process begins with our Team's unique and fundamental understanding of the VDOT Minimum Requirements for Quality Assurance and Quality Control on Design-Build and Public-Private Transportation Act Projects, dated July 2018 (the VDOT QA/QC Manual). **Not only is Wagman currently following the guidance in this manual on the I-95 Northbound Rappahannock River Crossing Design-Build project, but our team member, Ian Millikan, PE, DBIA, PMP, CCM, wrote much of the revised language when he was serving as VDOT's Assistant State Construction Engineer**. In addition to integrating value engineering concepts into our design, Ian will provide specific training to make sure that everybody on the DBT understands their role in the quality assurance and quality control process. Our Deputy Design Manager, Julia Simo, also recently implemented VDOT's tablet-based inspection program as VDOT's former State eConstruction Engineer. She will provide additional training to all QC & QA personnel and VDOT's OIA/OIV staff to ensure that all eConstruction platforms are utilized to the fullest extent possible. Photos documenting every step of construction will be tagged to plan sheets. Digital punchlists identifying design and/or construction deficiencies will be continuously generated and reviewed regularly by the QAM, Richard Allen. Inspectors will electronically upload inspection reports at the end of each day. Our Team will provide the QAM with every resource necessary to ensure delivery of a quality project for VDOT.

The DBT's Quality Plan is comprised of two sections: the Design Quality Plan and the Construction Quality Plan. Our Quality Plan will be a living document that is updated throughout the duration of the project. It will be closely monitored by our QAM and updated as necessary whenever we develop or receive new information. The most up-to-date version of the Quality Plan will be available to VDOT at all times.

DESIGN QUALITY PLAN | Our Design Manager, Eric Sender, will ensure the quality of all design deliverables. Eric will review each design submittal package to ensure that it conforms with the contract requirements, standards, specifications, and the approved Design QA/QC Plan. We will tailor a checklist for all applicable and required design elements to assure that our Design QA & QC Reviews are well structured and can be easily audited by VDOT. The checklist will be comprised of the VDOT LD-436 form and other internal checklists that our design team has developed on similar DB projects to minimize the effort and time it takes VDOT to provide comments. Our Team will use the following approach for design QA/QC:

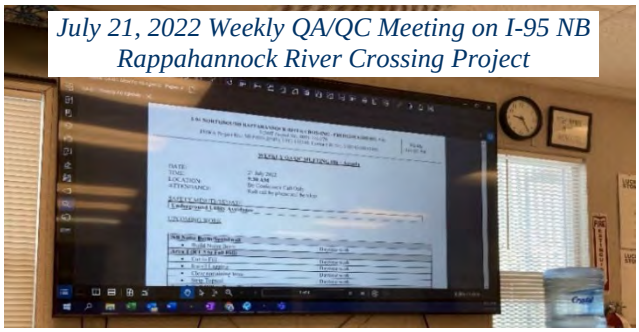
- Since the project requires multiple design disciplines, independent Senior Engineers within their respective disciplines will serve as Reviewers. They will check and sign off on all design calculations, including: horizontal/vertical alignment data; superelevation and lane transitions; hydrology & hydraulic analysis computations; and structural calculations. The Reviewer will ensure that the appropriate methodologies are used, and the results meet the RFP.
- Independent Senior Engineers, David Borusiewicz (WM), Mark Ledebur (WM), and Shankar Nair (EXP) will check work performed by subconsultants and each design submittal package before it is submitted to VDOT. They will perform these reviews expeditiously so that the project team can make corrections and revisions without delaying the project's design schedule.

Supporting Eric Sender in the design quality plan process will be David Borusiewicz, PE, DBIA and Mark Ledebur, PE with Wallace Montgomery (WM) and Shankar Nair, PE, SE with EXP US Services (EXP). WM and EXP have committed to providing independent technical reviews of each other's deliverables. This belt-and-suspenders approach is the same method WM used on the Albemarle Intersection Bundling DB project. It leverages the respective QA strengths and staff experience of the two major design firms to ensure high quality design.

- Prior to each plan submission, a constructability/maintainability review will be performed by Wagman/Fay, and a design review will be performed by EXP on elements designed by WM and performed by WM on EXP designed elements. In addition to traditional QA/QC, these reviews will emphasize adherence to the right-of-way limits, phased erosion and sediment controls, and environmental restrictions/commitments to make sure design submittals are well structured and easy for VDOT to review and approve.
- Design QA/QC Reviewers will sign off as appropriate to verify that each design submittal has completed the QA/QC process identified in the Design QA/QC Plan.

CONSTRUCTION QUALITY PLAN | Our Team has the design-build experience required to understand the importance of executing a meaningful Construction Quality Plan that saves both VDOT and the Design-Builder time and money. We plan to construct every element of the project correctly the first time, and we have proven that we can do this successfully by following a detailed Construction Quality Plan. Our QAM, Richard Allen will develop the Construction Quality Plan specifically for the Project based on the proposed schedule so that inspection resources are readily available for every test, inspection, witness point, and hold point required in the VDOT QA/QC Manual. Richard knows that the key to delivering a quality design-build project is preparation and communication. This will be achieved by conducting a thorough Preparatory Inspection Meeting (PIM) prior to the start of each work activity, creating and maintaining a digital Materials Notebook, and appropriately documenting all deficiencies to make sure they are corrected before payment is requested.

PIMs will be led by Richard and include pertinent members from the design team, the Entrusted Engineer in Charge (EIC), Construction Manager, Quality Control Manager, Lead QA & QC Inspectors, and every QA & QC Inspector that will be involved with that work package. VDOT's Project Manager and OIA/OIV Inspection staff will also be invited and encouraged to attend. Richard will schedule the meeting at least two weeks in advance to maximize attendance, and he will distribute a detailed agenda five days before each meeting. The first topic of each meeting will be a discussion of the design intent for that work element to confirm the completeness and suitability of the plans that will be constructed. The specific inspection plans and testing plans that were developed for the work activity will be reviewed in detail so everybody has a comprehensive understanding about where, when, and who will be performing every materials test and inspection. Richard will specifically address any safety issues, right-of-way constraints, utility locations, environmental permit requirements, and SWPPP concerns that are unique to the work activity, so the entire team is aware of potential risks and agreed upon mitigation strategies. Minutes of the PIM will be distributed for comments within two days after the meeting. The final minutes will become an official appendix to the Construction Quality Plan and uploaded digitally so they are easily accessible by VDOT and the entire design-build team at any time in the field or in the office. The PIM will set the stage for QA and QC requirements for each work package so every team member and VDOT has a comprehensive understanding related to their role in the process. This seamless and transparent communication will provide assurance to VDOT that RFP requirements are met with minimal VDOT intervention. One example of this commitment to partnering for improved quality recently occurred on the I-95 RRC projects where Wagman provided QA, QC, and VDOT with mobile survey rovers that were uploaded with a digital model of the project's Approved For Construction (AFC) plans. This allowed the inspectors to easily verify that the project was being construction in accordance with the plans.



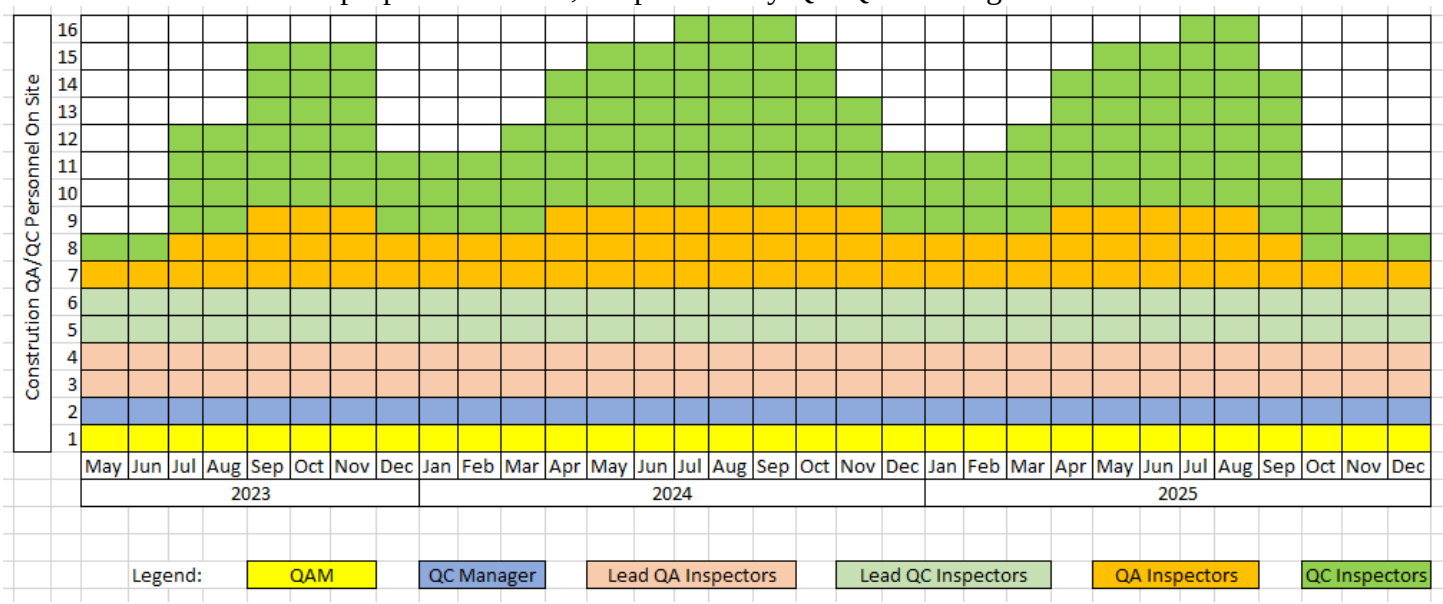
July 21, 2022 Weekly QA/QC Meeting on I-95 NB Rappahannock River Crossing Project

Our DBT's focus on quality doesn't stop at the PIM. We will go above and beyond the minimum requirements by holding weekly QA/QC meetings to ensure that the entire team has quality as their top priority. These meetings will focus on the status of any deficiencies that have not been resolved and provide a detailed review of a four-week-look-ahead schedule and associated QA/QC activities that must be performed. The weekly meetings will be led by the Construction Manager and attended by the EIC, QAM, QA Inspectors, QC Manager, QC inspectors, construction superintendents, construction engineers, and VDOT representatives. This weekly meeting fosters communication amongst team members thereby allowing the resolution of QA/QC issues to be expedited. The schedule look-ahead guarantees that all team members are aware of upcoming Witness and Hold Points and provides ample time for QC, QA, and VDOT to schedule necessary inspections in advance.

The Materials Notebook, Deficiencies Log, and Non-Conformance Report will be maintained digitally so they are always accessible to the DBT and VDOT. The Materials Notebook will include all documentation necessary to verify that the appropriate materials were sourced (C-25), delivered (tickets/receipts), and tested (material test reports) prior to being incorporated into the Project. The Deficiency Log will be used by all project staff

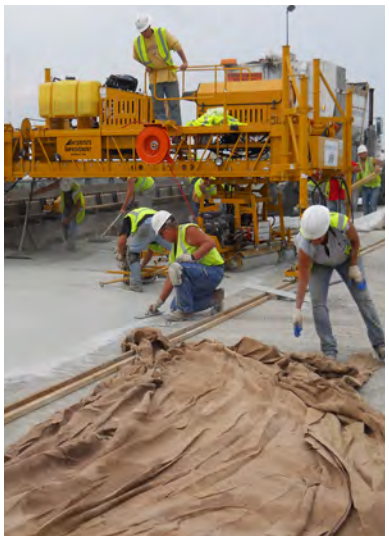
(including, but not limited to the VDOT PM, QAM, Lead QA Inspectors, and QC/QA/OIA/OIV Inspectors) to document any element of the project that is inspected and determined to not be in compliance with the contract. This will serve as a running punch list of items that must be corrected prior to acceptance. Any item on the Deficiency Log that is not corrected prior to the next Application for Payment, or items that are not correctable (such as safety or environmental permit violations) will be identified in the Non-Conformance Report. Richard will review the Materials Notebook, Deficiency Log, and Non-Conformance Report prior to certifying payment for each work package on the monthly payment application. The QAM will be authorized by the DB Project Manager to stop work for any issue, including those related to safety, environmental, and nonconformances.

Even the best Construction Quality Plan can only be effective if an appropriate amount of resources and time are dedicated to ensuring it is followed. We will empower the QAM to develop a QA/QC Staffing Plan that forecasts the number of QA and QC personnel that will be required each month based on the work activities identified in the baseline construction schedule to ensure every construction activity is adequately inspected. This staffing plan will be a living document that is regularly updated and included in each Monthly Report. Based on the work activities identified in our proposal schedule, the preliminary QA/QC Staffing Plan is shown below:



MINIMIZING THE NEED FOR ADDITIONAL VDOT OVERSIGHT | We understand VDOT intends to award a project-specific consultant contract to provide the project management, construction management, and OIA/OIV inspection services for this project. Even though we do not know which firm will be selected to perform these critical roles for VDOT at this time, we have developed an integrated strategy to working with the selected firm that will reduce VDOT's need for additional oversight on the project. The key will be consistent, concise, and transparent communication at each level of all organizations. This begins with the design review and comment response process. Our team prides itself on working with VDOT by hosting over-the-shoulder review meetings to understand the intent of design review comments so we can avoid unnecessary, and time consuming, back-and-forth correspondence. This approach has been incredibly successful on the Albemarle Intersection Bundling DB project where VDOT's PM noted the following on the July 2021 Design-Build Performance Evaluation, "**The Designer (WM) continues to address the Department's design review comments with an attitude of what is best for the project vs. an attitude of only doing the bare minimum.**"

Our commitment to transparent communication with VDOT will continue through the construction phase of the project. The QAM and Lead QA Inspectors will be on site full-time for the duration of construction activities and have an open and direct line of communication with VDOT at all times (24/7/365), so VDOT is always aware of when and where construction activities and QA and QC inspections are taking place. Daily diaries and material test reports will be electronically uploaded and available for VDOT review within 48 hours of the documentation being completed. The folder structure for this information will be well organized so it can be easily audited. We follow through on our commitment to construction quality and minimize the need for additional VDOT oversight as witnessed by the VDOT PM when he provided the excellent CQIP Score for the I-95 SB RRC project in June 2021, "**This project is one of the best overall projects. I have received several comments from my staff during the review regarding the exceptional organization and completeness of the records. The project seems to be sticking to the processes and enforcing them and it shows. Great job to this project team from the Contractor all the way up to the VDOT staff.**"



4.5
Construction of the Project

Joint Venture

WAGMAN

FAY SOUTHEAST
SAB USA CONSTRUCTION

Lead Engineer

WALLACE MONTGOMERY

Our DBT has extensive experience in developing a comprehensive approach to constructing Design-Build (DB) projects in major corridors in the Mid-Atlantic. Our approach focuses on safety for motorists and workers, minimizing impacts to the traveling public (local commuters, long distance interstate travelers, interstate commerce, pedestrians, and adjacent properties/businesses), efficient construction, and quality. We accomplish this through a design that improves safety, constructability, and schedule. We incorporate lessons learned delivering numerous interstate projects, including the I-95 SB and NB Rappahannock River Crossing (RRC) Projects. Our DBT has extensive local resources, including our existing three-acre material and equipment laydown yard located within 30 minutes of the I-64 HREL Segment 1A Project. Given these resources, our experience, and our fully integrated DB plan we hereby commit to **opening all lanes to traffic in final configuration by 11/25/2025**.

Table 4.5.1.1 – Construction Enhancements and Benefits

- Our DBT has sequenced our design and construction operations such that all VDOT activities have at least five days of float and do not appear on the critical path.
- By properly sequencing the design into multiple packages, scheduled based on construction necessity, critical construction operations can begin earlier enabling opening all lanes to traffic in final configuration by **11/25/2025**
- Our DBT has reviewed right-of-way and utility needs for construction. This review has determined that no right-of-way acquisitions or utility relocations are critical or near critical to our Construction Sequence and Proposal Schedule.
- Our DBT will design and construct a temporary signal at the Tidewater Drive Interchange for Ramp C. This will allow us to close Loop C to eliminate weaving traffic movements. Additionally, the DBT will strategically close Loop A and Ramp E. These detours will allow the DBT to reduce one phase of MOT and construction from the I-64 over Tidewater Drive bridges increasing safety, reducing complexity, and improving maintenance by eliminating a longitudinal joint.
- We will coordinate with adjacent projects such as HRBT and HREL 1B and integrate any key traffic impacting milestones into our schedule to ensure access constraints are contemplated in our critical path and to prioritize certain accesses to minimize constructive and traffic impacts. Segment A of the Project will be uniformly aligned with HRBT construction geometrically to avoid traffic impacts. Specifically, our EB and WB lanes will be ready to align with HRBT's major traffic switches currently scheduled to occur in early Summer 2024.
- Our ATC #1 will keep one reversible express lane open at all times in lieu of the permitted 21-day closure period for the express lanes, reducing traffic impacts and maintaining revenues from existing tolling (AADT over 5,600 vehicles) during construction of new barrier wall, joint rehabilitation, and latex overlay of the bridge deck.
- Our Bridge Rehabilitation concept includes the use of very early strength latex overlay mixes for bridge decks for I-64 EB/WB over Granby St Phase 1B, I-64 EB over Tidewater Phase 1B & 2A, I-64 WB over Tidewater Phase 1B, 2A, & 2B, and portions of the I-64 HOV bridge over I-564 and E. Little Creek Rd. This enhancement will return these locations to service expeditiously, improving safety while reducing traffic impacts and construction joints.
- Due to the constrained nature of the Project site, and to limit construction impacts, we will employ a detailed sequence inclusive of linear SWM and ESC during all construction operations whereby temporary basins are used and maintained until contributing drainage areas can be permanently stabilized. This same methodology to SWM and ESC was applied with exemplary results at I-95 SB and NB RRC projects by our DBT.
- Use of micropile foundation elements for all piers and at I-64 Eb over I-564 Abutment B eliminates significant area otherwise needed for conventional crane placement and laydown, as well as avoiding underground and overhead utilities.

Section 4.5.1, Sequence of Construction provides a walkthrough of the scope of work in each Phase and Segment with links to the Project Schedule. Section 4.5.2, Transportation Management Plan (TMP), places a focus on specifically how our team will safely control motorized and non-motorized traffic through the work zones, minimize delays, keep key stakeholders such as First Responders and Incident Management informed, and ultimately provide reliable travel times.

4.5.1 Sequence of Construction (SOC)

As previously described, our DBT has developed a sequence of construction that allows the Team to open all lanes to traffic in final configuration by **11/25/2025**, ahead of the Thanksgiving holiday. This enhancement is made possible by a meticulous planned and validated construction sequence. The planned sequence of construction described herein serves as the foundation for the Proposal Schedule within Section 4.6. Our sequence is predicated on beginning work in areas as soon as possible after constraints such as design, review, permitting, governmental approvals, and QA/QC preparation are satisfied. We developed our Sequence of Construction from the results of our risk and innovation task forces as described in Section 4.3 demonstrating integration between our Design, Construction, and Quality teams. This integration ensures our Sequence of Construction utilizes concepts that meet or exceed VDOT design criteria while promoting safe, efficient, and minimal impacts. Our sequence of construction takes into consideration the following key themes and elements including:

- Timely completion of the Scope Validation Process including but not limited to geotechnical analysis and validation, validating existing structure conditions, validating survey including right-of-way limits, validating

pavement condition, and confirmation of Design Exceptions/Waivers identified in the RFP. To mitigate schedule risks often associated with geotechnical laboratory testing, the DBT has already identified gaps in the subsurface data and has our boring and access plan ready to submit upon NTP.

- Minimizing disruption and safety concerns to the traveling public by reducing number of major traffic shifts/detours required to maintain traffic.
- Prioritizing early design elements to submit and receive environmental permitting and developing strategies to protect environmentally sensitive areas to include wetland jurisdictions.
- Minimizing unnecessary ESC risks and therefore overall need for temporary stabilization measures.
- Prioritizing early design elements to advance all utility relocations such as: maintaining an aggressive while appropriate project schedule driven by critical construction elements ensuring no overly compressed timeframes for design QA/QC review, constructability reviews, construction QA Plan development in accordance with the 2018 Minimum QA/QC Standards for DB, and all required agency reviews
- Providing ample time and prioritizing base design for the procurement, detailing, and fabrication of long lead materials such as steel girders, bearings, storm drainage, sign structures, ITS components, etc.
- Economized profile based on modeling for earthwork balancing and temporary pavement reductions for the Project.
- Coordination and inclusion of key milestones on adjacent/overlapping construction projects denoted in the RFP Part 2 with additional detail such as aligning our MOT Phases with HRBT project's major traffic switch scheduled to occur in early Summer 2024.
- Our DBT considered right-of-way activities and their potential role/impact on the Construction Sequence, based on our evaluation, no right-of-way activities on the Project are considered part of the critical path.

Based on previous experience, adjacent project coordination, and work breakdown, our DBT has divided the project into three distinct segments—A, B, and C (*see Figure 4.5.1.1*). The breakdown of the project into these Segments enables our DBT to sequence and prioritize design, ensure exemplary coordination with adjacent projects, manage resources effectively to prevent inefficiencies, improve safety and quality, advance concurrent work packages, and takes into consideration existing and proposed drainage areas for a seamless ESC Plan.

Table 4.5.1.2 – General MOT Phases by Segment

Phase 1 Early Works		
Segment A	EB	Outside Widening
	WB	Inside Widening
Phase 2 Early Works		
Segment A	EB	Inside Widening
	WB	Outside Widening
Phase 1		
Segment B	EB	Outside Widening
	WB	
Segment C	EB	
	WB	
Phase 2		
Segment B	EB	Inside Widening
	WB	
	HOV	ATC #1
Segment C	EB	Inside Widening
	WB	

As shown in *Exhibit 4.5.1.1*, Segment A, as the westernmost Segment, has the unique constraint of being the overlap area with the HRBT project. Segment B primarily consists of widening, the I-64/I-564 interchange, Granby Street Overpass, the E. Little Creek Overpass, and the existing reversible HOV lanes bridge. Thereby, Segment B represents the most intensive structural portion of the project making it a priority for our structures design and construction teams. Segment C includes the remainder of the widening within the project, and the Tidewater Drive interchange. The construction being performed in each Segment is correlated to a two-phase project-wide MOT phasing that will safely and logically establish the work areas available for Construction as shown in *Table 4.5.1.2*. Mainline traffic will only ever experience a single shift through the Project at any time. Our DBT's detailed approach to MOT and overall TMP as it relates to the construction sequence is detailed in *Section 4.5.2*.

The SOC and MOT phasing for the three construction segments and two major phases are summarized in *Exhibit 4.5.1.1* and detailed graphically in *Exhibits 4.5.1.2, 4.5.1.3, and 4.5.1.4.* The exhibits show how each segment is broken down into distinct construction phases and sub-phases for bridge widenings and rehabilitation. The two primary construction Phases in each Segment correlate to traffic shifts required on I-64 to complete the improvements, with all traffic either to the outside or inside, respectively on EB and WB alignments. This approach to construction will separate the traveling public from construction operations using TCB throughout all Segments. This provides a large, continuous, construction area which permits the safe staging of materials and equipment expediting the schedule. Key construction activities, as well as major MOT features, are listed for each distinct construction phase and sub-phase. The scope of the primary Phasing is illustrated in *Table 4.5.1.2.*

I-64 Hampton Roads Express Lanes (HREL) Segment 1A
City of Norfolk, Virginia
Project No. 0064-122-470, P101, R201, C501

Exhibit 4.5.1.1

OVERALL PROJECT SEGMENT AND SEQUENCING

SEGMENT A

Early Works Package. No structual work included.

PHASE 1

EB I-64 outside widening from Sta. 964+34 to Sta. 985+00; 564 Ramp B outside widening.

WB I-64 inside widening from Sta. 2810+42 to Sta. 2825+00.

PHASE 2

EB I-64 inside widening from Sta. 964+34 to Sta. 985+00; 564 Ramp B inside widening.

WB I-64 ouside widening from Sta. 2810+42 to Sta. 2825+00.

SEGMENT B

PHASE 1

EB I-64 outside widening from Sta. 985+00 to Sta. 1027+00.

EB widening and outside rehab of the Granby, 564 and Little Creek Bridges.

WB I-64 outside widening from Sta. 2825+00 to Sta. 3020+00.

WB outside rehab of the Granby and Little Creek Bridges.

PHASE 2

EB I-64 inside widening from Sta. 985+00 to Sta. 1027+00.

EB inside rehab of the Granby, 564 and Little Creek Bridges.

WB I-64 inside widening from Sta. 2825+00 to Sta. 3020+00.

WB inside rehab of the Granby and Little Creek Bridges.

EXPRESS LANES

Rehabilitation of the I-64 HOV over I-564 and Little Creek Bridge

ATC #1 includes alternative bridge construction phasing in lieu of implementing the RFP allowable 21 day closure.

SEGMENT C

PHASE 1

EB I-64 outside widening from Sta. 1027+00 to Sta. 1085+50.

EB widening and outside rehab of the Tidewater Bridge.

WB I-64 outside widening from 3020+00 to 3076+66.

WB widening and outside rehab of the Tidewater Bridge.

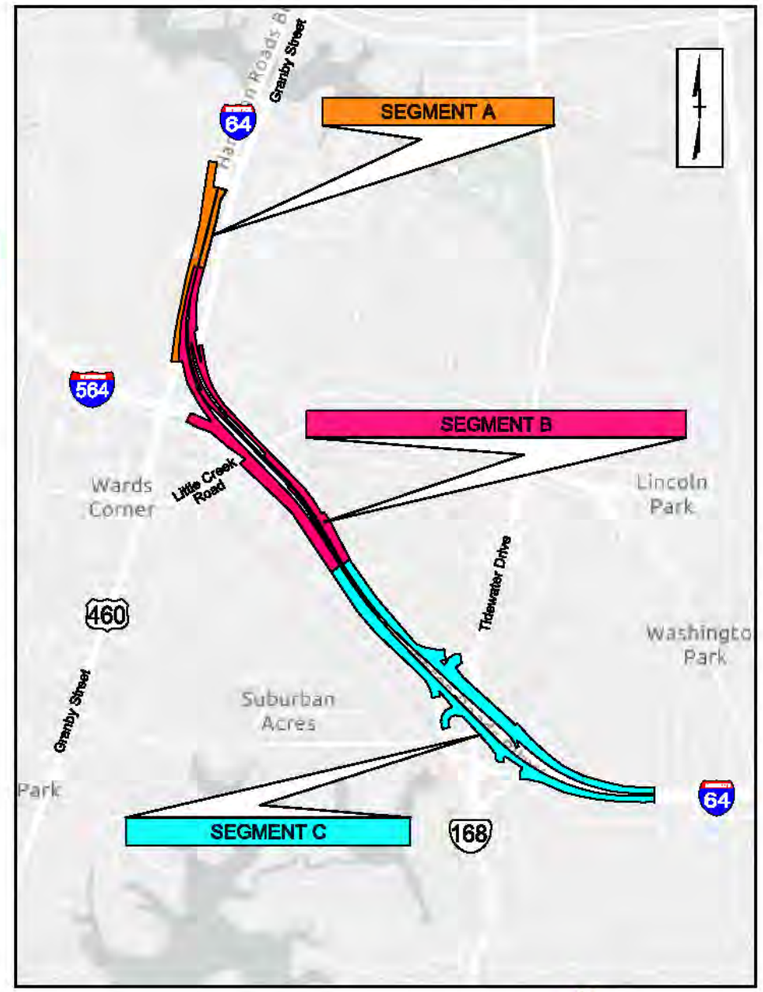
PHASE 2

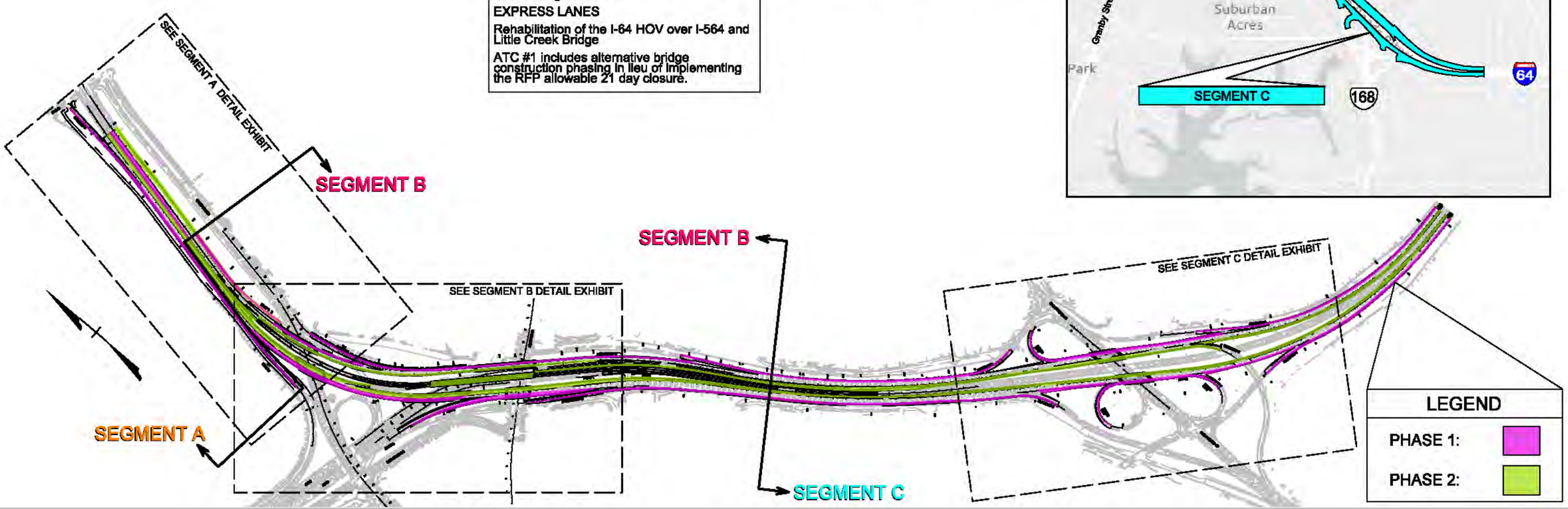
EB I-64 inside widening from Sta. 1027+00 to Sta. 1085+50.

EB inside rehab of the Tidewater Bridge.

WB I-64 inside widening from 3020+00 to 3076+66.

WB inside rehab of the Tidewater Bridge.

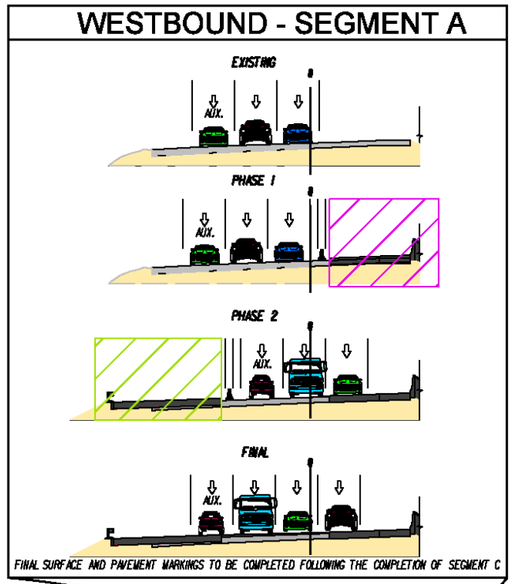


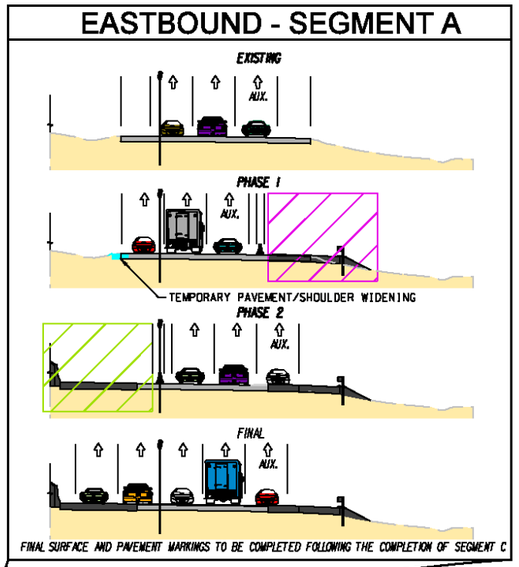


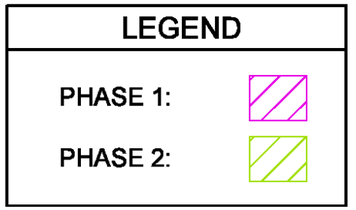
I-64 Hampton Roads Express Lanes (HREL) Segment 1A
City of Norfolk, Virginia
Project No. 0064-122-470, P101, R201, C501

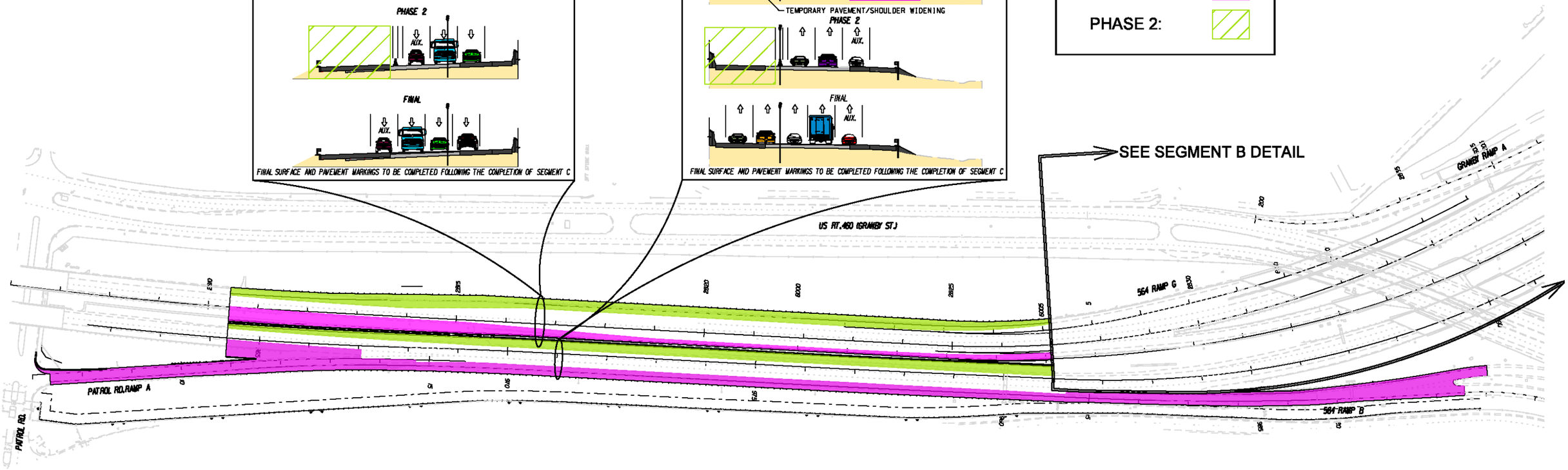
Exhibit 4.5.1.2

SEGMENT A DETAIL







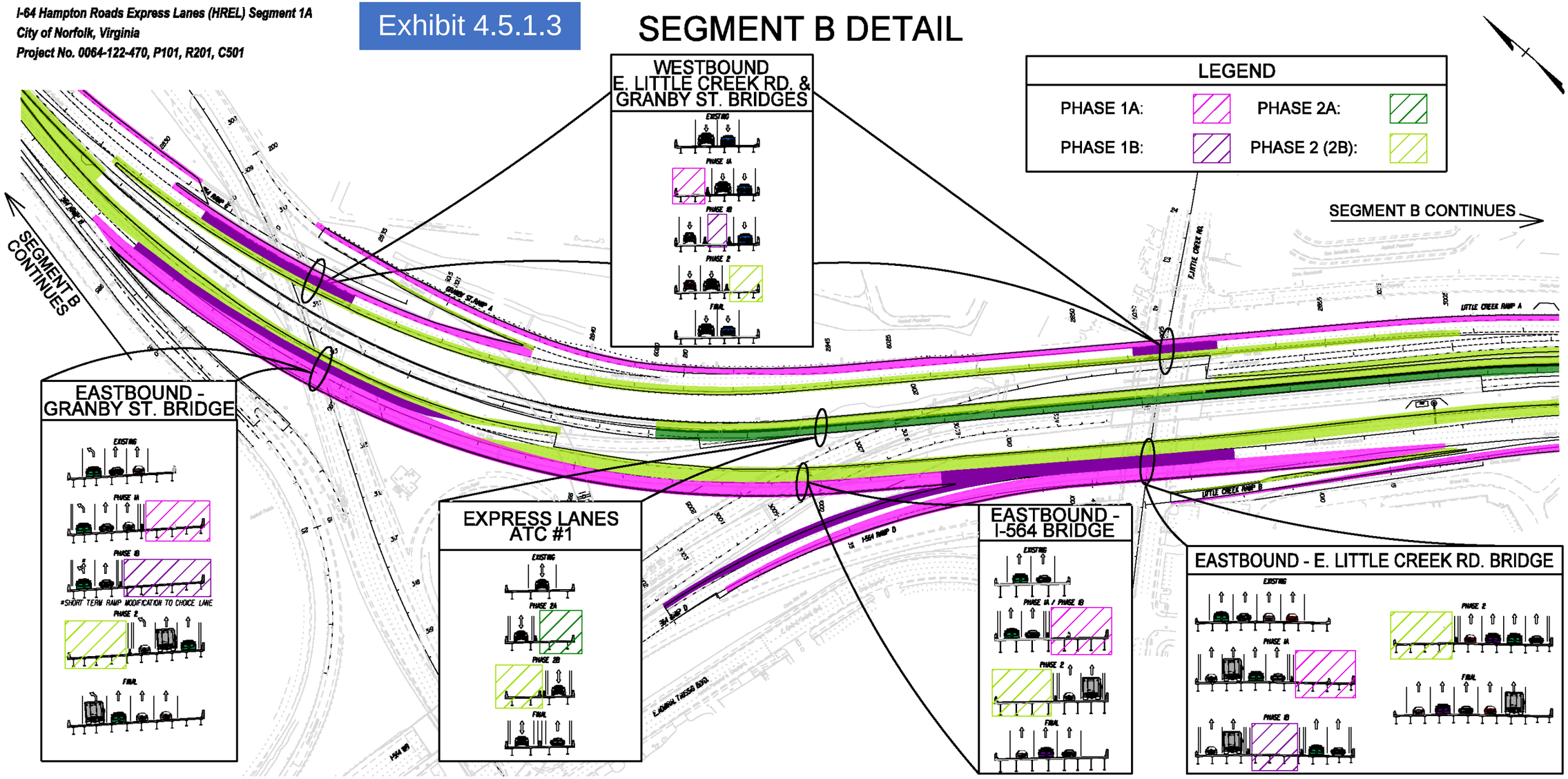


WORK AREA	WORK ELEMENTS	2023			2024				2025			
		Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Segment A	Naval Station Norfolk Security Fence Construction											
	Retaining Walls											
	EB - Phase 1 MOT											
	WB - Phase 1 MOT											
	EB - Phase 2 MOT											
	WB - Phase 2 MOT											
	Roadway Construction											

I-64 Hampton Roads Express Lanes (HREL) Segment 1A
City of Norfolk, Virginia
Project No. 0064-122-470, P101, R201, C501

Exhibit 4.5.1.3

SEGMENT B DETAIL

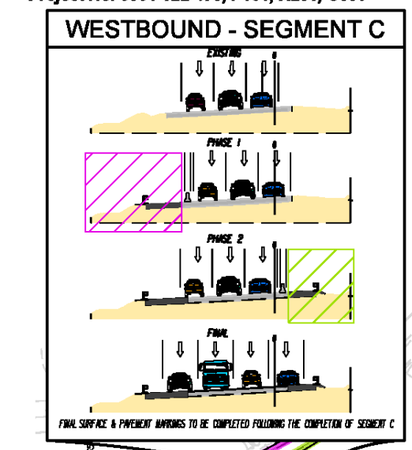


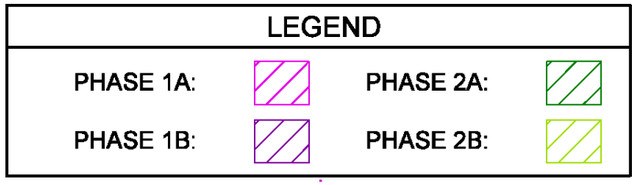
WORK AREA	WORK ELEMENTS	2023			2024				2025			
		Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Segment B	EB - Phase 1A MOT											
	WB - Phase 1A MOT											
	WB - Phase 1B MOT											
	Retaining Walls & Noise Walls Construction											
	EB over E. Little Creek Bridge Widening Construction (Phase 1A)											
	EB over Granby Bridge Widening Construction (Phase 1A)											
	EB over I-564 Bridge Widening Construction (Phase 1A)											
	EB - Phase IB MOT											
	WB I-64 HOV over I-564 & E. Little Creek Bridge Rehab (Phase 2A)											
	WB I-64 HOV over I-564 & E. Little Creek Bridge Rehab (Phase 2B)											
	EB - Phase 2 MOT											
	WB - Phase 2 MOT											
	Roadway Construction											

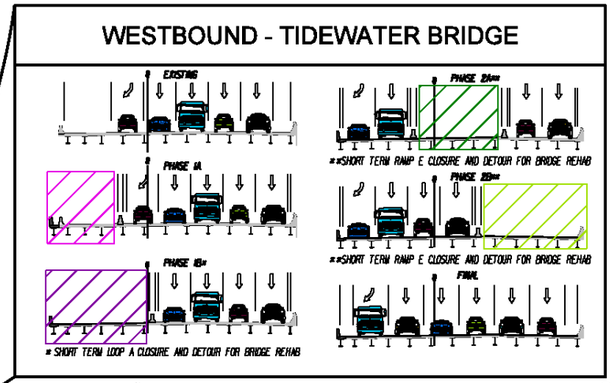
I-64 Hampton Roads Express Lanes (HREL) Segment 1A
City of Norfolk, Virginia
Project No. 0064-122-470, P101, R201, C501

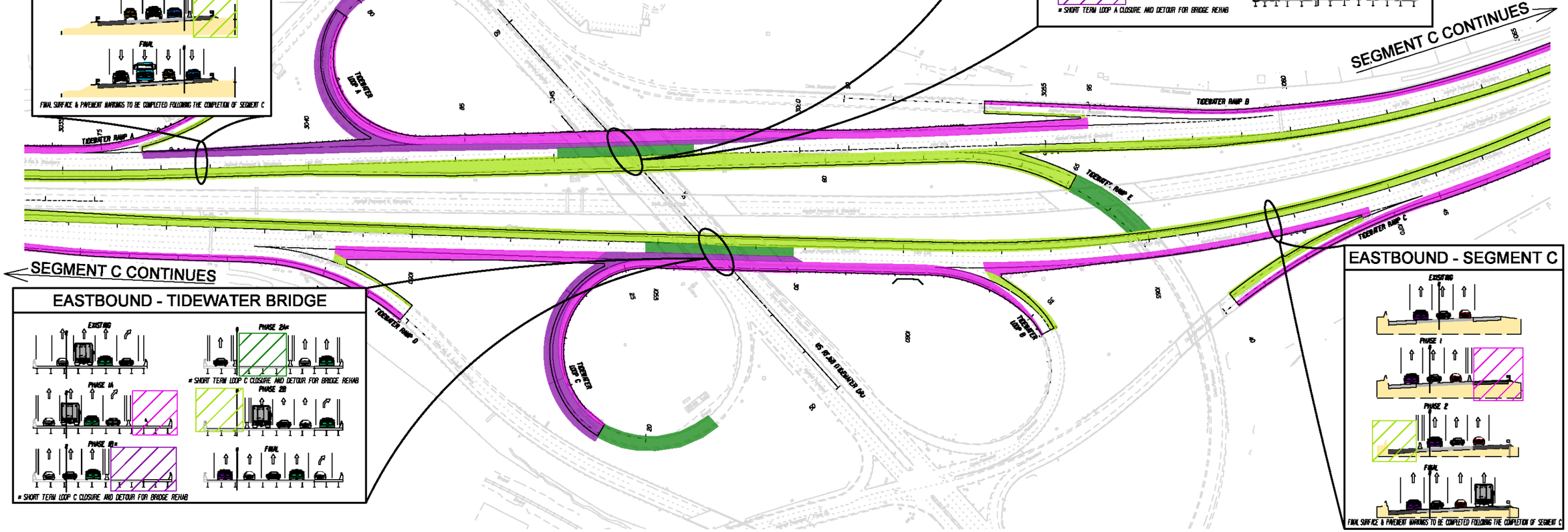
Exhibit 4.5.1.4

SEGMENT C DETAIL









WORK AREA	WORK ELEMENTS	2023			2024				2025			
		Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Segment C	Retaining Walls & Noise Walls Construction											
	EB - Phase 1 MOT											
	EB over Tidewater Bridges Widening Construction (Phase 1A)											
	EB Tidewater On Ramp C Loop Closure (3 Weeks) (Phase 1B/2A)											
	EB - Phase 2 MOT											
	WB - Phase 1 MOT											
	WB over Tidewater Bridges Widening Construction (Phase 1A)											
	WB Tidewater Off Ramp A Loop Closure (3 Weeks) (Phase 1B)											
	WB Tidewater On Ramp E Closure (2A/2B) (3 Weeks)											
	WB - Phase 2 MOT											
	Roadway Construction											

Early Works Phases 1 and 2

Early Works Construction Objectives

- Early Coordination and Advancement of HRBT Overlap Area Reducing VDOT Risk
- Effective Use of Contract Time While Awaiting Jurisdictional Area Permitting
- Reduction of TOYR Risks
- Providing Additional Float to Primary Design Packages, Initial Construction Starting While Critical Design Continues

Our DBT will develop Early Works packages which encompass Segment A so that we are on or ahead of the overlapping HRBT schedule. The RFP describes requirements for coordination of the I-64 HREL Segment 1A project with the HRBT leaving the DBT responsible for coordination of the overlapping HRBT schedule. However, should a Design-Builder fail to deliver the necessary improvement in a manner that causes no impact to HRBT, VDOT may face potential changes or claims on the HRBT project. ***Our DBT's Early Works construction sequence on Segment A represents a reduction in risk to VDOT by prioritizing this overlap area and removing potential conflicts as soon as possible in the construction of the HREL 1A project.*** This will be accomplished by accelerated design and construction coordinated with the HRBT schedule of record so that both projects align, ensuring no unnecessary impacts or sudden shifts to traffic moving through the corridor occur. ***Our DBT has the experience to deliver this concept as we have successfully done on the I-95 SB and NB Rappahannock River projects, both of which overlapped with the $535 million Fredericksburg Express Lanes Extension Mega Project***. This strategy will require two Phases of Early Works RFC Plans in Segment A containing MOT, Clearing, ESC, and Mass Grading. The primary objective of the Early Works Packages on the critical path outside of HRBT coordination will be to enable the temporary widening and shoulder. Once Early Works RFC plans including MOT and ESC are approved, crews will immediately mobilize to install advanced work zone signage and begin shoulder strengthening operations. ESC impacts during this phase are anticipated to be minimal as strengthening will occur directly adjacent to the roadway, confined by existing roadside ditches, where applicable. The construction sequence in the Early Works packages will also prioritize tree clearing where not subject to wetland impacts to ensure avoidance of time of year restrictions (TOYR) for northern long-eared bats or other species of concern. Ideally this can be completed concurrently with subsequent design package approvals to maximize efficiency; however, if design approvals and permitting have not been completed, grubbing may be delayed to avoid unnecessary ESC risks. Concurrently with the Early Works phases, the DBT will prioritize the relocation and installation of connective fiber optics such as fiber in the new median barrier from the western project limit extending approximately 2,000 feet to near the Granby Street overpass. Aerial fiber for temporary connectivity and point-to-point broadband fiber bridge back-up will be deployed in sections where construction activities prevent early permanent fiber installation

Figure 4.5.1.1 EB and WB I-64 Segment A Early Works Phase 1

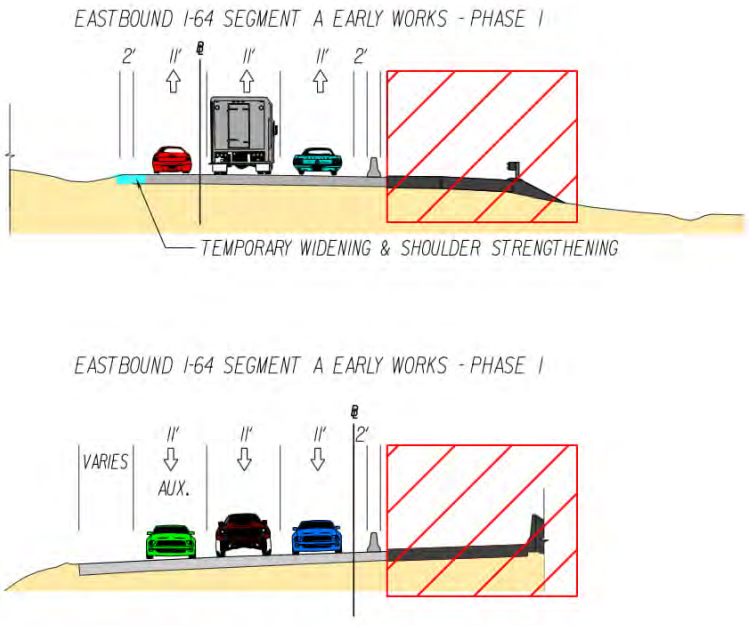
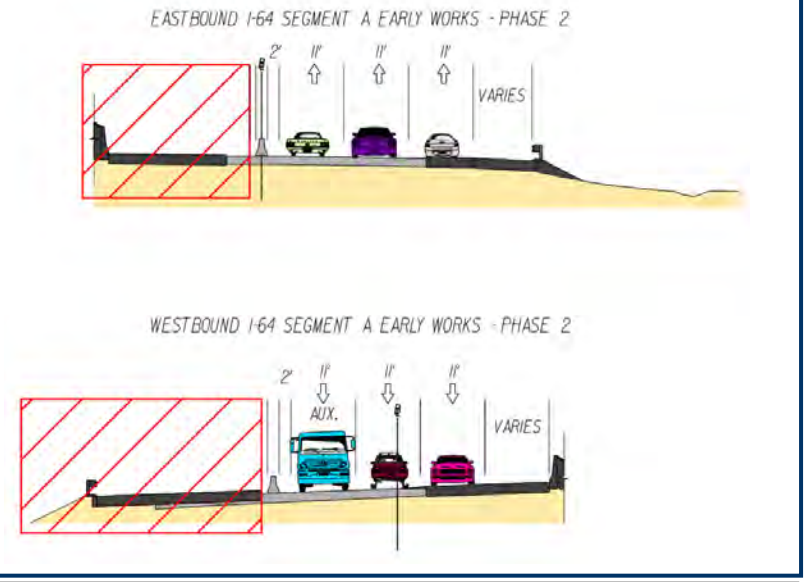


Figure 4.5.1.2 EB and WB I-64 Segment A Early Works Phase 2



and connection. This early work to protect the operational integrity of existing ITS assets will allow construction work to proceed with reduced risk to VDOT operation continuity. This advanced ITS work will also facilitate relocations sequenced with ongoing widening operations enabling a phased approach to relocation and installation efforts while minimizing downtime. Early works packages will also include areas of Segment B and C that are not subject to wetland impacts that require permits, thus allowing construction to start sooner. Final surfacing and permanent markings in the Segment A Early Works area will be completed alongside the final surface paving and permanent marking in Segments B and C to ensure a uniform and well maintained project at final completion.

Phase 1 Segments B & C

This Phase entails the temporary shift of EB and WB I-64 traffic to the inside on the already-widened and/or strengthened shoulders. This phase also includes sections of ramp widening and improvements, as well as surface road improvements. This Phase will be predicated on the approval of a project-wide MOT RFC Design Package detailing barrier placement, temporary marking, attenuators, construction of entrances, and signage necessary to implement the inside traffic shift. Approval of general RFC plans for Segment B or C will allow crews to begin various scopes of work to the outside of the existing roadway, including the construction of retaining walls utilized in our concept to reduce slope widening, proposed noise walls, ESC impacts, SWM facilities serving as temporary sediment traps, and potential jurisdictional area permitting and mitigations. Widening work to the outside will include earthwork, drainage, CTA, OGDL, and pavement courses. Final guardrail and/or barrier, as applicable, will be installed out of traffic before shifting to Phase 2. The flexibility inherent in the Segmented design packages allows crews to begin work earlier, as plan package approvals are obtained, and allocation of independent crew resources to multiple segments concurrently, while maintaining adaptability in all work areas protected by consistent positive barrier.

Structure crews may also begin widening and rehabilitation of the eight existing structures within Segments B and C concurrently. The eight structures each feature two to four sub-phases correlated to the construction sequence tailored to each structure and surface street MOT plan. Due to varying existing geometry, the bridge widening and rehabilitation work for Phase 1 slightly varies from bridge-to-bridge as described in *Section 4.3*.

The DBT has developed best practices to identify the specific areas of existing bridge decks that will require Type B or C deck repairs prior to beginning physical demolition. DBT members Wagman and WM successfully performed proactive investigations on the largest domestic Latex Bridge Rehabilitation for the MDTA on I-95 through downtown Baltimore. This enabled the delivery of over 600 SY of "emergency" deck repairs in addition to our contracted scope of $55M. This work was delivered early, earning the maximum schedule incentive.

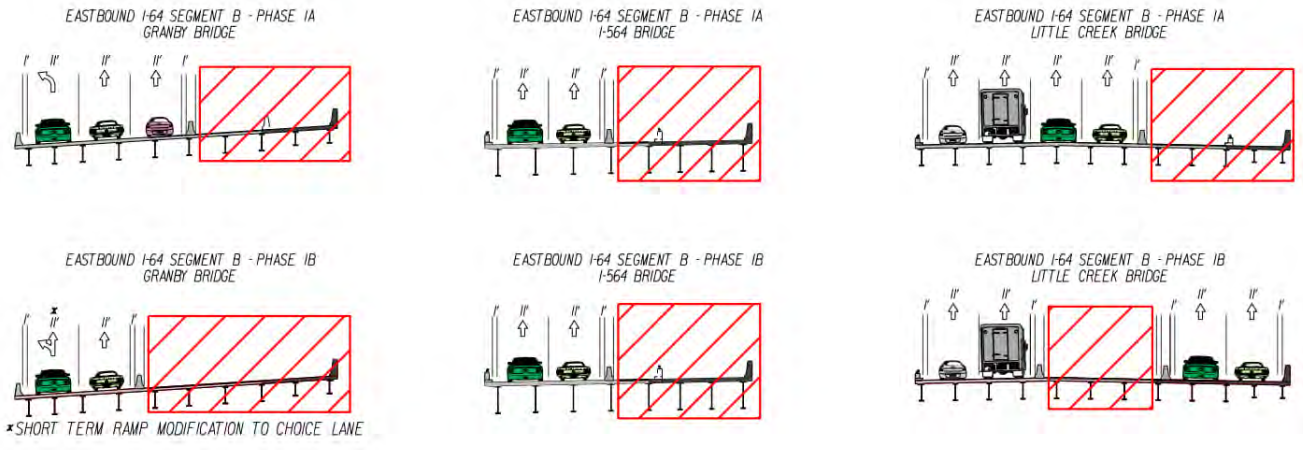
We have outlined the correlation between the Primary MOT phases and the Structure Specific Sub-phasing in the *Table 4.5.1.3*. Generally, structure crews will be mobilized to the available structures in a sequence permitting them to move along the Segment in a logical fashion while having the opportunity to advance multiple structures simultaneously. Sub-phase 1A will begin with demolition crews being mobilized.

Table 4.5.1.3 – Primary MOT Phasing and Structure Specific Sub-phases

Primary MOT Phase	Structure Specific Sub-phasing
1	1A
	1B
2	2A
	2B

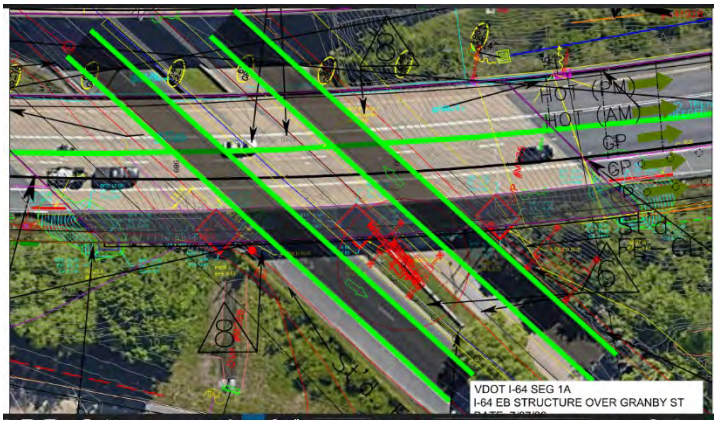
Generally, as demolition on one structure is completed, micropile and substructure crews will mobilize to the median piers of that structure and begin installation of the proposed Pier 2 located in the median of the surface road. It should be noted that this sequence will be inverted at Tidewater Dr. to facilitate EB shoulder strengthening for the center pier construction outside shift. Surface street MOT will subsequently be reconfigured to allow access to outside piers and abutments. Substructure concrete crews will complete the foundation elements and any surface street planned barrier or guardrail restorations/modifications. Girder erection will be followed by deck construction. New parapets will be completed. Widened structures will then progress to Sub-phase 1B where the existing structures will be repaired within the limits afforded by the Primary Phase 1 traffic. Throughout the I-64 bridge widening and rehabilitations, the RFP required lanes will be maintained. Following the completion of the Phase 1 structural work and concurrent roadway widening, the project will advance to Phase 2. Each widened and rehabilitated structure has specific constraints due to differences in surface street configuration and allowable lane closure restrictions. As such, the DBT's plan accommodates the differences in each site shown in *Figure 4.5.1.3*.

Figure 4.5.1.3 EB I-64 Phase 1A and 1B Segment B Typical Section



- ***I-64 EB over Granby Street*** Sub-phase 1A widening will maintain a minimum of two travel lanes of I-64 at all times with an 11' lane width and required 1' shy distance. Granby Street will require a stationary closure of the two opposing inside lanes of Granby Street reducing the typical section to a single lane in each direction for the duration of the median pier widening construction. Our concept not only meets the maximum long-term traffic control restriction on Granby Street of 12 months, but **our concept will exceed the RFP requirements by returning Granby Street under I-64 to two-lanes in each direction within five months of the initial closure,** minimizing impacts to traffic. Furthermore, during the closure, our team will maintain a **12-foot lane width (12+2 face-to-face of barrier)** for each travel lane reducing risk of incidents, accommodating larger vehicle traffic through the work zone, and further exceeding the RFP requirements of a 10-foot minimum lane width. Subsequently, lane closures will invert to the outside lanes to complete the exterior pier widening construction. The inside open lane will retain the 12-foot lane width (12+2 face-to-face of barrier). Sub-phase 1B will include the rehabilitation of the deck with no impacts to Granby Street below. **To accelerate this construction sub-phase very early strength latex will be utilized.** Crane placement on the outside will require the excavation of the adjacent embankment and support of excavation (SOE) elements will be installed for crane pad construction as required to minimize construction disturbance while maintaining two lanes of traffic on Granby Street.

Figure 4.5.1.4 – I-64 EB over Granby Street Construction

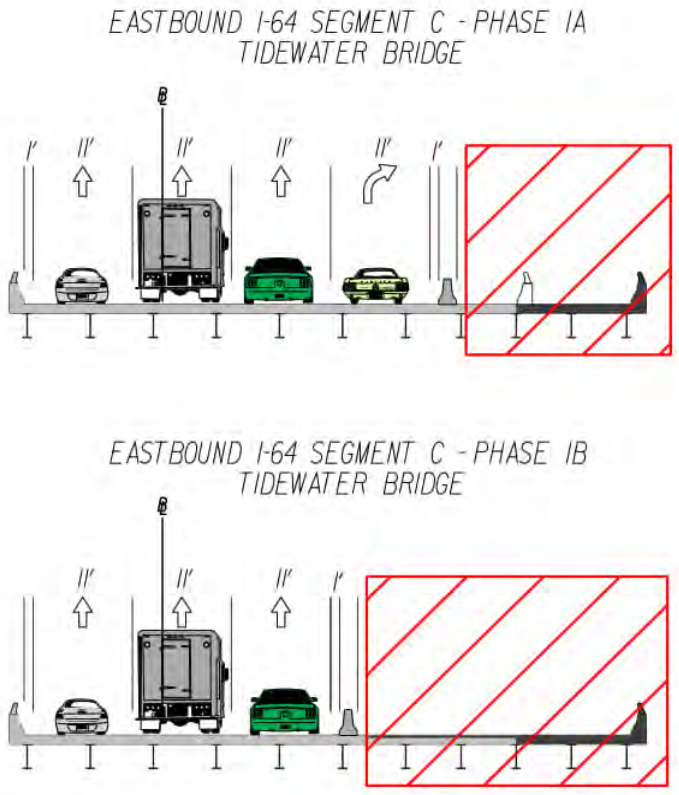


- ***I-64 EB over I-564*** Sub-phases will maintain two travel lanes on I-64 throughout construction. The widening work will entail the reduction of the lane width for the underlying I-64 HOV ramp to 12' (12+2), a stationary lane closure of the inside travel lane, and a shift to the outside shoulder while maintaining the RFP required 10' lane widths. **Our concept will return I-564 to two lanes in only five and a half months.** Construction will continue at the outside shoulder substructure widenings with only temporary traffic shifts while maintaining the existing lane on the HOV Ramp and two lanes on I-564. The I-564 Abutment B is a strategic location for the use of micropile foundation construction to avoid potential impacts to a high-mast ITS structure and adjacent I-564 travel lanes. Construction of the outside pier widenings and abutments will likely require SOE element installation to facilitate crane pad construction.
- ***I-64 EB over E. Little Creek Rd*** concept will maintain four travel lanes on I-64 throughout construction. The widening work will require the temporary closure of the two opposing inside lanes of underlying E.

Little Creek Road to facilitate building the proposed Pier 2 in the median. Following completion of the center pier widening, the lane closures will switch to the opposing outside lanes for the outside pier widening construction. Lane widths of 10' will be maintained in the open lanes throughout construction at E. Little Creek Road. During outside pier and abutment construction temporary SOE elements will be installed as necessary to facilitate crane pad construction. During Phase 1B, to rehabilitate the center two lanes of the bridge, traffic already separated by the incoming I-64 and I-564 ramps will continue separated until passing the interior closure effectively avoiding any additional impacts to traffic as shown in *Figure 4.5.1.3*.

- ***I-64 EB over Tidewater Drive*** Phase 1A and 1B concept will be widened to outside requiring the closure of the two opposing outside lanes of Tidewater Drive under I-64 for the simultaneous widened outside pier construction. Our DBT will maintain two lanes in each direction with a minimum lane width of 10'. Following the outside pier construction, the work zone will be reconfigured to close the interior lane of SB Tidewater Drive and have a lane width reduction at NB Tidewater Drive with two 10' lanes. As shown in *Exhibit 4.5.1.4*, Sub-phase 1B will require a temporary detour of the Tidewater Loop C on-ramp carrying traffic from SB Tidewater Drive to I-64 EB. Further details for this detour are included in *Section 4.5.2*.

Figure 4.5.1.5 EB I-64 over Tidewater Dr Sub-phases 1A and 1B

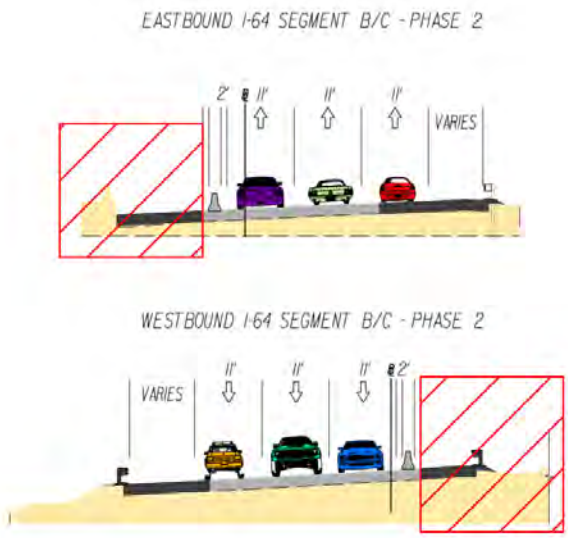


- ***I-64 WB over Tidewater Drive*** Sub-phase 1A will consist of the widening of the structure to the outside and will occur concurrently with Sub-phase 1A on the I-64 EB over Tidewater Dr. structure. This concurrent construction will reduce overall aggregate traffic impacts and create a consistent traffic pattern on Tidewater Drive. I-64 WB over Tidewater Dr Sup-phase 1B will temporary require the elimination of the Tidewater Loop A off-ramp from I-64 WB to Tidewater Dr SB. Traffic detour routes will be analyzed to determine the most appropriate route and are discussed further in *Section 4.5.2*. **Our Team will complete Phase 1B and remove the detour in less than three weeks by utilizing very early strength latex modified overlay**.
- ***Phase 1 Rehabilitation Only Bridges*** – I-64 WB over Granby Steet & I-64 WB over E Little Creek Road will be rehabilitated within the limits of the Primary Phase 1 traffic shift as detailed in the scoping. These rehabilitations generally consist of two Sub-phases 1A and 1B. Phase 1A will focus on the outermost portion of the structures while maintaining the RFP required two travel lanes at all times. Phase 1B will shift the bridge specific MOT to close the center lane splitting traffic. **Phase 1B work will be completed expeditiously utilizing very early strength latex modified concrete overlay to restore the riding surface and reduce the hazards inherent with center lane work zones**. Once completed, Phase 1B will be pulled back to the original positioning to restore traffic to two adjoining lanes until Phase 2 can be fully implemented.

Phase 2 Segments B & C

This phase includes the inside widening throughout the project facilitated by the shifting of traffic to the widened pavement built in Phase 1. Phase 2 will be predicated on approvals of final RFC plans for Segments B and C. Phase 2 will require the shifting of traffic over the course of several allowable closure periods to facilitate new temporary markings, barrier movement, and attenuator installation. Once complete, work on the inside widening will begin with earthwork and drainage work including retaining wall construction, facilitating ITS cabinet foundation placement. ITS and Signing crews will complete the remaining gantry and overhead sign foundations in addition to completing new permanent fiber optic and power conduits to enable system testing and integration as Phase 2 progresses. Rehabilitation crews will move sequentially through the structures continuously prosecuting work on each once started.

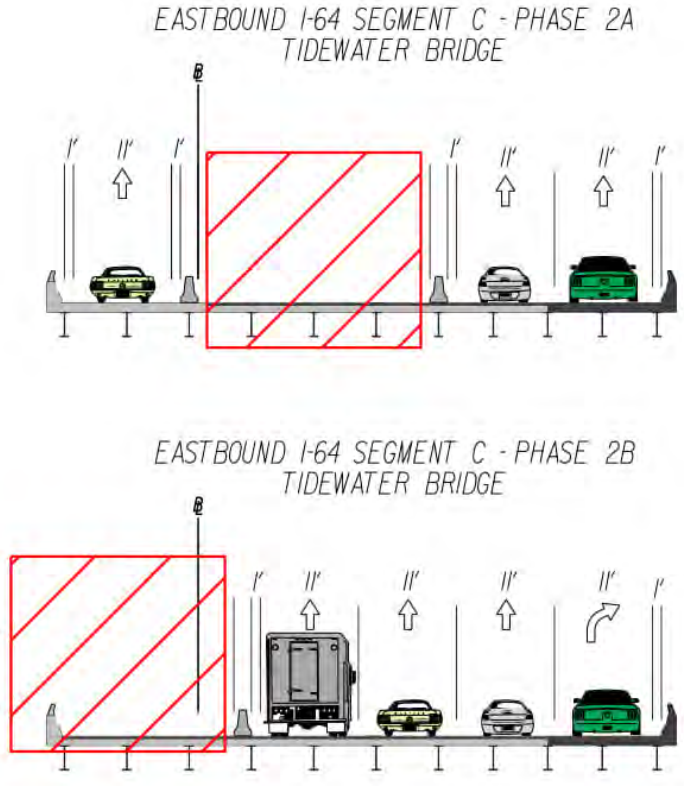
Figure 4.5.1.6 EB and WB I-64 Segment B/C Phase 2



Structure crews will also begin rehabilitation of the eight existing structures within Segments B and C with the construction sequence tailored to each. The bridge widening and rehabilitation work for Phase 2 slightly varies from bridge-to-bridge as described in *Section 4.3*.

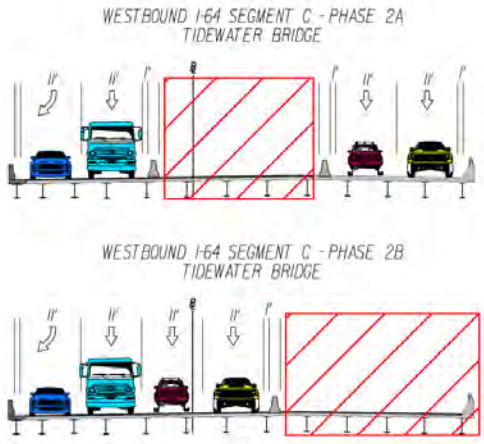
- ***I-64 EB over Tidewater Drive*** Phase 2 will be completed in two Sub-phases. The detour of Tidewater Loop C on-ramp from Phase 1B remains in place for Phase 2A. **Our Team will complete Phase 1B and 2A, then remove the detour in less than three weeks utilizing very early strength latex modified overlay**. Traffic will be split along EB I-64 behind temporary barrier wall with two lanes to the outside and one lane to the inside as shown in *Figure 4.5.1.7*. This will facilitate the bridge rehabilitation scope while three travel lanes of I-64 EB are maintained across the bridge. Phase 2B will include the opening of the On-Loop C Ramp from SB Tidewater Dr. to EB I-64. The work in this Phase will shift all traffic to the outside and conduct the necessary bridge rehabilitation on the inside. No lane closures will be required on Tidewater Drive during Phase 2.

Figure 4.5.1.7 EB I-64 Segment C Phase 2A & 2B



- ***I-64 WB over Tidewater Drive*** Phase 2 will be completed in two Sub-phases. Phase 2A includes the opening of the Loop A off-ramp from WB I-64 to SB Tidewater Dr. followed by the closure of the Tidewater On-Ramp E from NB Tidewater Dr. to WB I-64, detouring traffic as described in *Section 4.5.2*. This phase will rehabilitate the bridge in the center area while maintaining four travel lanes on I-64 WB. Phase 2B includes the continued closure of the Tidewater On-Ramp E to complete the rehabilitation of the structure to the inside. Following completion of rehabilitation work temporary signals, marking, and signing for the ramp detours will be promptly removed. Pavement will be restored where applicable and the interchange will return to conventional operation as modified. **Our Team will complete Phases 2A & 2B and remove the detour in less than three weeks utilizing very early strength latex modified overlay**.

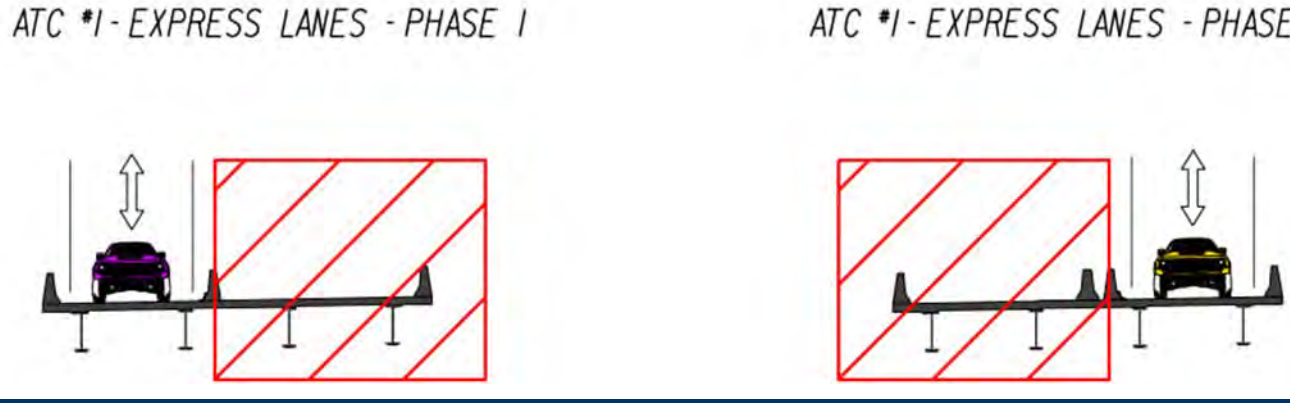
Figure 4.5.1.8 WB I-64 Segment C Phase 2A & 2B



I-64 HOV over I-564 and E. Little Creek Road

The proposed work on this bridge includes the DBT approved ATC #1 regarding the rehabilitation of the existing I-64 Reversible HOV Lanes Bridge over I-564. The DBT's unique ATC #1 allows the construction of barrier wall, joint rehabilitation, and latex modified concrete deck overlay without closing the reversible facility. This is completed by reconfiguring temporary barrier and MOT devices during reversal periods to prevent traffic impacts, improve safety, and prevent loss of tolling revenue. As highlighted in Section 4.3, the benefits of keeping the HOV lane (AADT of over 5,600 vehicles) open during the rehabilitation of this bridge safely maintains HOV commuter driving patterns and provides lane continuity, maintaining capacity on mainline I-64 allowing for the uninterrupted collection of toll revenue, and eliminating the schedule risk for an extended closure.

Figure 4.5.1.9 WB I-64 Segment C Phase 2A & 2B



ITS/Lighting/Signs

Our DBT understands the importance of maintaining ITS, signage and lighting on the project during each Phase and Stage of Construction. The existing corridor features substantial interchange and roadway lighting, overhead signing, and tolling facilities on the HOV lanes in Segment C. Power and Network connectivity for Overhead Dynamic Message Boards and Closed Circuit Television (CCTV) cameras must be maintained in accordance with RFP requirements. The DBT has extensive experience with these facilities on other VDOT Projects including the I-95 Rappahannock River Crossing Projects.

Lighting – The widening required for the project will force the removal and replacement of a substantial quantity of roadway lighting poles and luminaries over the 2.5-mile project. Many of the existing poles are immediately adjacent to the existing edge of pavement. Lighting components, particularly poles, have been subject to supply chain issues and fabrication delays. Being aware of this risk, the DBT will ensure that this construction reality

drives the early design development of lighting types and quantities that will enable ordering of poles and luminaries well in advance of their need on the project. Existing lighting will be maintained through construction until the new systems are installed and operational. If necessary, temporary lighting and signage will be installed in locations coordinated to eliminate conflict with on-going construction. Additionally, our Construction & ITS Coordinator, Juan Doron will with will collaborate with Design Utility Coordinator, Richard Bennett, to locate and field-verify power sources for existing lighting to avoid unnecessary outages or delays to utility service upgrades as may be required by updated VDOT Standards. Installation of new power conduits and conductors will be coordinated with earthwork activities to avoid damage to newly placed services with newly installed conduits mapped in field surveying models.

Signing – At the outset of the project our Survey Manager, Michael Hootman, will document the field condition and inventory of existing overhead and ground mount signing as well as whether signing is lighted. Juan's construction team will review existing signing against design plans to ensure that existing signing is not in conflict with proposed construction access, MOT devices, or final construction. This will ensure existing signing will be properly maintained, as necessary, in modified conditions such as the use of ground mounted skids for maintaining critical overhead or ground mount panels in a condition that keeps them visible and effective for roadway users. Signing to be maintained will be coordinated with VDOT Traffic and Operations personnel to determine preferred placement and/or alternatives.

ITS and Tolling – The project features significant amounts of existing and new ITS and tolling infrastructure associated with I-64 Operations (VDOT ATMS) and the Reversible I-64 Tolled HOV lanes. We understand the DBT will be responsible for the construction of civil infrastructure and power including foundations, conduits, fiber, gantries, dynamic signing, vehicle sensors, power services, and back-up power generators. Fiber will be installed to the VDOT Communications Hub at the I-64 EB Ramp/E. Little Creek Road intersection as well as the VDOT TOC at I-64/Indian River Road Interchange in existing conduit. In addition to these new elements, it is critical that the functionality of the existing tolling, dynamic message boards, CCTV cameras, and gates stay in operating condition. Our DBT will coordinate with VDOTs HRTOC and Tolling System Integrator (TSI) as required to ensure clear procedures are established for integration and testing, cut overs, and planned outages. Our DBT understands that gantries, CCTV poles, cabinets, and gates are long lead items for procurement, detailing, and delivery. Our construction sequence includes early procurement and detailing to allow expedient delivery of these items. Gantry designs and conduit layout will be priorities to ensure the TSI firm has sufficient designs to procure ITS cabinets, devices, and miscellaneous apparatuses for equipment attachment. Our construction sequence ensures that the required 180 day integration and testing phasing and activity durations are maintained in our schedule without risk of compression. We understand that tolling equipment and ITS construction is not simply installing civil infrastructure, hanging, and wiring some devices. It is a systematic installation, calibration, and testing process that requires careful planning and sequencing of the surrounding roadway to ensure that the tolling area is fully prepared and completed. Our DBT will prioritize the construction and resolution of any punch list items in the tolling area to ensure minimal impacts to VDOT's separately retained Tolling System Integrator (TSI). Toll Equipment Cabinet pads will be complete, served by communication fiber, and powered prior to the start of the integration and testing period. Our sequence and schedule break out these highly critical areas of the alignment to ensure that any slippage will not impact the delivery of the gantry area for calibration, integration, and testing. Our DBT will also commit to a minimum of monthly status update meetings with VDOT's TSI firm as desired, with frequency increasing to biweekly as we approach the Integration and Testing activity. These meetings will review design and construction progress to ensure the TSI firm is aware of their expected delivery timeframe well in advance. Furthermore, our DBT will ensure any issues regarding tolling civil infrastructure include the TSI firm as a reviewer for information and corrective actions ensuring no surprises when the project reaches the testing and integration milestone. The DBT understands the criticality of keeping ITS system operational to provide situational awareness, roadway user communication, and real-time condition data to agency leadership and incident management personnel. In addition to adhering to the required Notice of Impact (NOI) to Department Assets notifications, **our DBT will develop and maintain, throughout the life of the project, a call tree inclusive of the ITS/Tolling stakeholders and DBT personnel to enable efficient, agile, and complete communications and response in the event of an unplanned outage.** Our DBT

will have our ITS subcontractor available on-call to make necessary repairs should the existing ITS facilities be damaged during construction to ensure expedient repairs. The DBT will make every effort to minimize repeat calls to VDOT asset management and network operations personnel by ensuring field visits are well attended, markings are maintained, and identifying/location information is recorded in project survey models and/or field meeting minutes.

APPROACH TO MITIGATING DELAYS | The DBT's long history of delivering projects on time can be attributed to effectively partnering with VDOT and providing true integration between our Construction, Design, and Quality teams, a tenant of DBIA recommended practices. These experiences have compelled frequent, open, and honest communication between the DBT and VDOT at all levels to complete DB projects on schedule. This ladder-based approach results in high quality working relationships with our DBT's VDOT peers whether it is the VDOT PM and DBPM or the VDOT Construction Manager and DB Construction Manager. These relationships allow for fast-paced issue resolution at the lowest level possible. Issues are handled quickly and verbally with immediate written follow-up and confirmation. This is a foundational element of our success on other projects such as the I-95 Rappahannock River Crossing projects. Our DBT also understands that project success requires knowing the people and processes in the locale of the project. During initial construction kickoff and partnering our DBT will engage VDOT counterparts, team members, and stakeholders in the Hampton Roads District to ensure we have a firm grasp on the most up-to-date decision makers within the various agency and organizational directorates to ensure the right people are at the table for every decision.

Our DBT can self-perform all critical construction elements (roadway, drainage, structures, micropiles, latex and very early strength latex, utilities, geotechnical, noise barrier) and includes significant local manpower, equipment, and material resources. These resources are fully available for reassignment to this project to supplement the planned project team and advance the project. This capability separates us from many of our peers and allows us to mitigate resource constraints, subcontractor performance issues, and other issues beyond the control of the DBT or VDOT to deliver on-time and on-budget. In conjunction, our DBT is also committed to achieving the 12% DBE participation goal for the entire value of the contract.

Table 4.5.1.4 - Mitigations For Delays

- Partnering with VDOT and Key Stakeholders
- Integration Between Design & Construction
- Self-Performance Capabilities in Multiple Scopes
- Building a Field Centric Schedule
- Managing the Schedule
- Building in Float to High-Risk Activities
- Iterative Quality Management Systems
- Boots on the Ground Decision Making
- Team Utility Relocation Expertise

We utilize multiple scheduling tools to anticipate potential delays and effectively communicate these with appropriate mitigation strategies to VDOT. The Team has developed and will maintain a very detailed CPM schedule that has integrated the design, review, procurement, fabrication, construction activities, and third-party constraints (see Proposal Schedule in Section 4.6). Our schedule is the result of close coordination between the design, construction, and quality team combined with our immense VDOT experience and subcontractor input. The schedule is based on available design and construction resources; establishes specific activities for quality control/constructability of all deliverables; includes review times of all submittals, including shop drawings; includes time for all design, permitting, ROW acquisitions, utility relocations, construction, working drawings and material fabrication. A schedule is only as good as the effort and reasoning put into it. Our approach to scheduling and therefore sequencing the project to mitigate delays includes the following:

- Building realistic and feasible schedules based on experience and team input
- Incorporating VDOT comments and suggestions from reviews and tracking resolution in real time
- Ensuring construction field supervisory personnel "doer" involvement and buy-in
- Correlating three-week look-aheads with activities and planning from the CPM
- Real-time updating of the active CPM to contemporaneously recognize impacts and plan mitigations
- Compiling of updates and thoroughly narrating reasoning and details in monthly record submissions
- Thorough and transparent review of the CPM file, including the running of various what-if scenarios for early identification and mitigation of potential issues at Monthly Progress Meetings

Our DBT believes critical path scheduling is more than just a required once-a-month submission. The schedule is a dynamic tool and provides a basis for identifying opportunities for improvements to project completion through resequencing, adjusting resources or altering the means and methods for performance of the work. The outcomes of our approach to scheduling include:

- Minimizing the duration of impacts to the traveling public
- Avoiding or appropriately anticipating right-of-way acquisition delays

- Monitoring all witness and hold points
- Placing traffic on permanent pavement as early as safely possible
- Clearly identifying the project's critical path
- Avoiding utility conflicts
- Reducing overall contract duration
- No Surprises!

The project schedule will be updated monthly during the duration of the project and will include design, permitting, submittal/shop drawing reviews, procurement of materials, subcontractors, and construction activities. Quality Assurance (QA) and Quality Control (QC) hold points and witness points will be clearly defined, such as the performance, review, and submission to VDOT of underdrain videos, performed by a third party not involved in construction, after intermediate asphalt is complete and prior to transitioning to subsequent MOT phases. The schedule will be continuously monitored and updated to ensure that released-for-construction (RFC) plans, shop drawings, and governmental approvals are available when required, that resources are adequate and that materials are available when needed. Updating the schedule monthly and jointly reviewing the dynamic schedule file with VDOT at each progress meeting will allow us to identify any delay early and develop a recovery schedule as needed to open all lanes of traffic in their final configuration two days before the Thanksgiving Holiday by our intended early completion date of **11/25/2025** while also ensuring compliance with all enhancement timeframes included herein.

The 3-week look ahead when correlated to the project schedule will facilitate accurate scheduling of IA/QA/QC testing and inspection resources and manpower planning as highlighted in *Section 4.4*. Scheduled witness and hold points will clearly highlight these critical quality activities to all parties. Clear timelines on activities will allow VDOT the opportunity to be more efficient in its IA oversight by making sure that when VDOT is told an activity is occurring, they can count on it avoiding wasteful rescheduling and repeat visits.

Our DBT includes Quality Assurance and Quality Control firms with significant experience in VDOT Design-Build. Our DBT has continually set the bar for Construction Quality as measured by the statewide CQIP program with the I-95 RRC Projects by Wagman achieving scores over 97% in multiple CQIP reviews. This makes the I-95 RRC Projects two of the highest rated projects in the state for construction quality. Further, we stand behind our Quality Assurance Manager (QAM) to ensure that deficiencies and non-conformities are addressed as expeditiously as possible with sound judgement, sufficient opportunities for VDOT input, and a best fit solution to the issue at hand. When properly utilized, a systematically functional QA/QC program can quickly identify singular and systemic issues. When these issues are identified expediently, costly rework and delays can be avoided, having a direct impact on the project delivery timeframe.

This commitment to quality combined with our focus on managing to the project schedule augments the ability of VDOT IA and the DBT QA/QC personnel to plan required testing, have appropriately qualified staff on site, and ensure that VDOT's own plant QA services can arrange resources to inspect critical material deliveries. Ultimately excellence in QA/QC reduces the oversight burden on VDOT freeing up resources for other projects and Department objectives.

Bowman Consulting brings years of proven experience in managing utility avoidance and relocations by providing Utility Design coordination and Management Services. Richard Bennett of Bowman Consulting will be an integral part of our team integrated with Lead Designer Wallace Montgomery and the Wagman – Fay SE JV to make sure that the schedule is not impacted. One of the most common causes of construction delays are utility relocation issues. WM will use the 3D model generated from the OpenRoads design files while coordinating with Richard Bennett and the utility agencies to ensure that the means and methods required to relocate utilities will be compatible with the proposed construction plan. As an integral part of the Team, Richard Bennett's experience and input into project planning and scheduling have guided utility avoidance concepts in both design development and construction scheduling. Richard Bennett will be engaged in the project throughout design and construction maximizing the probability of anticipating and being able to mitigate utility delays and expedite utility work to increase the opportunity to improve upon stated final completion.

APPROACH TO PUBLIC SAFETY OPERATIONS | The DBT's top priority on the Project is the safety of our employees, subcontractors, agency partners, and the traveling public. We have a proven record of safely delivering multi-phase interstate projects as evidenced by recent national and regional industry safety awards from ARTBA, VTCA, and AGC-MD. In 2021, 2020, and 2019, Wagman was recognized by VTCA as the winner of the Contractor Safety Award in the 300,000 to 500,000, 150,001 to 300,000, and 100,000 to 250,000 manhours category, respectively..

FAY SE was recently awarded the 2021 VTCA Contractor Safety Award in the Less than 150,000 Manhours category. Our DBT Safety Director, Andrew Weston, CSP along with Construction Manager, Durant Walters, PE, DBIA received the award at the 2022 VTCA Annual Meeting. Currently, the Fay organization has over 2.2 million manhours without a single lost time incident Andrew Weston will be assigned to the HREL Segment 1A Project full time and will oversee the projects safety program from development of the Environmental Health and Safety Plan (EHSP) throughout training, physical construction, and project acceptance. As a Certified Safety Professional (CSP), Andrew has demonstrated a comprehensive knowledge of safety best practices and practical implementation skills on projects with risks similar to this Project. In addition to training members of the DBT, he will provide project specific training to the local first responders in fall retrieval.

Safety for the traveling public will be assured by the development of a detailed Traffic Control Plan (TCP). This plan will minimize traffic shifts and lane closures, maintain or exceed minimum lane widths, consider line of sight when planning for ingress to and egress from construction work areas, and avoid reductions in speed limits. TCB or guardrail will be used to protect long-term work areas. We will utilize a certified traffic control supervisor, David Creasey and crew with relevant Virgnia interstate experience, dedicated to installing, maintaining, and removing the temporary traffic control devices. We will conduct regular drive-through video inspections of the project and review for compliance with the approved TCP.

The DBT appreciates the criticality of keeping **vehicular traffic moving safely** while making the necessary infrastructure improvements; to accomplish this, we plan to perform the majority of our construction behind barrier. This also enables us to perform substantive portions of the work during the daytime. Our construction team has already worked closely with our design team in locating entrances to the work zone and will continue to perform detailed constructability reviews of the TMP and MOT plans, ensuring that our plans provide safe and effective advance warning and transit through the work zone.

Our DBT will also provide a comprehensive Incident Management Plan (IMP) conforming to RFP Part 2 Section 2.10.2. Additionally, our plan will provide the following **safety enhancements exceeding the RFP requirements** including:

- On-call towing services to supplement existing towing services during major traffic shifts and operations,
- A Hold Point for Emergency Responder Coordination Meetings facilitated by the DBT at the project office to provide updated information to 1st Responders prior to implementation of major traffic changes,
- Maintained access through all work zones for 1st Responders **with access points pre-mapped and provided graphically to applicable agencies,**
- Development of messaging for a variety of incidents (coordinated with VDOT's corridor incident management plan), and an emergency contingency plan (notification and response matrix coordinated with VA511 and preapproved detour routes with staged equipment and materials).

The DBT prioritizes the safety of the traveling public and is wholly aware of corridor-wide MOT impacts and coordinating with stakeholders to minimize additional traffic impacts. Our DBT has a proven track record of going above and beyond to manage stakeholder concerns at the I-95 Rappahannock River Crossing Projects. This includes actively engaging the VDOT District Communications and Operations teams to understand local events of significance and practicing active avoidance of traffic impacts. We will work with VDOT to minimize impediments to the traveling public and maintain a safe work zone throughout the I-64 corridor including participation in weekly Corridor-Wide Transportation Management communication team meetings. Our Team subscribes to a policy that all lane closures must be logged into LCAMs and VATraffic prior to implementation, unless in an emergency situation. This is a cornerstone of our No Surprises mentality.

Our DBT also recognizes that VDOT is responsible for all costs for Virginia State Police (VSP) services utilized for temporary lane closures, traffic shifts, and other operations outlined in Appendix C of the VAWAPM. Our DBT recognizes that we have a stake in ensuring efficient and properly planned use of VSP resources. Our DBT will exceed the requirements of the RFP by developing weekly VSP request tables for submission to VDOT Hampton Roads District coordinators clearly outlining traffic operations and associated needs. These tables will also prioritize operations allowing Troopers to recognize which operations are most critical when completing sign ups. Should planned operations exceed the availability of VSP Troopers, our DBT will complete appropriate processes to coordinate operation specific waivers from VSP to utilize Norfolk Police Department on a case-by-case basis.

EXPERIENCE MAINTAINING TRAFFIC THROUGH ALL PHASES OF CONSTRUCTION | One of the key considerations when developing the SOC and MOT phasing for the Project was to minimize any disruption and safety concerns to the traveling public by minimizing the major traffic shifts/detours required to maintain traffic. *Table 4.5.1.5* summarizes the traffic shifts required for each traffic movement within the project area.

The DBT will draw on its experience with major traffic shifts on high-volume interstates to successfully plan and execute this operation. We will closely coordinate with VDOT and implement measures such as temporary pavement and traffic analyses to minimize the disruption to traffic. While our Concept MOT has been developed in compliance with the RFP requirements of Part 2 Section 2.10.3, our Team has experience in providing unique approaches to major traffic shifts that look beyond the standard allowable lane closure tables to propose extended work periods that are planned at specific windows to result in a lower aggregate traffic delay with manageable queueing conditions, minimal impacts to parallel routes, and improved worker and motorist safety. While no deviations are foreseen, any proposed modifications would be proposed in accordance with Part 2 Section 2.10.3 with at least 30 days prior notice, comprehensive traffic analysis, and a demonstration of need.

The DBT has worked together to identify all critical construction activities, including access points and staging requirements, and we have developed a plan that accommodates these activities with minimal impact to the traveling public.

Table 4.5.1.5 – Traffic Shifts for Primary Traffic Movements

Major Traffic Movement	Number of Shifts	Phase 1		Phase 2	
		Phase 1A	Phase 1B	Phase 1A	Phase 2B
Segment A EB I-64	2	Widen Outside, Shift Inside		Widen Inside, Shift Outside	
Segment A WB I-64	2	Widen Inside, Shift Outside		Widen Outside, Shift Inside	
Segment B EB I-64	3	Widen Outside, Shift Inside	Middle Section of Little Creek Bridge Rehab, Split Traffic	Widen Inside, Shift Outside	
Segment B WB I-64	3	Widen Outside, Shift Inside	Middle Section of Little Creek & Granby Bridge Rehab, Split Traffic	Widen Inside, Shift Outside	
Segment C EB I-64	4	Widen Outside, Shift Inside	Widen Outside & Tidewater Bridge Outside Rehab, Shift Inside	Middle Section of Tidewater Bridge Rehab, Split Traffic	Widen Inside, Shift Outside
Segment C WB I-64	4	Widen Outside, Shift Inside	Widen Outside & Tidewater Bridge Outside Rehab, Shift Inside	Middle Section of Tidewater Bridge Rehab, Split Traffic	Widen Inside, Shift Outside

APPROACH TO STAGING AND STORAGE AREAS | The Team plans to build upon the successful staging plan used on the I-95 SB and NB RRC projects. The DBT's concept has reduced requirements for SWM facilities in the Loop C at Tidewater Drive creating a protected and safely accessible construction lay down area within the project right-of-way limits. All staging areas both offsite and onsite will be detailed in the project's SWPPP and properly permitted. Material staging for roadway construction will occur predominantly in station between construction entrances and the active work areas. We will pre-fabricate (specifically electric service racks and cabinets) and stage major materials at our existing three-acre material and equipment laydown yard located within 30 minutes of the I-64 HREL Segment 1A Project and schedule deliveries during non-peak hours whenever possible to minimize disruptions to the traveling public. The DBT will separate construction from the traveling public and will provide proper well signed ingress, egress, and refuge areas. These staging and storage/laydown areas are strategically located in close proximity to the work areas for access and operational efficiency to minimize construction traffic and deliveries disrupting traffic on I-64 as shown in *Exhibit 4.5.1.5*. Staging areas will also feature appropriate ESC measures to capture runoff and sediment before it is able to leave the project confines. Storage tanks and other potential pollution generators will feature appropriate containment in compliance with Pollution Prevention Plan requirements. Staging and storage areas will be meticulously maintained to ensure safety, environmental compliance, appropriate material storage accommodations, and a general appearance representative of the pride our Team takes in its work.

SEGMENT A

EB 964+34 TO 985+00
WB 2810+42 TO 2825+00

EB CONSTRUCTION
- CONSTRUCTION ACCESS - PHASE 1
- CONSTRUCTION ACCESS - PHASE 2

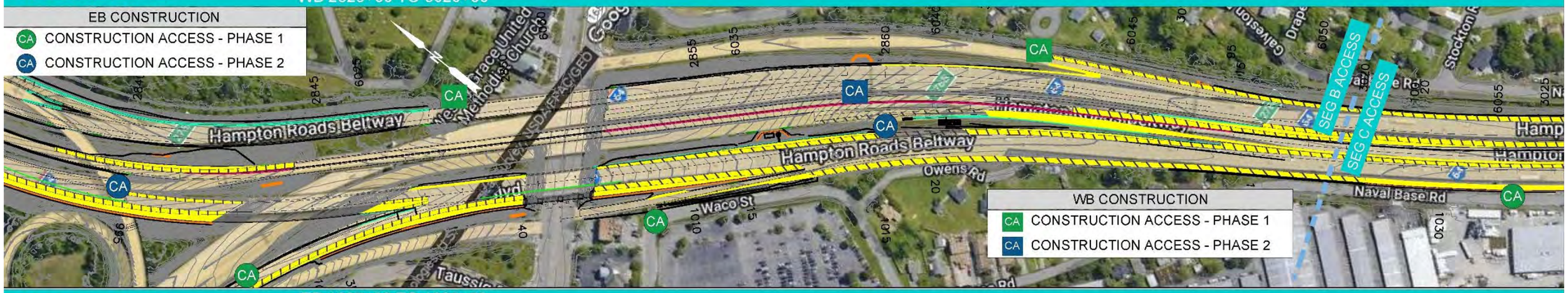
WB CONSTRUCTION
- CONSTRUCTION ACCESS - PHASE 1
- CONSTRUCTION ACCESS - PHASE 2

SEGMENT B

EB 985+00 TO 1027+00
WB 2825+00 TO 3020+00

EB CONSTRUCTION
- CONSTRUCTION ACCESS - PHASE 1
- CONSTRUCTION ACCESS - PHASE 2

WB CONSTRUCTION
- CONSTRUCTION ACCESS - PHASE 1
- CONSTRUCTION ACCESS - PHASE 2



SEGMENT C

EB 1027+00 TO 1085+50
WB 3020+00 TO 3076+66

WB CONSTRUCTION
- CONSTRUCTION ACCESS - PHASE 1
- CONSTRUCTION ACCESS - PHASE 2

EB CONSTRUCTION
- CONSTRUCTION ACCESS - PHASE 1
- CONSTRUCTION ACCESS - PHASE 2

4.5.2 Transportation Management Plan

Our TMP expands upon the RFP requirements, incorporating the strategies highlighted in the VDOT HREL Regional TMP to coordinate traffic control, operations, incident management, and public outreach throughout the 47-mile HREL project work zone. Table 4.5.2.1 elaborates on these Enhancements and Benefits.

The DBT will develop a TMP that exceeds the requirements of a Type C, Category V project as noted in IIM LD-241/TE-351. The TMP will include the Traffic Control Plans, Traffic Operations Plan, Incident Management Plans, and Public Outreach Plan that are consistent with the schedule and practices in the latest version of the ***VDOT HREL Regional TMP***. The TMP will be consistent with the phases identified in the Sequence of Construction outlined in Section 4.5.1, and activities (e.g., traffic shifts, community outreach) are linked to the Project Schedule described in Section 4.6.

Table 4.5.2.1 – Transportation Management Plan Enhancements and Benefits

- Temporary Traffic Control design will provide safe, reliable, and predictable traffic flow through the Project while providing sufficient emergency pull off areas on outside shoulders.
- Our marked ingress/egress areas with dedicated access for material deliveries and construction access will use the same enhanced construction ingress and egress access points with positive protection barrier offset to allow safe deceleration/acceleration as used on the I-95 SB RRC Project.
- Our TMP minimizes traffic shifts and reduces MOT durations and impacts to the traveling public.
- MOT inspections will be performed every working day and will be documented in the Project files. Our TMP/MOT Design Lead, Ryan Mattern, will assist our MOT Manager, David Creasey, by performing field reviews during construction to verify TTC is functioning as designed and develop enhancements where safety can be improved. Team members will be on-call 24-hours a day, seven days a week to assist with any traffic related issues within the project limits.
- All new MOT patterns will be documented via video immediately after installation and verified for conformity and operational acceptance. MOT will also be documented via video at the end of the work week and prior to Holidays in advance of increased traffic.
- Similar to our I-95 SB RRC Project, we will: 1) hold a separate Pardon Our Dust Meeting for this Project to review our formal incident management plan, discuss the planned TMP/MOT schemes and invite emergency service responders, school transportation, and regional transportation service providers, and 2) conduct safety specific training including fall retrieval with the emergency service providers.
- Our Team proposes to exceed the requirements of the RFP by adding Election Day, the Tuesday after the first Monday in November, to the Holidays enumerated in 2.10.3 to avoid traffic impacts to voters.

MAINTENANCE OF TRAFFIC STRATEGY THROUGHOUT CONSTRUCTION | Our approach to managing traffic sequencing is threefold:

- Reduce the number of traffic shifts within HREL Segment 1A
- Ensure all required traffic shifts are uniformly implemented and continuous throughout the project and geometry is designed for the full posted speed
- Ensure seamless traffic movement between HREL Segment 1A and adjacent HREL/HRBT segments.

This approach ensures that we maximize safety of roadway users and construction staff, minimize delays and business impacts, maintain travel time reliability, and deliver a project that opens all lanes in final configuration ahead of schedule and within budget. In addition to the adjacent HREL and HRBT projects, we will closely coordinate with adjacent City-led projects and private development projects in the area, including the Granby Street Bike Lane, ongoing signal optimizations and improvements, community drainage improvement projects, and ongoing city utility maintenance. To ensure continued coordination our DBT will establish a routine contact with the City of Norfolk and extend invitations to coordination meetings to further mitigate mutual impacts such as coordinating with the City to optimize and re-time signals and develop strategies to limit interstate traffic from cutting through local roadways.

Our DBT reviewed the RFP, the *VDOT HREL Regional TMP*, and the overlapping HRBT project schedule. From there, we collectively identified the constraints and "red flags" relating to maintaining traffic during Construction as highlighted in Section 4.5.1. We have already preformed preliminary VISSIM analysis of all MOT phases which show acceptable LOS and corridor travel times. The DBT will run additional microsimulations during final design of all MOT phases. The team opted to use an "outside-in" approach to widen the bridges first, then shift traffic to the newly widened roadway to complete the remaining phases. This multi-stage approach is detailed in our Project Schedule, highlighted in Section 4.5.1, and the maintenance of traffic plans for each phase shown per segment in *Exhibits 4.5.1.1, 4.5.1.2, 4.5.1.3, and 4.5.1.4*. Our MOT plan is developed based on the

posted 55-mph speed limit that will be supplemented with "work zone speed limit" signage, consistent with the RFP and the adjacent HRBT project. As such, we will not be requesting any work zone speed reductions.

As highlighted in *Section 4.5.1*, our Team will construct the project by completing an "early works" package of improvements that can be underway during the utility relocation, ROW acquisition, and preparation of the AFC plans for the primary phases of work. The early works, shown in *Figure 4.5.1.1* will include shoulder hardening where required and roadway widening within Section A at the western tie-in with the HRBT project to provide the appropriate roadway width required to transition traffic between the two projects. We will share 4 and 10 week look ahead schedules with HRBT and HREL 1B to enhance coordination between projects. Prior to initiating the early works package, we will place the required temporary traffic controls and ITS measures identified in the RFP (CCTV, microwave detectors, PCMS) and integrate them into the Regional system. The temporary ITS devices and signage will remain consistent throughout all of the MOT phases with specific plans detailed for individual traffic shift operations.

We will provide pre-coordinated static and PCMS signage directing truckers to the four distinct port facilities: Norfolk International Terminals (I-564), Newport News Marine Terminal, Portsmouth Marine Terminal, and Virginia International Gateway (VIG) Terminal in Portsmouth (stay on I-64) as well as signage directing employees and visitors to the appropriate exits for access to Naval Station Norfolk. We will coordinate closely with the Safety Service Patrols (SSP) based at the Northampton and Reversible Roadway posts which both operate 24 hours a day, 7 days a week.

Robert "Danny" Plott, Construction Incident Management Coordinator (CIMC), will respond to all incidents within the project limits, applying NIMS principles and practices. Danny has 48 years of experience and has completed FHWA SHRP2 "TIM" Responder Training; FEMA ICS/NIMS 100, 200 and 700; and Hazardous Materials training. He will attend a two-week Orientation training with VDOT IMC, conduct a pre-construction kick-off with emergency responders, provide monthly updates to the VDOT IMC, serve as Incident Commander until the VDOT IMC arrives on the scene of an event, maintain radio contact with the TOC, attend all Public Safety Meetings, complete "after action" reports for all incidents. He will coordinate with the VDOT IMC, SSP, Eastern Operations Center, and the Hampton Roads TOC to modify the established Incident Detour Plans for each phase of the MOT in the TMP. Since I-64 and I-564 are a hurricane evacuation route, he will work closely with Virginia Department of Emergency Management to adjust evacuation plans. Danny will drive an Incident Management truck outfitted with the items in Attachment 2.10.2 to detour mainline traffic for worst case incident and evacuation scenarios through the work zone.

Emergency pull-off areas, no greater than one mile apart, as needed, will be consistent with TTC 8.1. The pull-off areas will be separate from the enhanced construction entrances with full acceleration/deceleration lengths used for construction access. The DBT's incident response truck will be enhanced to include an Arrow Board. ***The MOT plan and SOC are developed such that our Team can maximize the width of each bridge construction phase while providing appropriate acceleration and deceleration distances at construction entrances without encroaching on ramp movements***.

Our DBT will ensure the Construction MOT Management Responsibilities on the project are clearly established and that Construction MOT Management is executed by our Construction MOT Manager, David Creasy with the relevant experience, attention to detail, and communication abilities to execute this important function, just as he did on the I-95 RRC projects This begins with clear establishment of responsibilities for the David as outlined in Table 4.5.2.2 below.

Table 4.5.2.2 Construction MOT Manager Responsibilities
• Coordination with HRTOC, City of Norfolk Smart Traffic Center, and Emergency Operations Center
• Being available to VDOT Incident Commanders to Provide Project Liaison
• Communication of Travel Demand Management (TDM) strategies during Construction in HRT's TRAFFIX System.
• VaTraffic, LCAMs, Hotspots, and AM 1680 Coordination
• Coordination of any Temporary Bus Stop Relocations and/or Route Impacts During Surface Streets Work
• Activation of On-Call DBT Provided Wrecker/Tow Services for Incident Management Supplementary Support
• Submission of Lane and Shoulder Closure Requests within the RFP Prescribed Timeframes
• Monitoring of MOT Crew Performance and Implementation of Lessons Learned for Continuous Improvement
• Coordination with District and Project Communications for Organic Social Media Outreach
• Coordination with Online Mapping and Navigation Services such as Waze, Google Maps, and Here to update real-time roadway user data for long-term closures and all detours.

Lane and Ramp Closures, Temporary Detours, Time of Day Restrictions, Flagging and Lane Widths | Lane closures will be consistent with the requirements of the RFP. Our DBT is proposing no deviations from the lane closure schedule provided in the RFP. The DBT will use temporary changeable message signs to provide 21 days advance notice of all upcoming traffic pattern changes. Temporary lane closures during off-peak times are anticipated for placement of traffic barrier, paving, sign placement, and shoulder improvements. We will maintain two through lanes in each direction west of I-564 and three in each direction east of I-564 during long-term closures, with additional closures during off-peak times as permitted in the RFP Lane Closure Schedule. We will submit lane/shoulder closure requests to the Hampton Roads TOC and VDOT PM no later than COB on Wednesday the week before the closure is to take place and will enter the lane closure limits and times into LCAMS no later than 8:00 a.m. on the Thursday before the week the closure is to begin. We will confirm the closure in writing no later than 24 hours before, including the tasks to be completed; labor, equipment, and materials to be utilized; notify the TOC when the first barrel goes down and the last barrel comes up; and adjust based on the feedback from the ITS devices (via the TOC). Acceleration, weaving, and deceleration lanes will be maintained as part of each work phase. Changes due to weather or unforeseen circumstances will be communicated to Hampton Roads TOC and the VDOT PM in real time to ensure public outreach occurs.

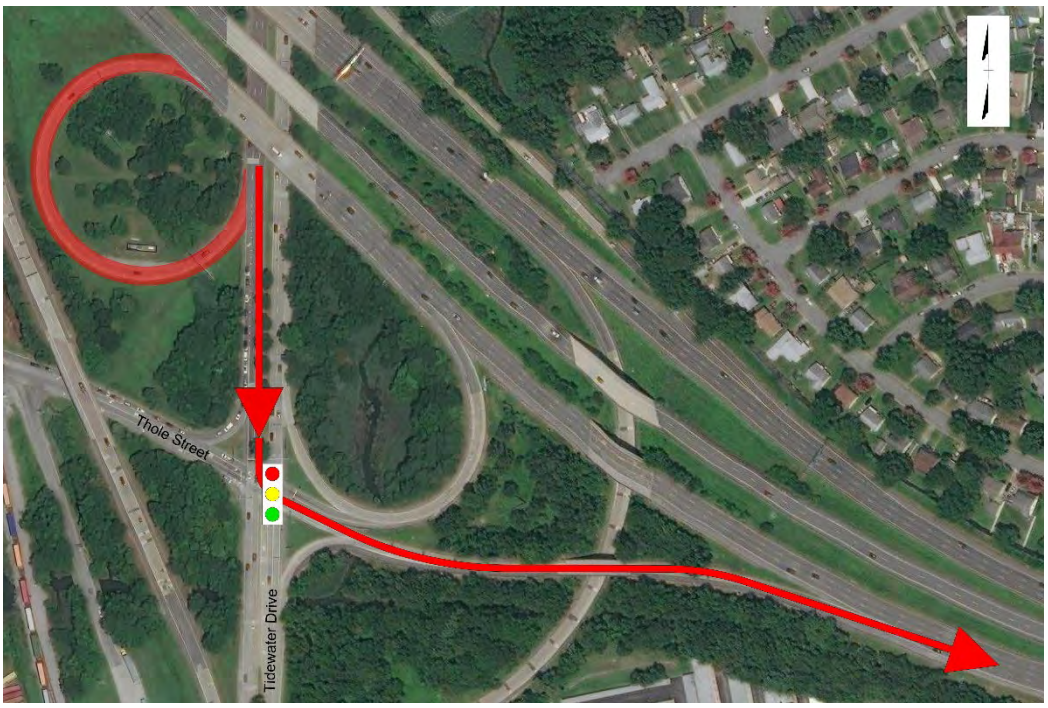
During bridge construction, we will maintain at least one lane in each direction on Granby Street, two lanes on E. Little Creek Road, and two lanes on Tidewater Drive, while maintaining existing turn bays. **Temporary traffic control on these arterial roadways will be coordinated with the City of Norfolk and will not last longer than six months significantly less than the one year maximum allowed by the RFP. The DBT is specifically committing to remove this MOT at Granby Street and Tidewater Drive within six months of installation, and at E. Little Creek within five months of installation as outlined in our Construction Sequence discussion in Section 4.5.1**. Pier and abutment work adjacent to I-564 will require lane shifts onto existing shoulders; these shoulders have concrete pavement and will be strengthened as part of the early works. We will provide PCMS that may be remotely controlled through the VDOT TOC consistent with the RFP, with locations coordinated with adjacent projects. We will also provide temporary microwave detection to provide real-time travel information to drivers through the work zone, consistent with the *HREL Regional TMP*.

Long-term lane closures and traffic shifts corresponding to Phases 1 and 2 will be mapped on corridor MOT plots to coordinate overlapping advanced signing and construction elements with adjacent project elements. This plan will be provided to the attendees of the weekly Corridor-Wide meeting introduced previously.

Detours at I-64 over Tidewater Drive

Detours will require modifications to City of Norfolk traffic signals; we will provide temporary traffic signal plans (and any temporary changes to existing signals) to VDOT and the City for review. The City DPW will also review, provide comments, and ultimately sign-off on the proposed MOT and TMP. The DBT proposes to close the loop ramp from southbound Tidewater Drive to eastbound I-64 (see *Figure 4.5.2.1*) for approximately three weeks once the pier and abutment work is complete for the eastbound I-64 bridge widening. Traffic that would ordinarily use the loop ramp will be directed into the left lane and detoured to make a left turn approximately 500 feet south at the existing signal at the Tidewater Drive and Thole Street intersection; this signal is modified to include a left-turn phase onto the existing on-ramp.

Figure 4.5.2.1 Detour Route – Closure of SB Tidewater On-Ramp to EB I-64



New pavement will be placed approximately six feet into the channelizing island to provide space for two through lanes and a left turn lane while the EB I-64 bridge over Tidewater Drive Phase 1B and 2A rehabilitation work is completed. Temporary full closures on City of Norfolk streets for beam placement will be coordinated with VDOT Project Management, Hampton Road Traffic Operations, District Communications, 1st Responders, City of Norfolk, and VSP. Closures will be no longer than 20 minutes between 12-4 a.m., consistent with the RFP.

Figure 4.5.2.2 Detour Route – Closure of WB I-64 Off-Ramp to SB Tidewater

Figure 4.5.2.3 Detour Route – Closure of NB Tidewater On-Ramp to WB I-64

Additional detours will be provided for short-term closures and will be implemented for the I-64WB over Tidewater Bridge rehabilitation, which will minimize the number of overall shifts and the duration of split traffic. The detours will be set up for the exit loop "A" ramp from westbound I-64 to SB Tidewater (See *Figure 4.5.2.2*) during Phase 1B rehabilitation work and the on ramp from northbound Tidewater Drive to westbound I-64 (See *Figure 4.5.2.3*) during Phases 2A and 2B rehabilitation work. Our DBT will perform additional traffic counts, trip redistribution, timing analyses and any temporary signal or geometric updates required as allowed by VDOT and approved by the RFP.

IMPACTS TO TRAVELING PUBLIC | The DBT TMP is developed to maximize throughput, safety, and reliability through minimizing traffic shifts, work phases, and the durations of shoulder and lane closures. The DBT's adoption of an "outside-in" approach to the bridge and roadway work minimizes the number of work phases. This enables effective navigation of the work zone and driver communications by simplifying project messaging. Our ATC #1 potentially has the most significant impact to the traveling public by avoiding the 21-day closure of the existing HOV lanes. Traffic impacts will also be mitigated by our uniform connection to the HRBT project and careful coordination of both planned MOT and incident management. Our TMP cumulatively addressed many of project induced traffic impacts. Our commitment to limiting the duration of surface street impacts through both firm commitments and innovative construction methods will mitigate one the most significant and less-immediately-visible impacts of the project. Our Early Works approach to temporary ITS redundancy and relocation ensures the operational resiliency of the existing VDOT ITS and Tolling Operations networks. This approach maintains VDOT's incident management capabilities to mitigate impacts to the travelling public. This approach when, combined with ATC #1, ensures continued functionality of the existing I-64 Reversible HOV lanes.

APPROACH TO PUBLIC OUTREACH | For a program as large as the HREL improvements, it is imperative that VDOT and the DBTs for each project provide accurate, consistent information to stakeholders that addresses the impacts of all of the projects put together. We understand that if we are awarded this project, we are part of a much larger team: The HREL Team. The *HREL Regional TMP* recommends global strategies for outreach; the project has its own branding, and we will ensure that all project updates, newsletters, email blasts, and other public-facing materials use that branding. . The DBT will develop drive thru simulations (Video Graphic Models)

before each MOT phase is implemented and provide to VDOT's Public Outreach Team as a public information best practice. Our public involvement and outreach communications team, led by Lynn Polizos, will coordinate with the communications teams of adjacent projects to ensure we develop a synchronized and comprehensive Public Information and Communications Plan (PICP) that raises awareness, mitigates corridor-wide impacts, and emphasizes the key benefits of the entire HREL network. This PICP will be submitted to VDOT within 45 days of the Date of Commencement, and will function as a dynamic, living document through all phases. Our strategic approach will be comprised of integrated communication tools, a robust media relations program, and a wide range of print, broadcast and interactive marketing campaigns with the ultimate goal of positively engaging and influencing stakeholders at all levels throughout all phases of the project. Similar to Lynn's successful implementation of the public outreach plans for VDOT's I-64 and I-264 Pavement Rehabilitation project in the Norfolk area, and Gilmerton Bridge Replacement project, she will regularly coordinate with the VDOT Hampton Roads Communication Office. Additionally, she will request and facilitate formal partnering with VDOT, City of Norfolk, and other key stakeholders to encourage frequent and open communication, creating an atmosphere of trust to identify and mitigate actual or perceived impacts. She will host a Community Open House to provide the pubic an opportunity to meet the construction team and be educated about hits critical Project.

Table 4.5.2.3 – Public Information and Communications (PICP) Methods, Strategies, and Objectives

Outreach Methods and Strategies	Communications Objectives
Organic Social Media Posting	Driver Education
Paid Targeted Advertising	Traffic Diversion During Major Operations
Print Media	Conveying Project Progress
Radio	Stakeholder Outreach
Project Dynamic Signing	Good Faith DBE/SWaM/OJT Efforts
Messaging for VDOT and DBT Websites	Highlighting VDOT Mission & Accomplishments
In-Person Meetings and Presentations	Public Feedback

Keeping Stakeholders Informed: The PICP will list key stakeholders that benefit from timely project information as well as communications partners who will help disseminate it. Some of the primary stakeholders for HREL Segment 1A are identified in Table 4.5.2.4, however partners also include elected officials, media outlets, community leaders. We realize that our project is just a little over two miles of a 47-mile improvement, and our message and strategies must be united with adjacent projects. Advertising and marketing efforts alerting the public about construction start, traffic pattern changes, and general work zone safety must be clear and understandable. The RFP notes that "a notification program shall be included in the communications plan to inform motorists and the broader community about expected traffic changes/delays through… a paid advertising campaign… [and] shall include regular coverage in print media, radio, social and interactive media." We are prepared to either pay for our own campaign or contribute funds to the global campaign outlined in the *HREL Regional TMP*.

Our public outreach team is currently on VDOT's Rappahannock Express Lanes project where they are successfully delivering the latest technologies to deliver cutting edge driver education, public information, and VDOT marketing materials. VDOT Fredericksburg Communications has acknowledged I-95 RRC as the example of what communications should be.

Table 4.5.2.4 – Project Stakeholder Matrix

Stakeholder	Impact	Mitigation Strategy
Naval Station Norfolk	Fence construction, congestion, access	Early works improvements, enhanced signage
Norfolk International Terminal	Congestion, access	Early works, port-specific signs
City of Norfolk Police	Incident/crash response	On-site CINC
City of Norfolk Fire Stations 9/12	Incident/crash response	On-site CINC
Utilities - Verizon/Dominion/Cox	Accidental outages, relocation delays	On-site utility coordinator, 3-D
Hampton Roads Transit	Temporary stop relocation, congestion	Active and Early Coordination
Wards Corner Businesses	Access, congestion, deliveries	Grassroots Outreach
Forest Lawn Cemetery	Noise, access	Signing and Worker Orientation
VDOT Hampton Roads District	Program Size, Resources	Timely Deliverables
VDOT Eastern TOC	Traffic operations performance	Driver Education
VDOT Interstate Management	Incident/crash response	On-site CINC
Apartment Complexes	Congestion, travel time	Communication early and often, HRT/TRAFFIX coordination
Owens Road Residents	Noise, construction equipment	Remove/replace noise wall early

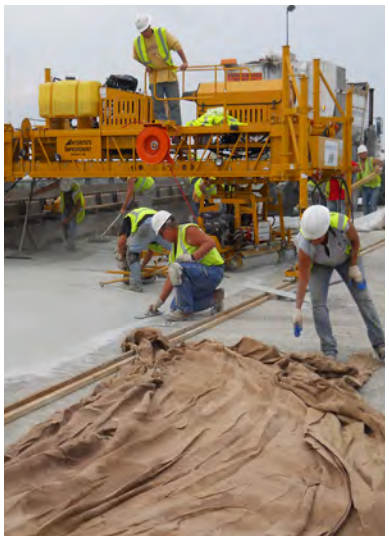
Communicating with the Traveling Public: Our Team will ensure uniform messaging, driver education, and consistence expectations throughout the work zone. As part of our PICP and as part of our overall TMP strategy the DBT will enable communications with the traveling public primarily focusing on building organic social media messaging, project eNewsletter utilizing electronic distribution services such as ConstantContact, Geofencing to direct paid advertising to target audiences, and enabling virtual communications in the post COVID environment. Our DBT acknowledges the restrictions on use of Unmanned Aerial Vehicles (UAV) in this location due to the proximity to Norfolk Naval Station, Little Creek Amphibious Base, and Oceania will be difficult if not impossible within the current UAV legal framework; however, our team will supplement drone photography with additional dash camera content, professional photography, and a steady stream of project progress photos from our Team's use of the Plangrid tablet-based documentation system which we have used extension on the I-95 Rappahannock River Crossing Projects and the Chatham Bridge Replacement. More details on this system are included in *Section 4.4.4*.

Our TMP will include a list of alternative routes and detours for different stakeholders (e.g., those who live north or south of I-64) available to VDOT and Project Communications to consistently offer travel alternatives to roadway users. Campaigns will focus on driver diversion before entering project limits to enable dissipation of congestion by leveraging existing roadway network capacity.

APPROACH TO PUBLIC SAFETY | The DBT enhances public safety through the design of the temporary traffic control, temporary ITS measures (microwave detectors, dynamic signage), and improved public outreach (noted in the previous section). When developing the TMP, our Team places a focus on reducing the conflict points, roadway users' exposure to those conflicts, and reducing the need for sudden driver decisions. We also seek to minimize pinch points (e.g., "cattle chutes" where both shoulders are closed) and traffic shifts. Treating the three Segments and the bridges therein as one large work zone helps to reduce the traffic shifts, even if the trade-off is a longer distance with a narrow inside or outside shoulder; the work area is consistent. This approach also allows us to maximize the space available on the non-constrained side of the roadway for construction access, full-width emergency pull-offs, and a consistent work zone.

Measures to Limit Disruptions to Vehicles: The Hampton Roads area has consistent, recurring congestion westbound in the afternoon. Our goal is to reduce non-recurring congestion through the use of portable microwave detectors and extra PCMS units to provide an "ad-hoc" queue detection warning system to reduce rear end crashes. This approach is consistent with the HREL Regional TMP and integrates with the systems being used in adjacent segments.

Measures to Limit Disruptions to Pedestrians: According to Plan Norfolk 2030, just over five percent of households in Norfolk do not own a car, with a greater concentration north of I-64. Granby Street, E. Little Creek Road, and Tidewater Drive are the only routes for those walking to reach the many retail shops and services in Wards Corner. We will ensure that sidewalk on only one side of a street is closed at a time, and that a temporary pedestrian access route is established on the opposite side; this may be in the roadway with barriers or an existing sidewalk. We will coordinate with HRT to temporarily relocate local bus stops and ensure that there is easy access to the HRT station on Granby Street.



4.6
Proposal Schedule

Joint Venture

WAGMAN

FAY SOUTHEAST
SAB USA CONSTRUCTION

Lead Engineer

WALLACE MONTGOMERY

4.6 Proposal Schedule

The Design-Build Team (DBT) of Wagman/Fay SE/Wallace Montgomery has provided a Proposal Schedule and Proposal Narrative demonstrating our understanding of the complexities and interrelationships of the technical elements of the Project. PDF copies of the Proposal Schedule and narrative as well as a back-up copy of the Proposal Schedule's source document have been uploaded.

Table 4.6.1 – Schedule Risk Mitigation

Milestones	• Optimized sequence of construction will enable the DBT to open all lanes to traffic by 11/25/2025
	• Complete the project on or before 12/15/2025
	• Optimized project segments permit flexible timing for tie-in to adjacent projects.
Risk Allocation	• During our monthly progress meetings with VDOT, the DBT will provide monitor screens to view our CPM in real time instead of just reviewing static PDF or printed hard copies. This lets the Project team run real time "what if" scenarios to see the effect on critical path or other key dates.
Scope Validation	• During the RFP phase the DBT has already developed a preliminary geotechnical investigation plan that identified any gaps in available data so that additional borings and analysis can be completed within the 120-day scope validation period.
Public Involvement	• In addition to the community and public information meetings required by the RFP, the DBT will host meetings prior to the implementation of each major traffic phase. The DBT will develop drive thru simulations (video graphic models) and provide to VDOT for appropriate use.
Environmental	• The CPM identifies and accounts for all environmental commitments, TOYR, and permit conditions/requirements.
	• The CPM identifies and accounts for TES requirements.
SWM	• Underdrains will be inspected by a third party not involved in design or construction. Inspection s will be performed reviewed and provided by VDOT after intermediate asphalt is complete and prior to transitioning to subsequent MOT phases. Our QA/QC Plan and CPM identify these inspection activities eliminating out of phase rework.
Right-of-Way	• The DBT has successfully coordinated the ROW process on VDOT DB projects of similar scope and complexity and our schedule includes reasonable and appropriate time frames for ROW and easement acquisitions.
Utilities	• The CPM has been developed with no utilities on the critical path.
	• DBT will develop and share 3D Models and visualizations with the utility owners to ensure conformance and compatibility between P&Es, our plans and construction. DBT will inspect as-built (using geospatial survey equipment) all utility relocations as they are being performed within the project limits to ensure they are in conformance with the P&E and allowable tolerances and the work is performed correctly the first time eliminating timely or out of phase rework.
	• The DBT will hold bi-monthly meetings with all utility owners to review status of P&Es and update our CPM accordingly.
Construction Approach	• Our MOT phasing requires only two major phases, and the traveling public will be completely separated form construction areas providing contiguous areas of existing I-64 for staging and more efficient construction the full length of the Project.
	• DBT has local resources that are experienced in the safe & efficient construction of projects of similar scope and complexity. DBT has the ability to self-perform all activities of work that are critical to control schedule, or recover schedules negatively impacted by others. Over the last 40 years, we have developed relationship with local subcontractors and vendors that will supplement our internal crews to maintain the projects schedule.
Coordination	• In addition to monthly CPM updates, DBT will include detailed 4 and 10-week look ahead schedules that will be shared with adjacent projects. This enhances operational coordination among projects and provides accurate and predictable information for use in public outreach.

In addition to the Construction Approach Schedule Risk Mitigations listed in the table above, the Wagman/Fay SE/Wallace Montgomery DBT will implement our VDOT accepted proposed ATC 1 for the Alternate Bridge Construction Phasing/MOT for the I-64 HOV Bridge over I-564 and Little Creek Road. The proposed ATC is to maintain the existing traffic operations and tolling through the I-64 HOV Bridge during its RFP required scope of work efforts and eliminates the need for the RFP allowable 21-Day Full Closure.

The proposed ATC will be implemented during the 800 ft. long I-64 HOV Bridge's rehabilitation scope of work of milling/hydro-demolition and latex modified concrete overlay resurfacing of the existing deck, bearing replacement and joint elimination as well as the installation of a permanent BMB-3A barrier while maintaining

the existing single reversable lane traffic weekday operations. We will implement a two-stage sequence of construction to complete the bridge's proposed work (Stage 1 – Partial Deck Overlay and Stage 2 – Remainder of Deck Overlay and Concrete Median Barrier Installation). Both stages of construction will utilize the DBT's grandfathered temporary single face concrete traffic barrier bolted in accordance with VDOT Road and Bridge Standard 502.11 to the existing deck and a 11'-0" temporary traffic lane with 1-foot shoulders/offsets to the temporary single barrier and the existing bridge's permanent outside parapet barrier as applicable to the construction stage.


I-64 EB Ramp to HOV Lane

The proposed ATC significantly exceeds the project goals and objectives of the project by avoiding implementation of the RFP Part 2 Section 2.10.3 allowable 21-day full closure period and maintaining the existing weekday peak-hours traffic operations, commuter mobility and tolling capabilities throughout the bridge's rehabilitation and median barrier installation efforts, therefore reducing traffic impacts and not exasperating peak-hours congestion during construction. The AADT per VDOT's 2021 Traffic Database Publication for the I-64 HOV Reversible Lane operations are 16,000 vehicles per day. Implementation of our ATC 1 will avoid the potential impact of 240,000 vehicle trips during a 21-day (15-work day) full closure while allowing for the most efficient and ensured quality controlled execution of the I-64 HOV bridge's full scope of work along with mitigating the scheduling risk related to any construction means and methods complications/challenges.

4.6.1 Project Schedule

The DBT has developed a Proposal Schedule (located in Volume II), which incorporates the Interdisciplinary, Constructability, and QA/QC internal plan reviews, VDOT plan reviews and approvals, environmental permitting and constraints, right of way acquisition, utility relocation, required submittals to include shop drawings, construction activities and QA/QC inspection and testing. RFP Section 2.3.1 provides Final Completion Milestones. Our optimized schedule permits all lanes to be open to traffic by the unique milestone date of November 25, 2025 with the Project Final Completion Date of December 15, 2025. The Proposal Schedule depicts the DBT's proposed overall sequence of work and duration for each work task and deliverables required to complete the Project. The schedule is organized using a hierarchical Work Breakdown Structure (WBS), divided into Contract Administration, EXECUTIVE SUMMARY & MILESTONES, ADMINISTRATION, DESIGN SCOPE, MATERIALS FABRICATION & PROCUREMENT, & CONSTRUCTION.

4.6.2 Project Schedule Narrative

In addition to the technical elements, the narrative also describes the DBT's plan to accomplish the Work including, but not limited to, the overall sequencing, a description and explanation of the Critical Path, proposed means and methods, and other key elements upon which the Proposal Schedule is structured.

Schedule Development

The DBT has reviewed in detail the scope and schedule requirements outlined in the RFP and has developed a Proposal Schedule outlining our plan to successfully manage all phases of the I-64 Segment 1A and build upon our existing partnerships with VDOT and other stakeholders to safely deliver the project in an expedited manner.

The Wagman/Fay Joint Venture Team is committed to providing VDOT with the unique milestone for opening all lanes to traffic in their final condition by November 25, 2025 and a completed project by December 15, 2025.

Table 4.6.2.1 – Project Milestones

Notice of Intent to Award	9/23/2022
Notice to Proceed	11/19/2022
Begin Physical Work	01/13/2023
Segment A	12/10/2024
Segment B	10/24/2025
Segment C	11/25/2025
Unique Milestone – Open all Lanes to Traffic in their Final Configuration	11/25/2025
Final Completion (Contract Requirement – December 15, 2025	12/15/2025

Work Breakdown Structure (WBS)

The DBT has organized the schedule into a hierarchical Work Breakdown Structure (WBS) to demonstrate the relationship and activity durations amongst the milestones, scope validation period, design, public involvement, environmental permitting, ROW acquisition, utility relocation, construction, and project management disciplines for the I-64 Segment 1A HREL. The following is a summary of our schedule organization followed by the complete WBS listing in Table 4.6-2.

- **Contract Administration**: This section provides quick review of Contractual Project Milestones and Overall Project Milestones status.
- **Executive Summary & Milestones**: This section provides an overview of the project scope summary.
- **Administration**: This section contains Scope Validation, QA/QC Construction Plan, Permits, and Project Submittals.
- **Design Scope**: Includes preliminary engineering services, plan development, QA/QC reviews, Environmental plan, ROW required by the DBT's design, Utilities design, submittal milestones, internal reviews, constructability reviews, VDOT plan reviews and approvals, other regulatory agency reviews.
- **Material Fabrication & Procurement**: This section includes all long lead fabrication and procurement items for Bridges, Retaining Walls, Overhead Signs, Drainage Components, Signals and Lighting, and Noise Walls. In recognition of current market conditions impacting structures ITS devices, generators, tanks, cabinets and cabling, the working drawings and catalog cuts for tolling systems, ITS, signing, and lighting items will start immediately upon plan approval to mitigate schedule risk.
- **Construction**: Includes all components of roadway and bridge construction as well as MOT, construction access, noise barriers, and drainage. This section is further broken down to show the DBT's logical progress of work.

Table 4.6.2.2 – Work Breakdown Structure

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WBS Code	WBS Name
22HH-004-Bid	VDOT I-64 HREL SEGMENT 1A BID SCHEDULE
22HH-004-Bid.ADMN	###### CONTRACT ADMINISTRATION ######
22HH-004-Bid.ADMN.OVR	===== OVERALL CONTRACT DURATION =====
22HH-004-Bid.ADMN.CMS	===== CONTRACT MILESTONES =====
22HH-004-Bid.ADMN.PMS	===== OVERALL PROJECT MILESTONES =====
22HH-004-Bid.EXEC	###### EXECUTIVE SUMMARY & MILESTONES ######
22HH-004-Bid.EXEC.TPW	===== TOTAL PHYSICAL WORK DURATION =====
22HH-004-Bid.EXEC.PMS	===== Design Packages =====
22HH-004-Bid.EXEC.PMS.4	===== Corridor =====
22HH-004-Bid.EXEC.PMS.1	===== Segment A =====
22HH-004-Bid.EXEC.PMS.2	===== Segment B =====
22HH-004-Bid.EXEC.PMS.3	===== Segment C =====
22HH-004-Bid.EXEC.PMS1	===== Construction =====
22HH-004-Bid.EXEC.PMS1.1	===== Segment A =====
22HH-004-Bid.EXEC.PMS1.2	===== Segment B =====
22HH-004-Bid.EXEC.PMS1.3	===== Segment C =====
22HH-004-Bid.ENGR	###### ADMINISTRATION ######
22HH-004-Bid.ENGR.2	===== SCOPE VALIDATION =====
22HH-004-Bid.ENGR.1	===== QA/QC Construction PLAN =====
22HH-004-Bid.ENGR.26	===== PERMITS =====
22HH-004-Bid.ENGR.26.28	US Army Corps of Engineers (USACE)
22HH-004-Bid.ENGR.26.29	Virginia Department of Environmental Quality (DEQ)
22HH-004-Bid.ENGR.26.29.1	Segment A
22HH-004-Bid.ENGR.26.29.3	Segment B
22HH-004-Bid.ENGR.26.29.2	Segment C
22HH-004-Bid.ENGR.8	===== PROJECT SUBMITTALS =====
22HH-004-Bid.ENGR1	###### DESIGN SCOPE ######
22HH-004-Bid.ENGR1.5	===== FIELD SURVEY & MOBILE SCANNING =====
22HH-004-Bid.ENGR1.8	===== QA/QC DESIGN PLAN =====
22HH-004-Bid.ENGR1.6	===== GEOTECHNICAL & SUBSURFACE ENGINEERING =====
22HH-004-Bid.ENGR1.6.1	Segment A
22HH-004-Bid.ENGR1.6.2	Segment B
22HH-004-Bid.ENGR1.6.3	Segment C
22HH-004-Bid.ENGR1.3	===== ROW =====
22HH-004-Bid.ENGR1.3.3	===== Segment B - ROW/Utility Easement Acquistions =====
22HH-004-Bid.ENGR1.3.1	===== Segment C - ROW/Utility Easement Acquistions =====
22HH-004-Bid.ENGR1.23	===== ENVIRONMENTAL =====
22HH-004-Bid.ENGR1.23.24	Noise Abatement
22HH-004-Bid.ENGR1.2	===== UTILITIES =====
22HH-004-Bid.ENGR1.2.4	Corridor
22HH-004-Bid.ENGR1.2.1	Segment A
22HH-004-Bid.ENGR1.2.2	Segment B
22HH-004-Bid.ENGR1.2.3	Segment C
22HH-004-Bid.ENGR1.7	===== ROADWAY DESIGN =====
22HH-004-Bid.ENGR1.7.3	Corridor - ITS-Lighting-Signing/Marking Plans
22HH-004-Bid.ENGR1.7.3.1	Corridor - ITS-Lighting-Signing/Marking Plans - Preliminary Design
22HH-004-Bid.ENGR1.7.3.2	Corridor - ITS-Lighting-Signing/Marking Plans - Final 100% Design
22HH-004-Bid.ENGR1.7.3.3	Corridor - ITS-Lighting-Signing/Marking Plans - RFC Design
22HH-004-Bid.ENGR1.7.9	Segment A - Roadway Design - Road-Drain/SWM-MOT-ESC Plans
22HH-004-Bid.ENGR1.7.9.1	100% Design
22HH-004-Bid.ENGR1.7.9.2	Released for Construction
22HH-004-Bid.ENGR1.7.1	Segment B - Roadway Design - Road-Drain/SWM-MOT-ESC Plans
22HH-004-Bid.ENGR1.7.1.1	100% Design
22HH-004-Bid.ENGR1.7.1.2	Released for Construction
22HH-004-Bid.ENGR1.7.2	Segment C - Roadway Design - Road-Drain/SWM-MOT-ESC Plans
22HH-004-Bid.ENGR1.7.2.1	100% Design
22HH-004-Bid.ENGR1.7.2.2	Released for Construction
22HH-004-Bid.ENGR1.1	===== Naval Station Norfolk Security Fence =====
22HH-004-Bid.ENGR1.11	===== STRUCTURE DESIGN =====
22HH-004-Bid.ENGR1.11.1	I64 EB Over Granby / I564 /E. Little Crk Bridges
22HH-004-Bid.ENGR1.11.1.1	I64 EB Over Granby / I564 / E. Little Crk Bridges Prelim - Stage I Plans
22HH-004-Bid.ENGR1.11.1.3	I64 EB Over Granby / I564 / E. Little Crk Bridges Final - Stage 2 (Super) Plans
22HH-004-Bid.ENGR1.11.1.4	I64 EB Over Granby / I564 / E. Little Crk Bridges Final - Stage 2 (Sub) Plans
22HH-004-Bid.ENGR1.11.1.5	I64 EB & WB Over Granby / I564 / E. Little Crk Bridges Rehab Final - Stage 2 (Rehab) Plans
22HH-004-Bid.ENGR1.11.3	I64 HOV Over I564 & E. Little Crk Bridge Rehab Final - Stage 2 Plans
22HH-004-Bid.ENGR1.11.2	I64 EB & WB Over Tidewater Bridges
22HH-004-Bid.ENGR1.11.2.1	I64 EB & WB Over Tidewater Bridges Prelim - Stage I Plans
22HH-004-Bid.ENGR1.11.2.3	I64 EB & WB Over Tidewater Bridges Final - Stage 2 (Super) Plans
22HH-004-Bid.ENGR1.11.2.4	I64 EB & WB Over Tidewater Bridges Final - Stage 2 (Sub) Plans
22HH-004-Bid.ENGR1.11.2.5	I64 EB & WB Over Tidewater Bridges Final - Stage 2 (Rehab) Plans
22HH-004-Bid.MATR	###### MATERIALS FABRICATION & PROCUREMENT ######
22HH-004-Bid.CONST	###### CONSTRUCTION ######
22HH-004-Bid.CONST.SITE	===== PREPARATORY/E&S CONTROLS/SITEWIDE WORK =====
22HH-004-Bid.CONST.SITE.5	Segment A
22HH-004-Bid.CONST.SITE.5.1	Segment A - EB - STA 964+34.38 to 975+00
22HH-004-Bid.CONST.SITE.5.1.3	Phase 1
22HH-004-Bid.CONST.SITE.5.1.4	Phase 2
22HH-004-Bid.CONST.SITE.5.2	Segment A - WB - STA 2810+42.50 to 2821+00
22HH-004-Bid.CONST.SITE.5.2.3	Phase 1

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WBS Code	WBS Name
22HH-004-Bid.CONST.SITE.5.2.4	Phase 2
22HH-004-Bid.CONST.SITE.5.3	Final Work
22HH-004-Bid.CONST.SITE.6	Segment B
22HH-004-Bid.CONST.SITE.6.1	Segment B - EB - STA 975+00 to 1026+87
22HH-004-Bid.CONST.SITE.6.1.1	Phase 1
22HH-004-Bid.CONST.SITE.6.1.3	Phase 2
22HH-004-Bid.CONST.SITE.6.2	Segment B - WB - STA 2821+00 to 3019+46
22HH-004-Bid.CONST.SITE.6.2.3	Phase 1
22HH-004-Bid.CONST.SITE.6.2.4	Phase 2
22HH-004-Bid.CONST.SITE.6.3	Final Work
22HH-004-Bid.CONST.SITE.7	Segment C
22HH-004-Bid.CONST.SITE.7.3	Segment C - EB - STA 1026+87 to 1090+90
22HH-004-Bid.CONST.SITE.7.3.1	Phase 1
22HH-004-Bid.CONST.SITE.7.3.3	Phase 2
22HH-004-Bid.CONST.SITE.7.1	Segment C - WB - STA 309+46 to 3082+06.03
22HH-004-Bid.CONST.SITE.7.1.1	Phase 1
22HH-004-Bid.CONST.SITE.7.1.3	Phase 2
22HH-004-Bid.CONST.SITE.7.2	Final Work
22HH-004-Bid.CONST.6	===== Utilities =====
22HH-004-Bid.CONST.5	===== Naval Station Norfolk Security Fence =====
22HH-004-Bid.CONST.3	===== ROADWAY =====
22HH-004-Bid.CONST.3.5	Segment A
22HH-004-Bid.CONST.3.5.1	Segment A - EB - STA 964+34.38 to 975+00
22HH-004-Bid.CONST.3.5.1.1	Phase 1 A [EB]
22HH-004-Bid.CONST.3.5.1.2	Phase 1 B [EB]
22HH-004-Bid.CONST.3.5.1.3	Phase 2 [EB/Median]
22HH-004-Bid.CONST.3.5.2	Segment A - WB - STA 2810+42.50 to 2821+00
22HH-004-Bid.CONST.3.5.2.3	Phase 1 [WB]
22HH-004-Bid.CONST.3.5.2.4	Phase 2 [EB/Median]
22HH-004-Bid.CONST.3.5.4	Final Work
22HH-004-Bid.CONST.3.6	Segment B
22HH-004-Bid.CONST.3.6.1	Segment B - EB - STA 975+00 to 1026+87
22HH-004-Bid.CONST.3.6.1.1	Phase 1 A [EB]
22HH-004-Bid.CONST.3.6.1.2	Phase 1 B [EB]
22HH-004-Bid.CONST.3.6.1.3	Phase 2 [EB/Median]
22HH-004-Bid.CONST.3.6.2	Segment B - WB - STA 2821+00 to 3019+46
22HH-004-Bid.CONST.3.6.2.3	Phase 1A [WB]
22HH-004-Bid.CONST.3.6.2.1	Phase 1B [WB]
22HH-004-Bid.CONST.3.6.2.4	Phase 2 [WB/Median]
22HH-004-Bid.CONST.3.6.4	Final Work
22HH-004-Bid.CONST.3.7	Segment C
22HH-004-Bid.CONST.3.7.3	Segment C - EB - STA 1026+87 to 1090+90
22HH-004-Bid.CONST.3.7.3.1	Phase 1 A [EB]
22HH-004-Bid.CONST.3.7.3.2	Phase 1 B [EB]
22HH-004-Bid.CONST.3.7.3.3	Phase 2 A [EB/Median]
22HH-004-Bid.CONST.3.7.3.4	Phase 2 B [EB/Median]
22HH-004-Bid.CONST.3.7.1	Segment C - WB - STA 309+46 to 3082+06.03
22HH-004-Bid.CONST.3.7.1.1	Phase 1 A [WB]
22HH-004-Bid.CONST.3.7.1.2	Phase 1 B [WB]
22HH-004-Bid.CONST.3.7.1.3	Phase 2 A [WB/Median]
22HH-004-Bid.CONST.3.7.1.4	Phase 2 B [WB/Median]
22HH-004-Bid.CONST.3.7.4	Final Work
22HH-004-Bid.CONST.4	===== STRUCTURES =====
22HH-004-Bid.CONST.4.5	Segment A
22HH-004-Bid.CONST.4.5.2	Segment A - WB - STA 2810+42.50 to 2821+00
22HH-004-Bid.CONST.4.5.2.3	WB-RW01 - Gravity Retaining Wall Sta 2813+86.36 to 2814+27.91 (42LF)
22HH-004-Bid.CONST.4.6	Segment B
22HH-004-Bid.CONST.4.6.1	Segment B - EB - STA 975+00 to 1026+87
22HH-004-Bid.CONST.4.6.1.1	B-655 - I-64 Bridge Over Granby [EB]
22HH-004-Bid.CONST.4.6.1.1.1	Phase 1 (Bridge Widening & Existing Bridge Rehabilitation [EB])
22HH-004-Bid.CONST.4.6.1.1.	Initial Work
22HH-004-Bid.CONST.4.6.1.1.	Bridge Rehabilitation
22HH-004-Bid.CONST.4.6.1.1.	Foundations
22HH-004-Bid.CONST.4.6.1	ABUTMENT A
22HH-004-Bid.CONST.4.6.1	PIER 1
22HH-004-Bid.CONST.4.6.1	PIER 2
22HH-004-Bid.CONST.4.6.1	PIER 3
22HH-004-Bid.CONST.4.6.1	ABUTMENT B
22HH-004-Bid.CONST.4.6.1.1.	Substructure
22HH-004-Bid.CONST.4.6.1	ABUTMENT A
22HH-004-Bid.CONST.4.6.1	PIER 1
22HH-004-Bid.CONST.4.6.1	PIER 2
22HH-004-Bid.CONST.4.6.1	PIER 3
22HH-004-Bid.CONST.4.6.1	ABUTMENT B
22HH-004-Bid.CONST.4.6.1.1.	Superstructure
22HH-004-Bid.CONST.4.6.1	SPAN 1
22HH-004-Bid.CONST.4.6.1	SPAN 2
22HH-004-Bid.CONST.4.6.1	SPAN 3
22HH-004-Bid.CONST.4.6.1	SPAN 4

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WBS Code	WBS Name
22HH-004-Bid.CONST.4.6.1.1	Final Work
22HH-004-Bid.CONST.4.6.1.1.2	Phase 1B [EB] (Existing Bridge Rehabilitation [EB])
22HH-004-Bid.CONST.4.6.1.1.2	ABUTMENT A
22HH-004-Bid.CONST.4.6.1.1.2	ABUTMENT B
22HH-004-Bid.CONST.4.6.1.1.2	Final Work*
22HH-004-Bid.CONST.4.6.1.1.3	Phase 2 [EB] (Existing Bridge Rehabilitation [EB])
22HH-004-Bid.CONST.4.6.1.1.3	ABUTMENT A
22HH-004-Bid.CONST.4.6.1.1.3	ABUTMENT B
22HH-004-Bid.CONST.4.6.1.1.3	Final Work*
22HH-004-Bid.CONST.4.6.1.2	B-656 - I-64 Bridge Over 564 [EB]
22HH-004-Bid.CONST.4.6.1.2.2	Phase 1 (Bridge Widening & Existing Bridge Rehabilitation [EB])
22HH-004-Bid.CONST.4.6.1.2.2	Initial Work
22HH-004-Bid.CONST.4.6.1.2.2	Bridge Rehabilitation
22HH-004-Bid.CONST.4.6.1.2.2	Foundations
22HH-004-Bid.CONST.4.6.1.2.2	ABUTMENT A
22HH-004-Bid.CONST.4.6.1.2.2	PIER 1
22HH-004-Bid.CONST.4.6.1.2.2	PIER 2
22HH-004-Bid.CONST.4.6.1.2.2	PIER 3
22HH-004-Bid.CONST.4.6.1.2.2	ABUTMENT B
22HH-004-Bid.CONST.4.6.1.2.2	Substructure
22HH-004-Bid.CONST.4.6.1.2.2	ABUTMENT A
22HH-004-Bid.CONST.4.6.1.2.2	PIER 1
22HH-004-Bid.CONST.4.6.1.2.2	PIER 2
22HH-004-Bid.CONST.4.6.1.2.2	PIER 3
22HH-004-Bid.CONST.4.6.1.2.2	ABUTMENT B
22HH-004-Bid.CONST.4.6.1.2.2	Superstructure
22HH-004-Bid.CONST.4.6.1.2.2	SPAN 1
22HH-004-Bid.CONST.4.6.1.2.2	SPAN 2
22HH-004-Bid.CONST.4.6.1.2.2	SPAN 3
22HH-004-Bid.CONST.4.6.1.2.2	SPAN 4
22HH-004-Bid.CONST.4.6.1.2.2	Final Work
22HH-004-Bid.CONST.4.6.1.2.4	Phase 2 (Existing Bridge Rehabilitation [EB])
22HH-004-Bid.CONST.4.6.1.2.4	ABUTMENT A
22HH-004-Bid.CONST.4.6.1.2.4	ABUTMENT B
22HH-004-Bid.CONST.4.6.1.2.4	Final Work*
22HH-004-Bid.CONST.4.6.1.3	B-657 - I-64 Bridge Over E. Little Creek [EB]
22HH-004-Bid.CONST.4.6.1.3.2	Phase 1A (Bridge Widening & Existing Bridge Rehabilitation [EB])
22HH-004-Bid.CONST.4.6.1.3.2	Initial Work
22HH-004-Bid.CONST.4.6.1.3.2	Bridge Rehabilitation
22HH-004-Bid.CONST.4.6.1.3.2	Foundations
22HH-004-Bid.CONST.4.6.1.3.2	ABUTMENT A
22HH-004-Bid.CONST.4.6.1.3.2	PIER 1
22HH-004-Bid.CONST.4.6.1.3.2	PIER 2
22HH-004-Bid.CONST.4.6.1.3.2	PIER 3
22HH-004-Bid.CONST.4.6.1.3.2	ABUTMENT B
22HH-004-Bid.CONST.4.6.1.3.2	Substructure
22HH-004-Bid.CONST.4.6.1.3.2	ABUTMENT A
22HH-004-Bid.CONST.4.6.1.3.2	PIER 1
22HH-004-Bid.CONST.4.6.1.3.2	PIER 2
22HH-004-Bid.CONST.4.6.1.3.2	PIER 3
22HH-004-Bid.CONST.4.6.1.3.2	ABUTMENT B
22HH-004-Bid.CONST.4.6.1.3.2	Superstructure
22HH-004-Bid.CONST.4.6.1.3.2	SPAN 1
22HH-004-Bid.CONST.4.6.1.3.2	SPAN 2
22HH-004-Bid.CONST.4.6.1.3.2	SPAN 3
22HH-004-Bid.CONST.4.6.1.3.2	SPAN 4
22HH-004-Bid.CONST.4.6.1.3.2	Final Work
22HH-004-Bid.CONST.4.6.1.3.1	Phase 1B (Existing Bridge Rehabilitation [EB])
22HH-004-Bid.CONST.4.6.1.3.3	ABUTMENT A
22HH-004-Bid.CONST.4.6.1.3.3	ABUTMENT B
22HH-004-Bid.CONST.4.6.1.3.3	Final Work*
22HH-004-Bid.CONST.4.6.1.3.4	Phase 2 (Existing Bridge Rehabilitation [EB])
22HH-004-Bid.CONST.4.6.1.3.4	ABUTMENT A
22HH-004-Bid.CONST.4.6.1.3.4	ABUTMENT B
22HH-004-Bid.CONST.4.6.1.3.4	Final Work*
22HH-004-Bid.CONST.4.6.1.4	EB-NW Noise Wall Sta 1022+90 to 1025+75 (285 LF)
22HH-004-Bid.CONST.4.6.1.5	EB-RW02 - MB7F w/ RW-3 Retaining Wall Sta 978+37.14 to 981+67.49 (330 LF)
22HH-004-Bid.CONST.4.6.1.7	EB-RW06 - MSE Retaining Wall Sta 991+07.46 to 997+34.64 (627 LF)
22HH-004-Bid.CONST.4.6.1.6	EB-RW09 - MSE Retaining Wall Sta 34+50.00 to 40+50.00 (557 LF)
22HH-004-Bid.CONST.4.6.1.9	EB-RW11 - MSE Retaining Wall Sta 1007+42.30 to 1011+46.73 (404 LF)
22HH-004-Bid.CONST.4.6.1.8	EB-RW12 - RW-3 Retaining Walll Sta 1011+90.01 to 1012+75.23 (85 LF)
22HH-004-Bid.CONST.4.6.2	Segment B - WB - STA 2821+00 to 3019+46
22HH-004-Bid.CONST.4.6.2.3	B-630 - I-64 Bridge Over Granby [WB]
22HH-004-Bid.CONST.4.6.2.3.6	Phase 1A (I-64 Bridge Over Granby Existing Bridge Rehabilitation [WB])
22HH-004-Bid.CONST.4.6.2.3	ABUTMENT A
22HH-004-Bid.CONST.4.6.2.3	ABUTMENT B
22HH-004-Bid.CONST.4.6.2.3	SPAN 1
22HH-004-Bid.CONST.4.6.2.3	SPAN 2
22HH-004-Bid.CONST.4.6.2.3	SPAN 3

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WBS Code	WBS Name
22HH-004-Bid.CONST.4.6.2.3	SPAN 4
22HH-004-Bid.CONST.4.6.2.3	Final Work'
22HH-004-Bid.CONST.4.6.2.3.1	Phase 1B (I-64 Bridge Over Granby Existing Bridge Rehabilitation [WB])
22HH-004-Bid.CONST.4.6.2.3	ABUTMENT A
22HH-004-Bid.CONST.4.6.2.3	ABUTMENT B
22HH-004-Bid.CONST.4.6.2.3	Final Work'
22HH-004-Bid.CONST.4.6.2.3.3	Phase 2 (I-64 Bridge Over Granby Existing Bridge Rehabilitation [WB])
22HH-004-Bid.CONST.4.6.2.3	ABUTMENT A
22HH-004-Bid.CONST.4.6.2.3	ABUTMENT B
22HH-004-Bid.CONST.4.6.2.3	Final Work'
22HH-004-Bid.CONST.4.6.2.4	B-629 - I-64 Bridge Over E. Little Creek [WB]
22HH-004-Bid.CONST.4.6.2.4.2	Phase 1A (I-64 Bridge Over E. Little Creek Existing Bridge Rehabilitation [WB])
22HH-004-Bid.CONST.4.6.2.4	ABUTMENT A
22HH-004-Bid.CONST.4.6.2.4	ABUTMENT B
22HH-004-Bid.CONST.4.6.2.4	SPAN 1
22HH-004-Bid.CONST.4.6.2.4	SPAN 2
22HH-004-Bid.CONST.4.6.2.4	SPAN 3
22HH-004-Bid.CONST.4.6.2.4	SPAN 4
22HH-004-Bid.CONST.4.6.2.4	Final Work'
22HH-004-Bid.CONST.4.6.2.4.1	Phase 1B (I-64 Bridge Over E. Little Creek Existing Bridge Rehabilitation [WB])
22HH-004-Bid.CONST.4.6.2.4	ABUTMENT A
22HH-004-Bid.CONST.4.6.2.4	ABUTMENT B
22HH-004-Bid.CONST.4.6.2.4	Final Work'
22HH-004-Bid.CONST.4.6.2.4.3	Phase 2 (I-64 Bridge Over E. Little Creek Existing Bridge Rehabilitation [WB])
22HH-004-Bid.CONST.4.6.2.4	ABUTMENT A
22HH-004-Bid.CONST.4.6.2.4	ABUTMENT B
22HH-004-Bid.CONST.4.6.2.4	Final Work'
22HH-004-Bid.CONST.4.6.2.7	C-501 - I64 HOV Over I564 & E. Little Crk Bridge [WB]
22HH-004-Bid.CONST.4.6.2.7.2	Phase 2A (I64 HOV Over I564 & E. Little Crk Bridge Rehabilitation)
22HH-004-Bid.CONST.4.6.2.7	SPAN 1
22HH-004-Bid.CONST.4.6.2.7	SPAN 2
22HH-004-Bid.CONST.4.6.2.7	SPAN 3
22HH-004-Bid.CONST.4.6.2.7	SPAN 4
22HH-004-Bid.CONST.4.6.2.7	SPAN 5
22HH-004-Bid.CONST.4.6.2.7	SPAN 6
22HH-004-Bid.CONST.4.6.2.7	SPAN 7
22HH-004-Bid.CONST.4.6.2.7	Final Work'
22HH-004-Bid.CONST.4.6.2.7.3	Phase 2B (I64 HOV Over I564 & E. Little Crk Bridge Rehabilitation)
22HH-004-Bid.CONST.4.6.2.7	Final Work'
22HH-004-Bid.CONST.4.6.2.1	WB-NW Noise Wall Sta 2847+85 to 202+09 (2,220 LF)
22HH-004-Bid.CONST.4.6.2.2	WB-RW04 - Gravity Retaining Wall Sta 6007+16.81 to 6007+77.80 (61LF)
22HH-004-Bid.CONST.4.6.2.6	WB-RW13 - RW3 Retaining Wall Sta 2859+13.03 to 2859+64.18 (51 LF)
22HH-004-Bid.CONST.4.7	Segment C
22HH-004-Bid.CONST.4.7.3	Segment C - EB - STA 1026+87 to 1090+90
22HH-004-Bid.CONST.4.7.3.1	B-653 - EB I-64 Bridge over Tidewater Dr
22HH-004-Bid.CONST.4.7.3.1.5	Phase 1A (Bridge Widening [EB])
22HH-004-Bid.CONST.4.7.3.1	Initial Work
22HH-004-Bid.CONST.4.7.3.1	Foundations
22HH-004-Bid.CONST.4.7.3	ABUTMENT A
22HH-004-Bid.CONST.4.7.3	PIER 1
22HH-004-Bid.CONST.4.7.3	PIER 2
22HH-004-Bid.CONST.4.7.3	PIER 3
22HH-004-Bid.CONST.4.7.3	ABUTMENT B
22HH-004-Bid.CONST.4.7.3.1	Substructure
22HH-004-Bid.CONST.4.7.3	ABUTMENT A
22HH-004-Bid.CONST.4.7.3	PIER 1
22HH-004-Bid.CONST.4.7.3	PIER 2
22HH-004-Bid.CONST.4.7.3	PIER 3
22HH-004-Bid.CONST.4.7.3	ABUTMENT B
22HH-004-Bid.CONST.4.7.3.1	Superstructure
22HH-004-Bid.CONST.4.7.3	SPAN 1
22HH-004-Bid.CONST.4.7.3	SPAN 2
22HH-004-Bid.CONST.4.7.3	SPAN 3
22HH-004-Bid.CONST.4.7.3	SPAN 4
22HH-004-Bid.CONST.4.7.3.1	Final Work
22HH-004-Bid.CONST.4.7.3.1.4	Phase 1A (Existing Bridge Rehabilitation [EB])
22HH-004-Bid.CONST.4.7.3.1	ABUTMENT A
22HH-004-Bid.CONST.4.7.3.1	ABUTMENT B
22HH-004-Bid.CONST.4.7.3.1	SPAN 1
22HH-004-Bid.CONST.4.7.3.1	SPAN 2
22HH-004-Bid.CONST.4.7.3.1	SPAN 3
22HH-004-Bid.CONST.4.7.3.1	SPAN 4
22HH-004-Bid.CONST.4.7.3.1	Final Work'
22HH-004-Bid.CONST.4.7.3.1.2	Phase 1B (Existing Bridge Rehabilitation [EB])
22HH-004-Bid.CONST.4.7.3.1	ABUTMENT A
22HH-004-Bid.CONST.4.7.3.1	ABUTMENT B
22HH-004-Bid.CONST.4.7.3.1	Final Work'
22HH-004-Bid.CONST.4.7.3.1.1	Phase 2A (Existing Bridge Rehabilitation [EB])
22HH-004-Bid.CONST.4.7.3.1	ABUTMENT A

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WBS Code	WBS Name
22HH-004-Bid.CONST.4.7.3.1.	ABUTMENT B
22HH-004-Bid.CONST.4.7.3.1.	Final Work'
22HH-004-Bid.CONST.4.7.3.1.3	Phase 2B (Existing Bridge Rehabilitation [EB])
22HH-004-Bid.CONST.4.7.3.1.	ABUTMENT A
22HH-004-Bid.CONST.4.7.3.1.	ABUTMENT B
22HH-004-Bid.CONST.4.7.3.1.	Final Work'
22HH-004-Bid.CONST.4.7.3.2	EB-RW15 - RW-3 Retaining Wall Sta 1036+01.21 to 1042+11.08 (610 LF)
22HH-004-Bid.CONST.4.7.3.3	EB-RW17 - RW-3 Retaining Wall Sta 1059+79.96 to 1060+41.31 (61 LF)
22HH-004-Bid.CONST.4.7.1	Segment C - WB - STA 309+46 to 3082+06.03
22HH-004-Bid.CONST.4.7.1.1	B-654 - WB I-64 Bridge over Tidewater Dr
22HH-004-Bid.CONST.4.7.1.1.5	Phase 1A (Bridge Widening [WB])
22HH-004-Bid.CONST.4.7.1.1.	Initial Work
22HH-004-Bid.CONST.4.7.1.1.	Foundations
22HH-004-Bid.CONST.4.7.1	ABUTMENT A
22HH-004-Bid.CONST.4.7.1	PIER 1
22HH-004-Bid.CONST.4.7.1	PIER 2
22HH-004-Bid.CONST.4.7.1	PIER 3
22HH-004-Bid.CONST.4.7.1	ABUTMENT B
22HH-004-Bid.CONST.4.7.1.1.	Substructure
22HH-004-Bid.CONST.4.7.1	ABUTMENT A
22HH-004-Bid.CONST.4.7.1	PIER 1
22HH-004-Bid.CONST.4.7.1	PIER 2
22HH-004-Bid.CONST.4.7.1	PIER 3
22HH-004-Bid.CONST.4.7.1	ABUTMENT B
22HH-004-Bid.CONST.4.7.1.1.	Superstructure
22HH-004-Bid.CONST.4.7.1	SPAN 1
22HH-004-Bid.CONST.4.7.1	SPAN 2
22HH-004-Bid.CONST.4.7.1	SPAN 3
22HH-004-Bid.CONST.4.7.1	SPAN 4
22HH-004-Bid.CONST.4.7.1.1.	Final Work
22HH-004-Bid.CONST.4.7.1.1.4	Phase 1A (Existing Bridge Rehabilitation [WB])
22HH-004-Bid.CONST.4.7.1.1.	ABUTMENT A
22HH-004-Bid.CONST.4.7.1.1.	ABUTMENT B
22HH-004-Bid.CONST.4.7.1.1.	SPAN 1
22HH-004-Bid.CONST.4.7.1.1.	SPAN 2
22HH-004-Bid.CONST.4.7.1.1.	SPAN 3
22HH-004-Bid.CONST.4.7.1.1.	SPAN 4
22HH-004-Bid.CONST.4.7.1.1.	Final Work'
22HH-004-Bid.CONST.4.7.1.1.2	Phase 1B (Existing Bridge Rehabilitation [WB])
22HH-004-Bid.CONST.4.7.1.1.	ABUTMENT A
22HH-004-Bid.CONST.4.7.1.1.	ABUTMENT B
22HH-004-Bid.CONST.4.7.1.1.	Final Work'
22HH-004-Bid.CONST.4.7.1.1.1	Phase 2A (Existing Bridge Rehabilitation [WB])
22HH-004-Bid.CONST.4.7.1.1.	ABUTMENT A
22HH-004-Bid.CONST.4.7.1.1.	ABUTMENT B
22HH-004-Bid.CONST.4.7.1.1.	Final Work'
22HH-004-Bid.CONST.4.7.1.1.3	Phase 2B (Existing Bridge Rehabilitation [WB])
22HH-004-Bid.CONST.4.7.1.1.	ABUTMENT A
22HH-004-Bid.CONST.4.7.1.1.	ABUTMENT B
22HH-004-Bid.CONST.4.7.1.1.	Final Work'
22HH-004-Bid.CONST.1	===== ITS/TOLLING/ELECTRICAL =====
22HH-004-Bid.CONST.1.5	Segment A
22HH-004-Bid.CONST.1.5.1	Segment A - EB - STA 964+34.38 to 975+00
22HH-004-Bid.CONST.1.5.1.3	Phase 1
22HH-004-Bid.CONST.1.5.1.4	Phase 2
22HH-004-Bid.CONST.1.5.2	Segment A - WB - STA 2810+42.50 to 2821+00
22HH-004-Bid.CONST.1.5.2.3	Phase 1
22HH-004-Bid.CONST.1.5.2.4	Phase 2
22HH-004-Bid.CONST.1.6	Segment B
22HH-004-Bid.CONST.1.6.1	Segment B - EB - STA 975+00 to 1026+87
22HH-004-Bid.CONST.1.6.1.1	Phase 1
22HH-004-Bid.CONST.1.6.1.3	Phase 2
22HH-004-Bid.CONST.1.6.2	Segment B - WB - STA 2821+00 to 3019+46
22HH-004-Bid.CONST.1.6.2.3	Phase 1
22HH-004-Bid.CONST.1.6.2.4	Phase 2
22HH-004-Bid.CONST.1.7	Segment C
22HH-004-Bid.CONST.1.7.3	Segment C - EB - STA 1026+87 to 1090+90
22HH-004-Bid.CONST.1.7.3.1	Phase 1
22HH-004-Bid.CONST.1.7.3.3	Phase 2
22HH-004-Bid.CONST.1.7.1	Segment C - WB - STA 309+46 to 3082+06.03
22HH-004-Bid.CONST.1.7.1.1	Phase 1
22HH-004-Bid.CONST.1.7.1.3	Phase 2
22HH-004-Bid.CONST.2	===== OVERHEAD SIGNS =====
22HH-004-Bid.CONST.2.5	Segment A
22HH-004-Bid.CONST.2.5.1	Segment A - EB - STA 964+34.38 to 975+00
22HH-004-Bid.CONST.2.5.1.3	Phase 1
22HH-004-Bid.CONST.2.5.1.4	Phase 2
22HH-004-Bid.CONST.2.5.2	Segment A - WB - STA 2810+42.50 to 2821+00
22HH-004-Bid.CONST.2.5.2.3	Phase 1

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WBS Code	WBS Name
22HH-004-Bid.CONST.2.5.2.4	Phase 2
22HH-004-Bid.CONST.2.6	Segment B
22HH-004-Bid.CONST.2.6.1	Segment B - EB - STA 975+00 to 1026+87
22HH-004-Bid.CONST.2.6.1.1	Phase 1
22HH-004-Bid.CONST.2.6.1.3	Phase 2
22HH-004-Bid.CONST.2.6.2	Segment B - WB - STA 2821+00 to 3019+46
22HH-004-Bid.CONST.2.6.2.3	Phase 1
22HH-004-Bid.CONST.2.6.2.4	Phase 2
22HH-004-Bid.CONST.2.7	Segment C
22HH-004-Bid.CONST.2.7.3	Segment C - EB - STA 1026+87 to 1090+90
22HH-004-Bid.CONST.2.7.3.1	Phase 1
22HH-004-Bid.CONST.2.7.3.3	Phase 2
22HH-004-Bid.CONST.2.7.1	Segment C - WB - STA 309+46 to 3082+06.03
22HH-004-Bid.CONST.2.7.1.1	Phase 1
22HH-004-Bid.CONST.2.7.1.3	Phase 2

Calendars

The DBT has incorporated six calendars into the Project Schedule:

Table 4.6.2.3 – Calendar Table

Calendar	Activity Count
5 @ 8 H, W	908
5@8 H Design / Submittals	206
CALENDAR DAY	245
CURE	78
NLEB CELENDAR	3
PLANTING	3

- **"5@8 H, W"** This calendar is based on five (5) Working days per week, 8 Hr./ Days with non-working days for weather. In addition to weekends, this calendar designates all major holidays and the days between Christmas and New Year as non-working days. This calendar is used for all production activities that are affected by weather.
- **"5@8 H Design/Submittals"** This calendar is based on five (5) Working days per week, 8 Hr./ Days. In addition to weekends, this calendar designates all major holidays and the days between Christmas and New Year as non-working days. This calendar is used for all Design and Administration activities.
- **"Calendar Day"** This calendar is based on seven (7) working days per week 24 Hr. Days. This calendar holds every day as a working day. This calendar has been assigned to all administrative, procurement and review activities. For example, this calendar has been assigned to VDOT's 21 Calendar Day review activities.
- **"Cure"** This calendar is based on seven (7) working days per week 24 Hr. Days. This calendar is used for concert cure time.
- **"NLEB Calendar"** This TOYR calendar is based on five (5) working days per week, 8 Hours/ Days with non-working days for weekends and major holidays. In addition, this calendar blocks out the restricted tree cutting season for the Northern Long-eared bats from April 1st to November 14th each year. This calendar is used for all clear and grub activities.
- **"Planting"** This calendar is based on five (5) working days per week, 8 Hours/ Days with non-work days for weather, weekends, and major holidays as non-working days. In addition, this calendar blocks out the restricted planting season from March 16th to October 14th each year. This calendar is used for all tree and shrub planting activities.

Holidays

Our project schedule incorporates the following holidays:

- **New Year's Day Holiday**: Holiday from 7:00AM December 31st until 7:00 AM the next work day following New Year's Day, unless the holiday occurs on a Sunday. If holiday falls on Sunday, then Monday will also be considered a holiday, and work will not occur until 7:00 AM on Tuesday.
- **Easter Holiday**: Holiday from 7:00AM on Good Friday until 7:00 AM on the Monday following Easter Sunday.
- **Memorial Day Holiday**: Holiday from 7:00AM on Friday prior to Memorial Day until 7:00 AM on the Tuesday following Memorial Day.
- **Independence Day Holiday**: Holiday from 7:00AM on the day prior to July 4th, until 7:00 AM the next work day following July 4th unless the holiday occurs on a Sunday. If holiday falls on Sunday, then Monday will also be considered a holiday, and work will not occur until 7:00 AM on Tuesday.
- **Labor Day Holiday**: Holiday from 7:00AM on the Friday before Labor Day until 7:00 AM on the Tuesday following Labor Day.
- **Election Day Holiday**: Although not required by the RFP, our scheduled incorporates this Holiday from 7:00AM on Monday before Election Day until 7:00 AM on the Tuesday following Election Day to avoid traffic impacts to voters.
- **Thanksgiving Day Holiday**: Holiday from 7:00AM on the Wednesday before Thanksgiving Day until 7:00 AM on the Monday following Thanksgiving Day.
- **Christmas Day Holiday**: Holiday from 7:00AM on the day prior to December 25th until 12:00 AM the day after December 25th.

Plan to Accomplish the Work

The narrative below describes the DBT's project delivery plan grouped by major Work Breakdown Structure (WBS) divisions. These include quality control, design, geotechnical investigation, right-of-way acquisition, environmental investigation & permitting, utility relocation, public involvement, and construction. The overall project delivery sequence was developed based on the roadway and bridge improvement concepts shown in the

RFP, along with the MOT, geotechnical, environmental, existing utility, and end user requirements identified by the RFP and the DBT.

Design Phase

The DBT will finalize the required Project designs in accordance with the RFP requirements to obtain approvals of Release for Construction (RFC) plan sets and necessary permits, right of way acquisitions and utility relocations for the roadway and bridge improvements

Design submittal activities will include surveying, roadway engineering with roadside and guardrail design, bridges and retaining walls structural and foundation engineering, hydraulic-drainage analysis/design including SWM facilities, traffic analysis and engineering for temporary traffic control, ITS, signing and pavement markings, lighting and applicable side street signals at the interchange ramps connections, geotechnical investigation including borings and analysis, materials analysis, and pavement design for temporary pavements and confirmation of RFP final pavement sections.

The design activities include necessary preliminary/final designs; third-party coordination such as with the Naval Station Norfolk regarding their security fencing, engineering plan preparation, interim VDOT reviews and subsequent approvals. It includes time for the designs necessary Interdisciplinary, Constructability, and QA/QC reviews at the multiple steps in the design process.

We will focus on refining our technical proposal designs and meeting the requirements of the RFP documents. The DBT will perform studies of the information contained in the RFP documents to confirm that the information provided to date is correct and suitable for use in designing the project. These additional studies will include performing supplemental field surveying to confirm horizontal and vertical control of key project features verifying type and location of existing subsurface utilities; confirming existing right of way and property limits; and performing a thorough geotechnical field investigation to confirm geotechnical conditions for the bridge foundations, roadway, and stormwater management designs. The findings of these studies will be summarized in a series of reports and, if discrepancies occur between the information in the RFP documents and the DBT studies, these results will be presented to VDOT for review and evaluation as outlined in the Scope Validation process for the project.

Our design submission approach will be to implement a “rolling” roadway and bridge structural design submission process to allow the work to proceed within each of our proposed Project Work Area A, B, and C Segments as outlined below in Exhibit 4.6.2.1. Each Segment’s roadway designs will be developed in two main steps: 1) advanced final design/Right of Way (ROW) plans submittals and 2) finalized design/RFC plans. The goal of the advanced final design/ROW plans submittals is to gain ROW Authorization to proceed with ROW acquisition services and to advance processing permitting applications and reviews with the intent to secure permit approvals as noted below coinciding with the RFC plans approvals. Roadway plans will be developed with performing geometric designs; preparing cross sections and defining limits of construction; completing drainage-SWM and erosion & sediment control designs and reports; preparing temporary traffic control plans as well as a TMP. Geotechnical Engineering Reports will be submitted 90 days in advance of any final construction documents. The Structural design process of the bridge widenings in the applicable Segments will include Preliminary Plans Phase I and Final Plans Phase II submittals. Each bridge’s Stage II plans will be developed with a Superstructure focused plans submittal with the intent to expedite steel girder fabrication efforts and then a separate Stage II Bridge Substructure plans submission supported with final foundation recommendations. One step final design plan submission will be developed for each of the bridges requiring rehabilitation work only.

We will develop independent I-64 Segment 1A corridor wide preliminary design, advance final design, and finalized design plans (RFC) submissions for the final ITS, lighting, and roadway signing/pavement markings features. These design submissions will include a detailed Sign Sequencing Plan addressing covering, removing, and unveiling signs during the Segments’ construction and MOT phasing and Sign Unveiling Plan for opening the completed lanes to traffic.

Environmental Permitting activities will begin with receiving NTP and will include a thorough environmental evaluation and confirmation of the information provided in the RFP documents as well as follow-up environmental coordination and securing Section 7 concurrence. The DBT will prepare a comprehensive environmental management plan that includes a matrix of environmental commitments and compliance requirements that; identifies milestone dates and integrates those into the project schedule; identifies the responsible party; and summarizes requirements. The DBT will secure the environmental permits prior to construction and coordinate NEPA re-evaluations for construction segment authorization, and appropriately adhere to construction time of year restrictions.

The final noise analysis will be conducted including the public polling of property owners which are affected and benefited by the effected noise abatement measures.

Final environmental permitting activities will begin immediately after receiving VDOT approval of the Right of Way Plans and/or concurrence to advance the final construction plans for approval. At this point in the design, the footprint for the project will be firmly established and the DBT will identify the final environmental impacts required to construct the project in its entirety. The DBT will strive to avoid and minimize environmental impacts during design development and construction. A Stormwater Pollution Prevention Plan (SWPPP) will be developed and the registration statement for the Virginia Stormwater Management Permit will be submitted immediately following the SWPPP development. We have also included environmental milestones such as submission of permit applications and securing the required permits required to ensure they are in-hand well in advance of the corresponding construction activities.

Following VDOT's concurrence to advance Segment A – Early Works final construction plans for approval; we will submit the necessary permit application submissions for the VSMP/VPDES Permits (Form LD-445 Submission). We will meet SWM requirements and secure the VSMP/VPDES permits for the Project's proposed improvements within Segment A using a portion of the available nutrient credits being provided by the VDOT. Following final design completion of the Segment B and C proposed improvements and concurrence to advance final construction plans for approval, we will submit updated LD-445 forms and secure modifications to the issued VSMP/VPDES permits for the Segment B and C final features and footprint. We acknowledge that the VSMP/VPDES Permits, and their modifications can each require a three-month approval timeframe, however we will strive to submit necessary VSMP/VPDES Permits permit applications (Form LD-445) for VDOT to process and submit to DEQ within the first week of the month to streamline timeframe and potentially reduce the approval timeframe to 60 days.

The DBT will coordinate with the USACE to confirm the Preliminary Jurisdictional Determination and determine if there are any other options for impact avoidance and minimization that have not already been considered in our conceptual plans. We will prepare a Joint Permit Application (JPA) for a Nationwide #23 Permit of the wetland and stream impacts identified in Segment B and Segment C of our Project with the initial Segment B Right-of-Way Plan submittal. (Since we do not anticipate any wetland or stream impacts in Segment A, activities associated with the Early Works Package can advance before the permit is approved by the USACE).

Right-of-Way Acquisition: Starting at NTP the DBT will evaluate the proposed ROW, permanent easements, and temporary easements as shown on the plans. If changes are required, either due to a change in the required ROW or a change based on the results of legal research, the DBT will prepare updated preliminary ROW plans and a ROW data sheet and will submit to VDOT for review and approval. Preliminary ROW activities will begin after receiving NTP. The DBT will begin performing the legal research for the identified parcels on the preliminary plans at the same time that our survey crew is validating the survey information provided in the RFP package. We will develop ROW plans with advanced final design efforts and proceed with ROW acquisition services with VDOT's approval of the ROW Plans Submittal and ROW Authorization.

Utility Relocations: The DBT's project schedule includes activities for holding the Utility Field Investigation (UFI) meeting, followed by preparation of the Plan & Estimate (P&E) estimates by the utility owner, approval of the P&E, and construction of the relocation. Although we have already met with each individual utility company to discuss the proposed relocations and prior rights, the utility relocation schedule starts with formal UFI meetings following completion of all confirmation utility locating OL-B designation and necessary supporting test hole vertical locating. This will enable our Team to confirm and adjust our list of utility conflicts based on the field utility locating data prior to holding the formal UFI meeting. We will continue this early coordination of utilities throughout the Design Phase of the Project to ensure that our Design Plans are coordinated with the utility relocation plans. Following the UFI meeting, we will perform follow-up and supplement utility test hole locating based on the finalized design project features and conflict points. The utility relocations are anticipated to be completed prior to impacting construction operations, thus avoiding potential construction delays.

Critical Design/Permitting Hold Points have been incorporated in our project schedule as required by the RFP and are shown below.

Table 4.6.2.4 – Critical Design/Permitting Hold Points

Planned Schedule Hold Point	Hold Point Duration (Calendar Days)
General Pollutant Discharge Elimination System Permit for discharge of stormwater from Construction Activities (VPDES Construction Permit) for Segment A	90 Days
Nationwide #23 Permit for Wetland and Stream Impacts for Segments B and C	90 Days
General Pollutant Discharge Elimination System Permit for discharge of stormwater from Construction Activities (VPDES Construction Permit Modification) for Segment B	90 Days
General Pollutant Discharge Elimination System Permit for discharge of stormwater from Construction Activities (VPDES Construction Permit Modification) for Segment C	90 Days

Scope Validation: The scope validation period is 120 days after NTP, and the schedule depicts activities that are relevant to the validation work, and VDOT review of the submittal.

Public Outreach: The public outreach schedule includes developing and submitting our Emergency Contact List and Response Plan upon Notice to Proceed, holding citizen information meetings during the design phase, public information "Pardon our Dust" meetings at the start of construction and prior to major traffic switches, providing frequent updates to the Office of Public Affairs, and additional specific group meetings as necessary. The schedule includes "level of effort" type activities for these Public Information meetings intended to also cover many other public involvement activities that our Team will perform, including meeting with local businesses and affected property owners, attending meetings with homeowners associations, local government representatives, and community groups, and providing information for regular updates at progress meetings and weekly lane closure plans. These "level of effort" type activities will be further defined during development of our Baseline CPM.

Construction Phase: The sequence of construction and segment limits developed by the DBT, were driven by several key factors which the DBT identified as being critical to the on-time completion of the project:

- **Coordination with Adjacent Projects**:
  - Our DBT's approach will ensure that the transition from our project's tie-in to HRBT will accommodate all potential HRBT traffic shifts, to specifically include their major traffic switch scheduled for early Summer 2024. This key factor resulted in our first order of work being the complete widening of the travel lanes from the northern tie-in point to a distance long enough to shift 3-lanes of traffic.
- **Public Safety**:
  - Grouping together the three (3) bridge overpasses that are in close proximity; Granby Street, I-564, and E. Little Creek Road, as not enough distance is between them to safely shift traffic without creating a weave.
  - Minimizing the number of major traffic shifts/detours required to maintain traffic to reduce disruption and safety concerns to the traveling public
- **Efficient Approach**:
  - Allowing independent phasing of the Tidewater Drive overpass bridge, discrete from the other bridge modifications. This permits sequential or concurrent reconstruction and widening activities as resources permit. This also permits flexibility for traffic to align with upcoming I-64 Segment 1B improvements.
  - Bridge widenings are constructed without closing travel lanes, allowing for full ramp movements.
- **Reduce Risk**:
  - Maintaining a reasonable design schedule providing enough time with specific activities for comprehensive Interdisciplinary, Constructability, and QA/QC reviews; and all required agency reviews.
  - Providing ample lead-time to secure materials.

As a result of the analysis of these key factors, the DBT developed three (3) distinct segments with 2-phases of construction to build and manage the project.

Exhibit 4.6.2.1

WORK AREA	WORK ELEMENTS	2023			2024				2025			
		Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Segment A	Naval Station Norfolk Security Fence Construction											
	Retaining Walls											
	EB - Phase 1 MOT											
	WB - Phase 1 MOT											
	EB - Phase 2 MOT											
	WB - Phase 2 MOT											
	Roadway Construction											

WORK AREA	WORK ELEMENTS	2023			2024				2025			
		Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Segment B	EB - Phase 1A MOT											
	WB - Phase 1A MOT											
	WB - Phase 1B MOT											
	Retaining Walls & Noise Walls Construction											
	EB over E. Little Creek Bridge Widening Construction (Phase 1A)											
	EB over Granby Bridge Widening Construction (Phase 1A)											
	EB over I-564 Bridge Widening Construction (Phase 1A)											
	EB - Phase IB MOT											
	WB I-64 HOV over I-564 & E. Little Creek Bridge Rehab (Phase 2A)											
	WB I-64 HOV over I-564 & E. Little Creek Bridge Rehab (Phase 2B)											
	EB - Phase 2 MOT											
	WB - Phase 2 MOT											
	Roadway Construction											

WORK AREA	WORK ELEMENTS	2023			2024				2025			
		Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Segment C	Retaining Walls & Noise Walls Construction											
	EB - Phase 1 MOT											
	EB over Tidewater Bridges Widening Construction (Phase 1A)											
	EB Tidewater On Ramp C Loop Closure (3 Weeks) (Phase 1B/2A)											
	EB - Phase 2 MOT											
	WB - Phase 1 MOT											
	WB over Tidewater Bridges Widening Construction (Phase 1A)											
	WB Tidewater Off Ramp A Loop Closure (3 Weeks) (Phase 1B)											
	WB Tidewater On Ramp E Closure (2A/2B) (3 Weeks)											
	WB - Phase 2 MOT											
	Roadway Construction											

Segment A accommodates the tie-in to HRBT's various MOT conditions by constructing the full roadway widening as an "early works" design and construction package. This segment extends from the tie-in point and terminates at the limits of its drainage area POI 1.

- Segment A-EB – 64 EB Station 964+34 to 64 EB Station 985+00
- Segment A-WB – 64 WB Station 2810+42 to 64 EB Station 2825+00

These limits are intentionally set to accommodate advanced design and permitting separate from the remaining project drainage areas allowing independent plans and permitting for early construction. Additionally, significant structures are omitted from this segment, further reducing the number of reviews thereby advancing approvals to the RFC package quicker. This design package and follow-on construction will be coordinated with HRBT MOT phasing so that both projects align and there will be no impacts to traffic moving through the corridor.

Segment B focuses on the three (3) bridge overpasses that are in close proximity; Granby Street, I-564, and East Little Creek Road, which must be widened and overlaid concurrently due to MOT constraints.

- Segment B-EB – 64 EB Station 985+00 to 64 EB Station 1027+00
- Segment B-WB – 64 WB Station 2825+00 to 64 WB Station 3020+00

This segment also contains the majority of the projects storm water management facilities and will likely take more time to reach the RFC stage due to the increased complexity of design and number of reviews. Segment B also includes the reversible express lane bridge which will be coordinated with the phasing of the Granby Street bridge modifications to avoid conflicting traffic patterns and reduce closure periods.

Segment C includes the Tidewater bridge and project terminus with I-64 HREL Segment 1B.

- Segment C-EB – 64 EB Station 1027+00 to 64 EB Station 1085+50
- Segment C-WB – 64 WB Station 3020+00 to 64 WB Station 3082+06

This segment is delineated to permit the widening and rehabilitation of EB and WB lanes and structures independent of the adjacent widening(s) which provides flexibility for future Segment 1B traffic phasing. Isolation of this segment also allows construction resource flexibility, increasing efficiency of the project's construction and reduces risk of delays within Phases.

Each Segment will be constructed in two major construction phases and have been conceived to be built independently from each other and accommodate separate maintenance of traffic (MOT) phases. This allows work in each phase along the 2.5-mile-long corridor to occur concurrently regardless of how advanced any particular segment is. The two major phases for each Segment are:

- Phase 1 – EB I-64 outside widening from Sta. 964+34 to Sta. 1085+50
  Phase 1 – WB I-64 outside widening from Sta. 2810+42 to Sta. 3082+06
- Phase 2 – EB I-64 inside widening from Sta. 964+34 to Sta. 1090+90
  Phase 2 – WB I-64 inside widening from Sta. 2810+42.50 to Sta. 3082+06

The two phases include MOT sub-phases in each Segment to allow construction activities to proceed with minimal impact to the traveling public. The construction phases correlate to traffic shifts required by each phase to complete the improvements. Key construction activities as well as major MOT features for each distinct construction phase are as follows:


Schedule Team Meeting

EB I-64 Segment A Phase 1A: Segment A Phase 1A will include inside median shoulder strengthening and temporary pavement widening followed by shifting traffic to the inside shoulder to permit construction of the outside widening. The inside shoulder of the ramp from Patrol Road to I-64 EB is also strengthened and widened with temporary pavement to permit permanent widening to the outside. Shoulder strengthening will continue through Segment B and C. The work in Segment A will align with I-64 EB in HRBT Construction Phase 2 or earlier. The absence of structures in Segment A will accelerate the design and construction. The designation of Segment A as an early works package will ensure that the tie-in to the HRBT project will occur without delays.

EB I-64 Segment A Phase 1B: Segment A Phase 1B maintains traffic on the inside shoulder to permit construction of the outside widening but shifts traffic on the Patrol Road entrance ramp to I-64 SB from the temporary pavement to the newly widened pavement to the outside. The remaining ramp is then widened from the project limits to the gore area of I-64 EB.

WB I-64 Segment A Phase 1: The WB I-64 Segment A Phase 1 will include shifting traffic to the outside shoulder to permit construction of the inside widening. Construction in this Segment will match I-64 WB HRTB

Construction Phase 3 or earlier. Again, since there are no structures in Segment A, all work activities are completed without Sub-Phases.

EB I-64 Segment A Phase 2: Segment A Phase 2 will include working on the inside widening after traffic is shifted to the outside lanes constructed in Phase 1. This work will align with HRBT EB construction Phase 3, or earlier.

WB I-64 Segment A Phase 2: The WB I-64 Segment A Phase 2 will include working on the outside widening after traffic is shifted to the inside lanes constructed in Phase 1. This work will align with the HRBT WB Phase 4, or earlier.

EB I-64 Segment B Phase 1A: Traffic will be shifted to the inside and construction will be performed on the outside behind Temporary Concrete Barrier (TCB). Construction activities will include roadway widening throughout this segment and:

- EB I-64 Bridge over Granby St. Phase 1A Widening: The work includes an optional lane to access the reversible express lanes. The express lanes work will be concurrent with Phase 2 bridge rehabilitation.
- EB I-64 Bridge over I-564 Phase 1A Widening
- EB I-64 Bridge over E. Little Creek Phase 1A Widening
- EB I-564 Ramp to I-64 EB widening to the outside.
- E. Little Creek Ramp to I-64 EB widening to the outside.

EB I-64 Segment B Phase 1B: Traffic remains on the inside lanes with construction performed on the outside behind TCB with the exception of E. Little Creek Road, where Traffic is divided across the bridge and the middle of the structure is rehabbed. Construction activities will include the continuation of activities from Phase 1A above and:

- EB I-64 Bridge over Granby St. Phase 1B Rehabilitation
- EB I-64 Bridge over E. Little Creek Phase 1B Rehabilitation

WB I-64 Segment B Phase 1A: Traffic will be shifted to the inside and construction will be performed on the outside behind TCB. Construction activities will include:

- WB I-64 Bridge Over Granby Phase 1A Rehabilitation
- WB I-64 Bridge Over E. Little Creek Phase 1A Rehabilitation

WB I-64 Segment B Phase 1B: Traffic will be shifted to the outside for the widening of I-64 WB Ramp to I-564. Traffic crossing the bridges will be split to the inside and outside lanes, and construction will be performed in the middle lane behind TCB. Construction activities will include:

- WB I-64 Bridge Over Granby Phase 1B Rehabilitation
- WB I-64 Bridge Over E. Little Creek Phase 1B Rehabilitation

EB I-64 Segment B Phase 2: Traffic will be shifted to the outside and construction will be performed on the inside/median behind TCB. Construction activities will include:

- EB I-64 Bridge Over Granby St. Phase 2 Rehabilitation
- EB I-64 Bridge Over I-564 Phase 2 Rehabilitation
- EB I-64 Bridge Over E. Little Creek Phase 2 Rehabilitation

WB I-64 Segment B Phase 2: Traffic will be shifted to the outside and construction will be performed on the inside behind TCB. Construction activities will include:

- WB I-64 Bridge Over Granby St. Phase 2 Rehabilitation
- WB I-64 Bridge Over E. Little Creek Phase 2 Rehabilitation

EB I-64 Segment C Phase 1A: Traffic will be shifted to the inside lanes and construction will be performed on the outside lanes/shoulder behind TCB. Construction activities will include:

- EB I-64 Bridge Over Tidewater Phase 1A Widening outside of existing bridge.

EB I-64 Segment C Phase 1B: Traffic remains shifted to the inside lanes and the ramp from SB Tidewater Dr. To EB I-64 is closed and traffic detoured. Construction will be performed on the outside behind TCB. Construction activities will include:

- EB I-64 Bridge Over Tidewater Phase 1B Rehabilitation.

WB I-64 Segment C Phase 1A: Traffic will be shifted to the inside and construction will be performed on the outside behind TCB. Construction activities will include:

- WB I-64 Bridge Over Tidewater Phase 1 Widening

WB I-64 Segment C Phase 1B: Traffic will remain shifted to the inside and construction will be performed on the outside behind TCB. Construction activities will include:

- WB I-64 Bridge Over Tidewater Phase 1B Rehabilitation: Work in this phase will include closing the off-ramp from WB I-64 to SB Tidewater Dr. and detouring traffic.

EB I-64 Segment C Phase 2A: Traffic will be shifted to the outside and construction will be performed on the inside/median behind TCB. Construction activities will include:

- EB I-64 Bridge Over Tidewater Phase 2A Rehabilitation: The work in this phase will include closing the ramp from southbound Tidewater Dr. to EB I-64 and detouring traffic

EB I-64 Segment C Phase 2B: Traffic will remain shifted to the outside and construction will be performed on the inside/median lane behind TCB. Construction activities will include:

- EB I-64 Bridge Over Tidewater Dr. Phase 2B Rehabilitation: The ramp from SB Tidewater Dr. to EB I-64 is opened in Phase 2B.

WB I-64 Segment C Phase 2A: Traffic will be shifted to the outside and construction will be performed on the inside/median behind TCB. Construction activities will include:

- WB I-64 Bridge Over Tidewater Dr. Phase 2A Rehabilitation: the off-ramp from WB I-64 to SB Tidewater Dr. is open during this Phase. The on-ramp from NB Tidewater Dr. to WB I-64 is closed during this phase and traffic detoured.

WB I-64 Segment C Phase 2B: Traffic will remain shifted to the outside and construction will be performed on the inside/median behind TCB. Construction activities will include:

- WB I-64 Bridge Over Tidewater Phase 2B Rehabilitation: the off-ramp from WB I-64 to SB Tidewater Dr. is open during this Phase. The on-ramp from NB Tidewater Dr. to WB I-64 is closed during this phase and traffic detoured.

The sequence of construction proposed by our Team provides flexibility throughout all phases of construction. This allows us to perform construction in multiple areas with multiple crews concurrently as shown in our Proposal Schedule included in Volume II shows our sequence of construction broken down by Segment, Phase, and major work elements such as bridge widening, bridge repairs, roadway, Noise barriers, ITS, Signing, lighting and punch list/closeout.

Major Traffic Shifts

The DBT's plan for project construction anticipates the following major traffic switch and MOT milestones during construction:

Table 4.6.2.4 – Traffic Shifts for Primary Traffic Movements

Planned Traffic Shifts / MOT Milestone	Planned Shift Date
Implement Segment A EB, Phase 1A	08/07/2023
Implement Segment A EB, Phase 1B	12/27/2023
Implement Segment A EB, Phase 2	03/19/2024
Implement Segment A WB, Phase 1	08/07/2023
Implement Segment A WB, Phase 2	03/11/2024
Implement Segment B EB, Phase 1A	11/09/2023
Implement Segment B EB, Phase 1B	08/14/2024
Implement Segment B EB, Phase 2	01/21/2025
Implement Segment B WB, Phase 1A	11/10/2023
Implement Segment B WB, Phase 1B	05/14/2024
Implement Segment B WB, Phase 2	01/21/2025
Implement Segment C EB, Phase 1A	05/22/2024
Implement Segment C EB, Phase 1B	10/22/2024
Implement Segment C EB, Phase 2A	01/21/2025
Implement Segment C EB, Phase 2B	04/24/2025
Implement Segment C WB, Phase 1A	06/06/2024
Implement Segment C WB, Phase 1B	11/12/2024
Implement Segment C WB, Phase 2A	01/27/2025
Implement Segment C WB, Phase 2B	06/10/2025

QA/QC Inspection and Testing

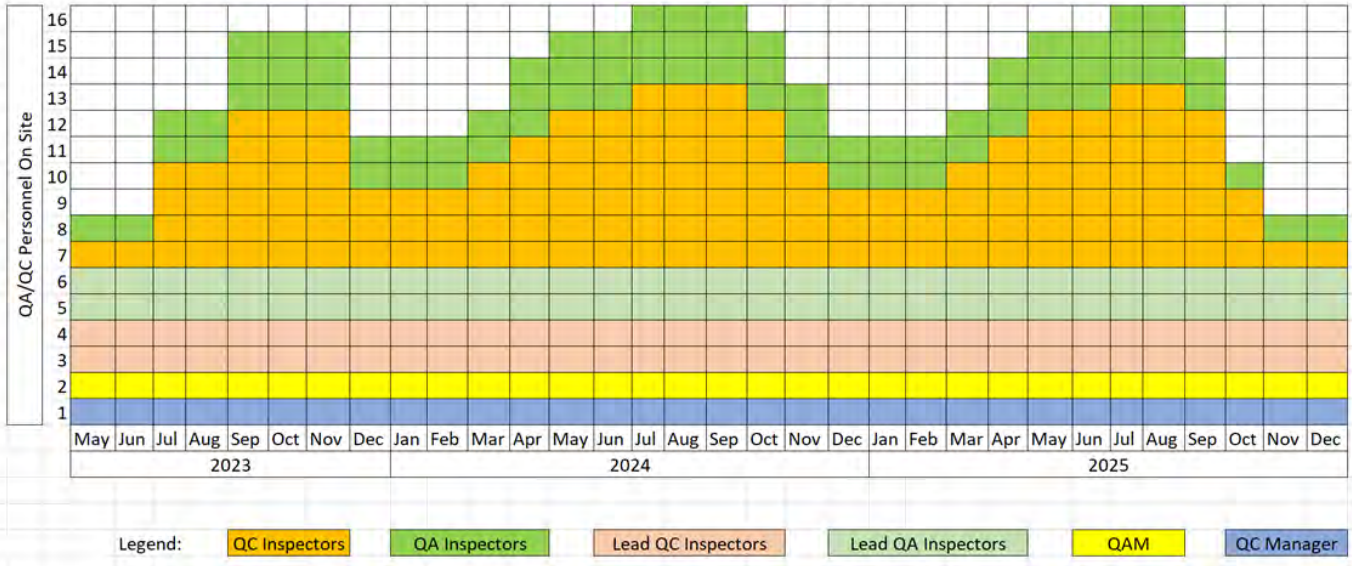
The project schedule will also be critically important to the management of our QA/QC inspection, testing, and documentation efforts. By resource loading our construction activities with crews classified by construction discipline and reviewing the associated resource histograms on a weekly basis, our team will be able to identify

all current and future QA/QC hold points, and to quantify QA/QC coverage and testing resources needed to provide robust quality control in a timely and efficient manner.

The DBT has developed and refined numerous best practices related to QA/QC in our delivery of VDOT DB projects in multiple districts. These practices have recently been enhanced to satisfy the expectations communicated to our overall industry by VDOT Senior Management. This excellent performance was recently validated by the VDOT OIA initial QCIP audit of our I-95 SB RRC where the Design Builder (Wagman) obtained a score of 96.36. The following practices will be implemented on this project:

- All key and value-added staff will remain committed to the project and not delegate their duties.
- The CPM schedule will include separate activities for constructability and QA/QC reviews by the DBT as well as VDOT and agency reviews. The EICE will ensure these reviews occur and that the design submittals will be stamped after review and prior to formal submission.
- Written work plans are developed for construction activities with noted witness and hold points for safety, QA, and QC inspections. These written plans will be reviewed and incorporated into the formal Preparatory Meetings
- Proactive QA/QC inspections with vigilant written documentation (inspection logs, Deficiencies, and NCRs) of any issues with potential to affect quality or safety for tracking and follow through until formal resolution by the EIC and/or Designer/Engineer of Record as required.
- The QAM will hold formal QA/QC meetings at the project field office at least weekly to review look ahead schedules; staffing assignments; preparatory meetings; QA/QC logs; inspection reports; and the quantity ledger book.
- Additional DBT Members (SWM/ESC Design Lead, EIC, Safety Manager, Sr. QA Inspector, and Sr. QC Inspector) will assist the ESC Manager by rotating their participation in the Construction Runoff Control Inspections (CRCI).
- CRCI will occur twice a week at a minimum and after every measurable storm event.
- Contractor QA/QC Plan will be updated and maintained with all proper official documentation.

Figure 4.6.2.3 QA/QC Staffing Plan



Project Critical Path

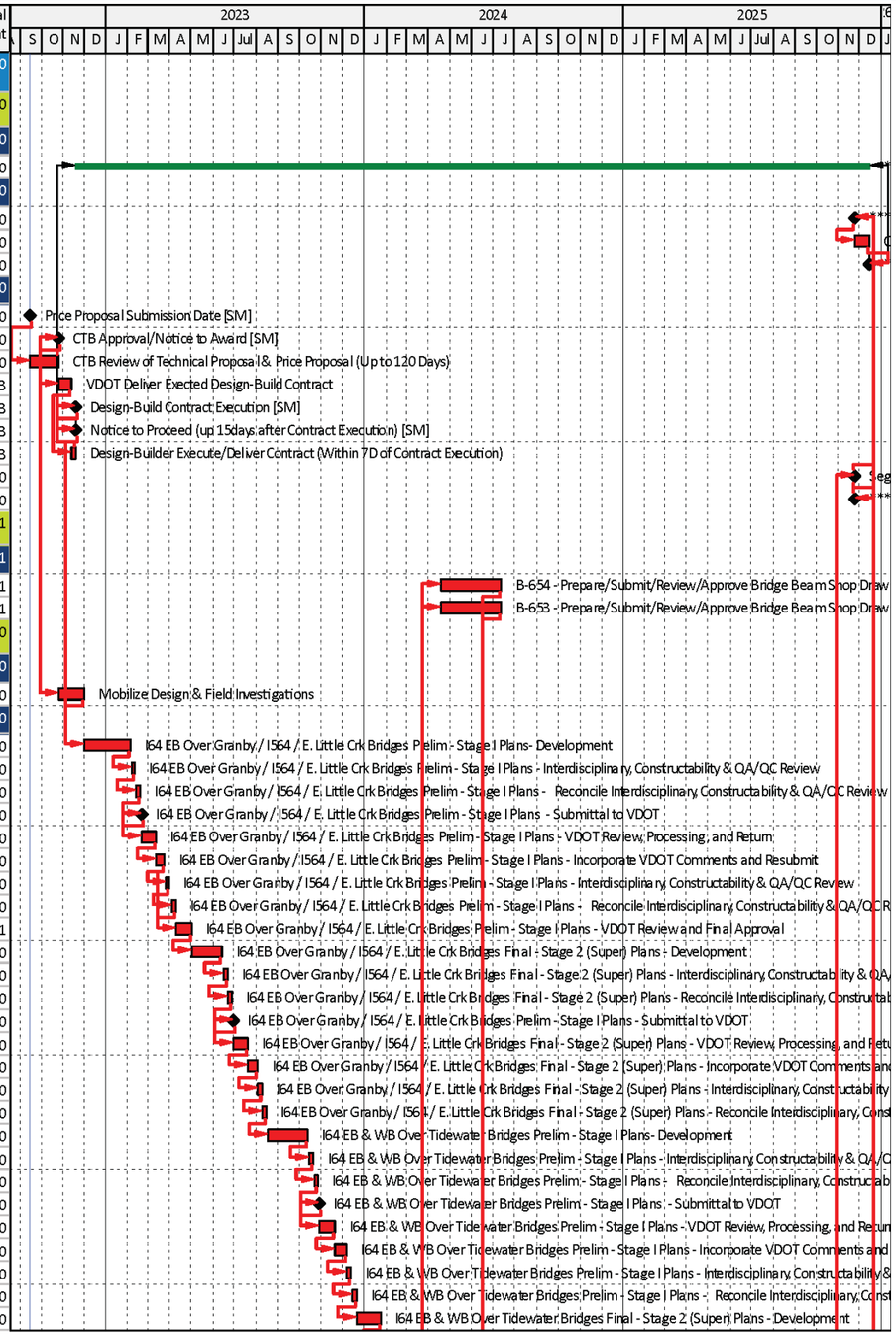
The Critical Path will be continually analyzed throughout the Project to ensure the entire team is concentrating on activities required to achieve key project milestones. The overall critical path of the project (longest path) is summarized below:

- Mobile design and field investigations
- Stage 1 and Stage 2 structure plans for bridges: Granby, I-564 and E. Little Creek
- Fabrication, erection and deck construction of EB Tidewater Bridge
- Segment C – Phase 2A roadway widening

Final paving and markings. The complete critical path is shown in Table 4.6.2.5. The activities have been filtered by both Longest Path and Critical in order to include the interim milestone activities.

Table 4.6.2.5 – Critical Path

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
VDOT I-64 HREL SEGMENT 1A BID SCHEDULE		789	15-Sep-22	15-Dec-25	0
##### CONTRACT ADMINISTRATION #####		789	15-Sep-22	15-Dec-25	0
===== OVERALL CONTRACT DURATION =====		1122	19-Nov-22	15-Dec-25	0
MS.1130	***** Project Duration [LOE] *****	1122	19-Nov-22	15-Dec-25	0
===== CONTRACT MILESTONES =====		20	25-Nov-25	15-Dec-25	0
MS.1220	**** Construction Substantial Completion ****	0		25-Nov-25	0
MS.1200	Contract Closeout	20	25-Nov-25	15-Dec-25	0
MS.1260	**** Contract Final Completion (15DEC25) ****	0		15-Dec-25*	0
===== OVERALL PROJECT MILESTONES =====		777	15-Sep-22	25-Nov-25	0
MS.1000	Price Proposal Submission Date [SM]	0	15-Sep-22		0
MS.1070	CTB Approval/Notice to Award [SM]	0	26-Oct-22		0
MS.1010	CTB Review of Technical Proposal & Price Proposal (Up to 120 Days)	41	15-Sep-22	26-Oct-22	0
MS.1080	VDOT Deliver Exected Design-Build Contract	19	26-Oct-22	14-Nov-22	13
MS.1100	Design-Build Contract Execution [SM]	0	19-Nov-22		13
MS.1110	Notice to Proceed (up 15days after Contract Execution) [SM]	0	19-Nov-22		13
MS.1090	Design-Builder Execute/Deliver Contract (Within 7D of Contract Execution)	5	14-Nov-22	19-Nov-22	13
MS.1230	Segment C Construction Completion [FM]	0		25-Nov-25	0
MS.1240	**** Unique Milestone: Open All Lane's and Traffic in it's final Configation **** [FM]	0		25-Nov-25	0
##### ADMINISTRATION #####		85	18-Apr-24	12-Jul-24	1
===== PROJECT SUBMITTALS =====		85	18-Apr-24	12-Jul-24	1
AD.PS.1170	B-654 - Prepare/Submit/Review/Approve Bridge Beam Shop Drawings (I-64 WB Bridge Over Tidewater Dr)	85	18-Apr-24	12-Jul-24	1
AD.PS.1070	B-653 - Prepare/Submit/Review/Approve Bridge Beam Shop Drawings (I-64 EB Bridge Over Tidewater Dr)	85	18-Apr-24	12-Jul-24	1
##### DESIGN SCOPE #####		359	26-Oct-22	18-Apr-24	0
===== FIELD SURVEY & MOBILE SCANNING =====		24	26-Oct-22	01-Dec-22	0
DS.1000	Mobilize Design & Field Investigations	24	26-Oct-22	01-Dec-22	0
===== STRUCTURE DESIGN =====		334	02-Dec-22	18-Apr-24	0
DS.2670	I64 EB Over Granby / I564 / E. Little Crk Bridges Prelim - Stage I Plans- Development	45	02-Dec-22	03-Feb-23	0
DS.2680	I64 EB Over Granby / I564 / E. Little Crk Bridges Prelim - Stage I Plans - Interdisciplinary, Constructability & QA/QC Review	5	06-Feb-23	10-Feb-23	0
DS.2690	I64 EB Over Granby / I564 / E. Little Crk Bridges Prelim - Stage I Plans - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	13-Feb-23	17-Feb-23	0
DS.2700	I64 EB Over Granby / I564 / E. Little Crk Bridges Prelim - Stage I Plans - Submittal to VDOT	0	20-Feb-23		0
DS.2710	I64 EB Over Granby / I564 / E. Little Crk Bridges Prelim - Stage I Plans - VDOT Review, Processing, and Return	21	20-Feb-23	13-Mar-23	0
DS.2730	I64 EB Over Granby / I564 / E. Little Crk Bridges Prelim - Stage I Plans - Incorporate VDOT Comments and Resubmit	10	13-Mar-23	24-Mar-23	0
DS.2740	I64 EB Over Granby / I564 / E. Little Crk Bridges Prelim - Stage I Plans - Interdisciplinary, Constructability & QA/QC Review	5	27-Mar-23	31-Mar-23	0
DS.2750	I64 EB Over Granby / I564 / E. Little Crk Bridges Prelim - Stage I Plans - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	03-Apr-23	10-Apr-23	0
DS.2760	I64 EB Over Granby / I564 / E. Little Crk Bridges Prelim - Stage I Plans - VDOT Review and Final Approval	21	10-Apr-23	01-May-23	1
DS.2780	I64 EB Over Granby / I564 / E. Little Crk Bridges Final - Stage 2 (Super) Plans - Development	30	02-May-23	14-Jun-23	0
DS.2840	I64 EB Over Granby / I564 / E. Little Crk Bridges Final - Stage 2 (Super) Plans - Interdisciplinary, Constructability & QA/QC Review	5	15-Jun-23	21-Jun-23	0
DS.2860	I64 EB Over Granby / I564 / E. Little Crk Bridges Final - Stage 2 (Super) Plans - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	22-Jun-23	28-Jun-23	0
DS.2880	I64 EB Over Granby / I564 / E. Little Crk Bridges Prelim - Stage I Plans - Submittal to VDOT	0	29-Jun-23		0
DS.2890	I64 EB Over Granby / I564 / E. Little Crk Bridges Final - Stage 2 (Super) Plans - VDOT Review, Processing, and Return	21	29-Jun-23	20-Jul-23	0
DS.2920	I64 EB Over Granby / I564 / E. Little Crk Bridges Final - Stage 2 (Super) Plans - Incorporate VDOT Comments and Resubmit	10	20-Jul-23	02-Aug-23	0
DS.2930	I64 EB Over Granby / I564 / E. Little Crk Bridges Final - Stage 2 (Super) Plans - Interdisciplinary, Constructability & QA/QC Review	5	03-Aug-23	09-Aug-23	0
DS.2940	I64 EB Over Granby / I564 / E. Little Crk Bridges Final - Stage 2 (Super) Plans - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	10-Aug-23	16-Aug-23	0
DS.2970	I64 EB & WB Over Tidewater Bridges Prelim - Stage I Plans- Development	40	17-Aug-23	13-Oct-23	0
DS.3100	I64 EB & WB Over Tidewater Bridges Prelim - Stage I Plans - Interdisciplinary, Constructability & QA/QC Review	5	16-Oct-23	20-Oct-23	0
DS.3110	I64 EB & WB Over Tidewater Bridges Prelim - Stage I Plans - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	23-Oct-23	27-Oct-23	0
DS.3130	I64 EB & WB Over Tidewater Bridges Prelim - Stage I Plans - Submittal to VDOT	0	30-Oct-23		0
DS.3140	I64 EB & WB Over Tidewater Bridges Prelim - Stage I Plans - VDOT Review, Processing, and Return	21	30-Oct-23	20-Nov-23	0
DS.3170	I64 EB & WB Over Tidewater Bridges Prelim - Stage I Plans - Incorporate VDOT Comments and Resubmit	10	20-Nov-23	06-Dec-23	0
DS.3180	I64 EB & WB Over Tidewater Bridges Prelim - Stage I Plans - Interdisciplinary, Constructability & QA/QC Review	5	07-Dec-23	13-Dec-23	0
DS.3190	I64 EB & WB Over Tidewater Bridges Prelim - Stage I Plans - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	14-Dec-23	20-Dec-23	0
DS.3210	I64 EB & WB Over Tidewater Bridges Final - Stage 2 (Super) Plans - Development	25	21-Dec-23	25-Jan-24	0

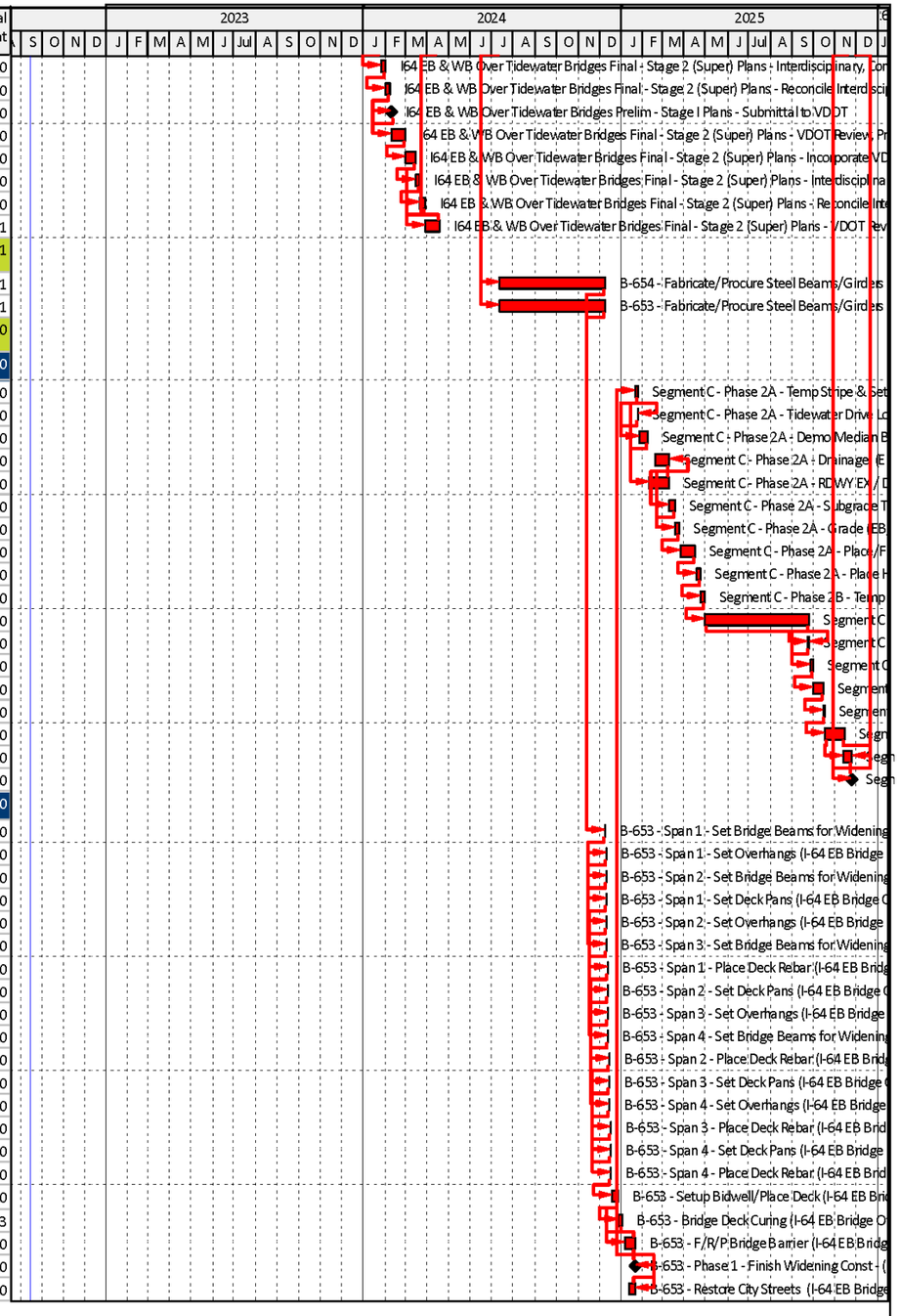


Start: 15-Sep-22
End: 15-Dec-25
Data: 15-Sep-22
Run: 16-Aug-22

Critical Remaining Work
Remaining Work
Actual Work
Changed Work
Remaining Level of Effort
Actual Level of Effort
Delay/Impact
Adverse Weather
Additional/Extra Work

VDOT I-64 HREL SEGMENT 1A BID SCHEDULE
(ACAA) INFO COLUMNS (11x17) | TASK filter: Longest Path.
Page 1 of 2

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
DS.3220	I64 EB & WB Over Tidewater Bridges Final - Stage 2 (Super) Plans - Interdisciplinary, Constructability & QA/QC Review	5	26-Jan-24	01-Feb-24	0
DS.3230	I64 EB & WB Over Tidewater Bridges Final - Stage 2 (Super) Plans - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	02-Feb-24	08-Feb-24	0
DS.3240	I64 EB & WB Over Tidewater Bridges Prelim - Stage I Plans - Submittal to VDOT	0	09-Feb-24		0
DS.3250	I64 EB & WB Over Tidewater Bridges Final - Stage 2 (Super) Plans - VDOT Review, Processing, and Return	21	09-Feb-24	01-Mar-24	0
DS.3270	I64 EB & WB Over Tidewater Bridges Final - Stage 2 (Super) Plans - Incorporate VDOT Comments and Resubmit	10	01-Mar-24	14-Mar-24	0
DS.3280	I64 EB & WB Over Tidewater Bridges Final - Stage 2 (Super) Plans - Interdisciplinary, Constructability & QA/QC Review	5	15-Mar-24	21-Mar-24	0
DS.3290	I64 EB & WB Over Tidewater Bridges Final - Stage 2 (Super) Plans - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	22-Mar-24	28-Mar-24	0
DS.3310	I64 EB & WB Over Tidewater Bridges Final - Stage 2 (Super) Plans - VDOT Review and Final Approval	21	28-Mar-24	18-Apr-24	1
##### MATERIALS FABRICATION & PROCUREMENT #####		150	12-Jul-24	09-Dec-24	1
F&P1140	B-654 - Fabricate/Procure Steel Beams/Girders (I-64 WB Bridge Over Tidewater Dr)	150	12-Jul-24	09-Dec-24	1
F&P1150	B-653 - Fabricate/Procure Steel Beams/Girders (I-64 EB Bridge Over Tidewater Dr)	150	12-Jul-24	09-Dec-24	1
##### CONSTRUCTION #####		233	10-Dec-24	25-Nov-25	0
===== ROADWAY =====		210	21-Jan-25	25-Nov-25	0
CN.RD.2110	Segment C - Phase 2A - Temp Stripe & Set Temp Barrier - Traffic Switch (EB/Median Work)	4	21-Jan-25	24-Jan-25	0
CN.RD.2120	Segment C - Phase 2A - Tidewater Drive Loop C Closure- Traffic Switch (EB)	1	24-Jan-25	24-Jan-25	0
CN.RD.2130	Segment C - Phase 2A - Demo Median Barrier (EB/Median Work)	10	27-Jan-25	07-Feb-25	0
CN.RD.2160	Segment C - Phase 2A - Drainage (EB/Median Work)	15	18-Feb-25	10-Mar-25	0
CN.RD.2140	Segment C - Phase 2A - RDWY EX / Demo / Milling / Embankment Fill for Widening (EB/Median Work)	20	10-Feb-25	10-Mar-25	0
CN.RD.2170	Segment C - Phase 2A - Subgrade Treatment (EB/Median Work)	5	11-Mar-25	18-Mar-25	0
CN.RD.2180	Segment C - Phase 2A - Grade (EB/Median Work)	5	19-Mar-25	25-Mar-25	0
CN.RD.2190	Segment C - Phase 2A - Place/Finish AB (EB/Median Work)	15	26-Mar-25	16-Apr-25	0
CN.RD.2200	Segment C - Phase 2A - Place HMA (EB/Median Work)	5	17-Apr-25	23-Apr-25	0
CN.RD.2210	Segment C - Phase 2B - Temp Stripe & Set Temp Barrier - Traffic Switch (EB/Median Work)	4	24-Apr-25	30-Apr-25	0
CN.RD.2220	Segment C - Phase 2B - Drainage (EB/Median Work)	100	01-May-25	25-Sep-25	0
CN.RD.2240	Segment C - Phase 2B - Subgrade Treatment (EB/Median Work)	3	23-Sep-25	25-Sep-25	0
CN.RD.2250	Segment C - Phase 2B - Grade (EB/Median Work)	3	26-Sep-25	30-Sep-25	0
CN.RD.2260	Segment C - Phase 2B - Place/Finish AB (EB/Median Work)	10	01-Oct-25	14-Oct-25	0
CN.RD.2270	Segment C - Phase 2B - Place HMA (EB/Median Work)	2	15-Oct-25	16-Oct-25	0
CN.RD.2670	Segment C - FInal Paving	20	17-Oct-25	14-Nov-25	0
CN.RD.2690	Segment C - QA Inspection & Corrective Work	10	12-Nov-25	25-Nov-25	0
CN.RD.2700	Segment C - Roadway Construction Complete	0		25-Nov-25	0
===== STRUCTURES =====		23	10-Dec-24	20-Jan-25	0
CN.B-653.1790	B-653 - Span 1 - Set Bridge Beams for Widening (I-64 EB Bridge Over Tidewater Dr)	1	10-Dec-24	10-Dec-24	0
CN.B-653.1810	B-653 - Span 1 - Set Overhangs (I-64 EB Bridge Over Tidewater Dr)	1	11-Dec-24	11-Dec-24	0
CN.B-653.1820	B-653 - Span 2 - Set Bridge Beams for Widening (I-64 EB Bridge Over Tidewater Dr)	1	11-Dec-24	11-Dec-24	0
CN.B-653.1830	B-653 - Span 1 - Set Deck Pans (I-64 EB Bridge Over Tidewater Dr)	1	12-Dec-24	12-Dec-24	0
CN.B-653.1840	B-653 - Span 2 - Set Overhangs (I-64 EB Bridge Over Tidewater Dr)	1	12-Dec-24	12-Dec-24	0
CN.B-653.1850	B-653 - Span 3 - Set Bridge Beams for Widening (I-64 EB Bridge Over Tidewater Dr)	1	12-Dec-24	12-Dec-24	0
CN.B-653.1860	B-653 - Span 1 - Place Deck Rebar (I-64 EB Bridge Over Tidewater Dr)	1	13-Dec-24	13-Dec-24	0
CN.B-653.1870	B-653 - Span 2 - Set Deck Pans (I-64 EB Bridge Over Tidewater Dr)	1	13-Dec-24	13-Dec-24	0
CN.B-653.1880	B-653 - Span 3 - Set Overhangs (I-64 EB Bridge Over Tidewater Dr)	1	13-Dec-24	13-Dec-24	0
CN.B-653.1890	B-653 - Span 4 - Set Bridge Beams for Widening (I-64 EB Bridge Over Tidewater Dr)	1	13-Dec-24	13-Dec-24	0
CN.B-653.1900	B-653 - Span 2 - Place Deck Rebar (I-64 EB Bridge Over Tidewater Dr)	1	16-Dec-24	16-Dec-24	0
CN.B-653.1910	B-653 - Span 3 - Set Deck Pans (I-64 EB Bridge Over Tidewater Dr)	1	16-Dec-24	16-Dec-24	0
CN.B-653.1920	B-653 - Span 4 - Set Overhangs (I-64 EB Bridge Over Tidewater Dr)	1	16-Dec-24	16-Dec-24	0
CN.B-653.1930	B-653 - Span 3 - Place Deck Rebar (I-64 EB Bridge Over Tidewater Dr)	1	17-Dec-24	17-Dec-24	0
CN.B-653.1940	B-653 - Span 4 - Set Deck Pans (I-64 EB Bridge Over Tidewater Dr)	1	17-Dec-24	17-Dec-24	0
CN.B-653.1950	B-653 - Span 4 - Place Deck Rebar (I-64 EB Bridge Over Tidewater Dr)	1	18-Dec-24	18-Dec-24	0
CN.B-653.1960	B-653 - Setup Bidwell/Place Deck (I-64 EB Bridge Over Tidewater Dr)	5	19-Dec-24	27-Dec-24	0
CN.B-653.1970	B-653 - Bridge Deck Curing (I-64 EB Bridge Over Tidewater Dr)	7	27-Dec-24	03-Jan-25	3
CN.B-653.1980	B-653 - F/R/P Bridge Barrier (I-64 EB Bridge Over Tidewater Dr)	10	06-Jan-25	20-Jan-25	0
CN.B-653.2010	B-653 - Phase 1 - Finish Widening Const - (I-64 EB Bridge Over Tidewater Dr) - [FM]	0		20-Jan-25	0
CN.B-653.1990	B-653 - Restore City Streets (I-64 EB Bridge Over Tidewater Dr)	5	13-Jan-25	20-Jan-25	0



Start: 15-Sep-22
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Critical Remaining Work
Remaining Work
Actual Work
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Remaining Level of Effort
Actual Level of Effort
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Adverse Weather
Additional/Extra Work

VDOT I-64 HREL SEGMENT 1A BID SCHEDULE

(ACAA) INFO COLUMNS (11x17) | TASK filter: Longest Path.

Page 2 of 2

Schedule Management

The schedule is the most important tool in the construction management process and is an efficient method to communicate the intended sequence and progress of the project to the construction team as well as the project stakeholders. The schedule is an extremely useful and productive planning tool. The DBT takes pride in our detailed advance planning for safe and efficient execution of the work. Our Construction Managers, Superintendents, Safety Professionals, and Craft Supervisors use this critical tool as the first step in developing Activity Hazard Analyses and Activity Work Plans. In addition to early planning, the schedule is used to monitor the project's progress and help identify potential deficiencies and problem areas before they develop into a critical impact.

The project management team will continually review and monitor the schedule and use the information gathered to develop mitigation strategies for any activities that are identified as potential impacts. This proactive approach will ensure that the project continues to move forward and that any potential delays are addressed immediately. A variety of different tools will be utilized to assist with this process, including but not limited to, the following:

- Weekly schedule meetings between the engineering and construction team members during the design phase
- Weekly construction scheduling meetings throughout the duration of the construction process with the construction team (including management)
- Monthly progress meetings to include all project stakeholders, project team members, and subcontractors
- Three-week look ahead schedules
- RFI logs
- Submittal logs
- Work plans
- Subcontract/purchase order logs
- Shop drawing tracking logs
- Weekly manpower and equipment reviews.

All of the above referenced tools will be utilized simultaneously to provide a current and realistic picture of the progress and status at any given time. Information will be presented at meetings to all who are involved for the opportunity to discuss and address any concerns in front of all that are affected. This keeps the line of communication open and allows resolutions and recovery strategies to be developed at an early phase; therefore, preventing further conflict.

Subcontractor and Material Supplier Scheduling

Subcontractors and material suppliers are a critical part of the project schedule. The DBT will closely evaluate each subcontractor and supplier based on quality, performance, and reputation. Beginning with the initial subcontract paperwork, each subcontractor will be intimately involved with every aspect of the project schedule, and their input will be vital. Suppliers will go through a similar process. This includes progress meetings, weekly look-ahead schedules, material submittals, and recovery strategies if needed. Accountability is the key to effective subcontractor and supplier management, and it will be perfectly clear that subcontractors and suppliers will be held accountable for all aspects of their work from quality to schedule.

Schedule Recovery

Unexpected issues and unforeseen conditions are a possibility during the construction process. The DBT includes many experienced and well-respected members in the DB field with the ability to recognize and react to any issues that may arise. We will aggressively manage the project and, if needed, mitigate any issues that affect the construction schedule. If necessary, a schedule recovery strategy will be developed, immediately implemented, and closely monitored until the schedule is recovered. Should schedule recovery be required, the DBT has four Field Service Centers (FSC) in close proximity to this Project. We have an equipment fleet valued at over $50 million and over 700 construction professionals. Therefore, the DBT's resources can be quickly mobilized to recover the schedule.

Table 4.6.2.6 – Mitigations for Delays
• Partnering with VDOT and Key Stakeholders
• Integration between Design and Construction
• Self-Performance Capabilities in Multiple Scopes
• Building a Field Centric Schedule
• Managing to the Schedule
• Building in Float to High-Risk Activities
• Iterative Quality Management Systems
• Boots on the Ground Decision Making
• Team Utility Relocation Expertise

The Team's long history of delivering projects on time can be attributed to effectively partnering with VDOT and providing true integration between our Construction, Quality and Design teams. A tenant of DBIA recommended practices. These experiences have compelled frequent, open and honest communication between the Team and VDOT at all levels to complete DB projects on schedule. This ladder-based approach results in high quality working relationships with our the DBTs VDOT peers whether it's the VDOT PM and DBPM or the VDOT Construction Manager and DB Construction Manager. These relationships allow for fast-paced issue resolution at the lowest level possible. Issues are handled quickly and verbally with immediate written follow-up and confirmation. This is a foundational element of our success on other projects such as the I-95 Rappahannock River Crossing projects. Our DBT also understands that project success requires knowing the people and processes in the locale of the project. During initial construction kickoff and partnering our DBT will engage VDOT counterparts, team members, and stakeholders in the Hampton Roads District to ensure we have a firm grasp on the most up-to-date decision makers within the various agency and organizational directorates to ensure the right people are at the table for every decision.

Our Team can self-perform all critical construction elements (roadway, drainage, structures, utilities, geotechnical, latex, and very early strength latex, noise barrier) and includes significant local manpower, equipment, and material resources. These resources are available for reassignment to this project 24 hours 7 days a week to supplement the planned project team and advance the project. This capability separates us from many of our peers and allows us to mitigate resource constraints, subcontractor performance issues, and other issues beyond the control of the Team or VDOT to deliver on-time and on-budget.

We utilize multiple tools (baseline project schedule, three-week look ahead schedules, weekly schedule, quality coordination meetings, and day-to-day coordination meetings with adjacent projects) to anticipate potential delays and effectively communicate these with appropriate mitigation strategies to VDOT. The Team has developed and will maintain a very detailed CPM schedule that has integrated the design, review, procurement, fabrication, construction activities, and third-party constraints (see Proposal Schedule in Section 4.6). Our schedule is the result of close coordination between the design and construction team combined with our immense VDOT experience and subcontractor input. The schedule is based on available design and construction resources; establishes specific activities for quality control/constructability of all deliverables; includes review times of all submittals, including shop drawings; includes time for all design, permitting, ROW acquisitions, utility relocations, construction and material fabrication. A schedule is only as good as the effort and reasoning put into it. Our approach to scheduling and therefore sequencing the project to mitigate delays includes the following:

- Building realistic and feasible schedules based on experience and team input
- Incorporating VDOT comments and suggestions from reviews
- Ensuring construction field supervisory personnel "doer" involvement and buy-in
- Correlating three-week lookaheads with activities and planning from the CPM
- Real-time updating of the active CPM to contemporaneously recognize impacts and plan mitigations
- Compiling of updates and thoroughly narrating reasoning and details in monthly record submissions
- Thorough transparent review of the CPM as an important agenda item at Monthly Progress Meetings

Our DBT believes critical path scheduling is more than just a required once a month submission. The schedule is a dynamic tool and provides a basis for identifying opportunities for improvements to project completion through resequencing, adjusting resources or altering the means and methods for performance of the work. The outcomes of our approach to scheduling include:

- Minimizing the duration of impacts to the traveling public
- Avoiding or appropriately anticipating right-of-way acquisition delays
- Placing traffic on permanent pavement as early as safely possible

- Clearly identifying the project's critical path
- Avoid utility conflicts
- Reducing overall contract duration
- No Surprises!

The project schedule will be updated monthly during the duration of the project and will include design, permitting, submittal/shop drawing reviews, procurement of materials, subcontractors, and construction activities. Quality Assurance (QA) and Quality Control (QC) hold points and witness points will be clearly defined. The schedule will be continuously monitored and updated to ensure that released-for-construction (RFC) plans, shop drawings, and governmental approvals are available when required, that resources are adequate and that materials are available when needed. Updating the schedule monthly and jointly reviewing with VDOT at each progress meeting will allow us to identify any delay early and develop a recovery schedule as needed to open up all lanes of traffic in their final configuration by 11/25/2025 and complete the project by 12/15/2025 while also ensuring compliance with all enhancement timeframes included herein.

The project schedule when correlated to the 3-week look ahead will facilitate accurately scheduling IA/QA/QC testing and inspection resources and manpower planning. Scheduled witness and hold points will clearly highlight these critical quality activities to all parties. Clear timelines on activities will allow VDOT the opportunity to be more efficient in its IA oversight by making sure that when VDOT is told an activity is occurring, they can count on it avoiding wasteful rescheduling and repeat visits.

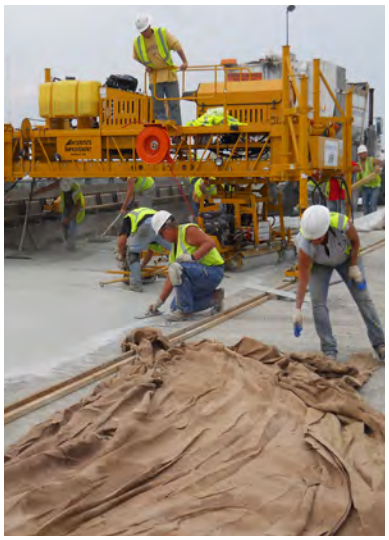
Our DBT includes Quality Assurance and Quality Control firms with significant experience in VDOT Design-Build. Our DBT has continually set the bar for Construction Quality as measured by the statewide CQIP program with the I-95 RRC Projects by Wagman achieving scores over 97% in multiple CQIP reviews. This makes the I-95 RRC Projects two of the highest rated projects in the state for construction quality. Further, we stand behind our Quality Assurance Manager (QAM) to ensure that deficiencies and non-conformances are addressed as expeditiously as possible with sound judgement, sufficient opportunities for VDOT input, and a best fit solution to the issue at hand. When properly utilized a systematically functional QA/QC program can quickly identify singular and systemic issues. When these issues are identified expediently costly rework and delays can be avoided having a direct impact on the project delivery timeframe.

This commitment to quality combined with our focus on managing to the project schedule augments the ability of VDOT IA and the DBT QA/QC personnel to plan required testing plans, have appropriately qualified staff on site, and ensure that VDOT's own plant QA services can arrange resources to inspect critical material deliveries. Ultimately excellence in QA/QC reduces the oversight burden on VDOT freeing up resources for other projects and Department objectives.

Bowman providing Utility Design Coordination and Management Services brings years of proven experience in managing utility avoidance and relocations. Richard Bennett of Bowman Consulting will be an integral part of our team integrated with Lead Designer Wallace Montgomery and the Wagman – Fay SE JV to make sure that the schedule is not impacted. One of the most common causes of construction delays are utility relocation issues. WM will use the 3D model generated from the OpenRoads design files while coordinating with Richard Bennett and the utility agencies to ensure that the means and methods required to relocate utilities will be compatible with the proposed construction plan. As an integral part of the Team, Richard Bennett's experience and input into project planning and scheduling has guided utility avoidance concepts in both design development and construction scheduling. Richard Bennett will be engaged in the project throughout design and construction maximizing the probability of anticipating and being able to mitigate utility delays and expedite utility work to increase the opportunity to improve upon stated final completion.

4.6.3 Proposal Schedule in Electronic Format

The DBT has provided a copy of the Proposal Schedule and narrative in PDF format as well as a back- up copy of the Proposal Schedule's source document in XER format via BidExpress.



Appendix I Forms

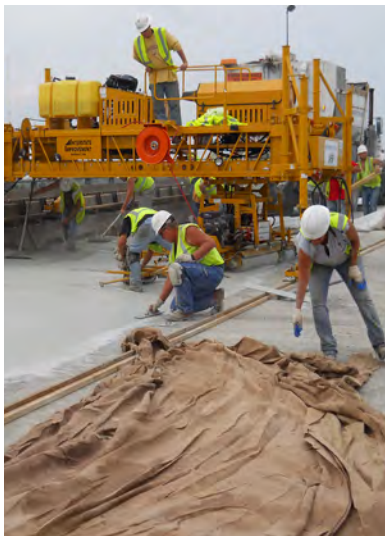
Joint Venture

WAGMAN

FAY SOUTHEAST
SAB USA CONSTRUCTION

Lead Engineer

WALLACE MONTGOMERY



Attachment 4.0.1.1

Technical Proposal Checklist

ATTACHMENT 4.0.1.1

HREL Segment 1A

TECHNICAL PROPOSAL CHECKLIST AND CONTENTS

Offerors shall furnish a copy of this Technical Proposal Checklist, with the page references added, with the Technical Proposal.

Technical Proposal Component	Form (if any)	RFP Part 1 Cross Reference	Included within page limit?	Technical Proposal Page Reference
Technical Proposal Checklist and Contents	Attachment 4.0.1.1	Section 4.0.1.1	no	Appendix
Acknowledgement of RFP, Revisions, and/or Addenda	Attachment 3.6 (Form C-78-RFP)	Sections 3.6, 4.0.1.1	no	Appendix
Letter of Submittal	NA	Sections 4.1		1
Letter of Submittal on Offeror's letterhead	NA	Section 4.1.1	yes	1
Identify the full legal name and address of Offeror	NA	Section 4.1.1	yes	1
Authorized representative's original signature	NA	Section 4.1.1	yes	1
Declaration of intent	NA	Section 4.1.2	yes	1
120 day declaration	NA	Section 4.1.3	yes	1
Point of Contact information	NA	Section 4.1.4	yes	1
Principal Officer information	NA	Section 4.1.5	yes	1
Final Completion Date	NA	Section 4.1.6	yes	1
Proposal Payment Agreement or Waiver of Proposal Payment	Attachment 9.3.1 or 9.3.2	Section 4.1.8	no	Appendix
Certification Regarding Debarment Forms	Attachment 11.8.6(a) Attachment 11.8.6(b)	Section 4.1.9	no	Appendix
Offeror's Qualifications	NA	Section 4.2		2-3

ATTACHMENT 4.0.1.1

HREL Segment 1A

TECHNICAL PROPOSAL CHECKLIST AND CONTENTS

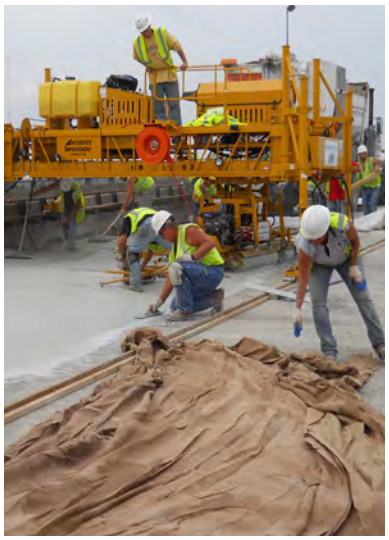
Technical Proposal Component	Form (if any)	RFP Part 1 Cross Reference	Included within page limit?	Technical Proposal Page Reference
Confirmation that the information provided in the SOQ submittal remains true and accurate or indicates that any requested changes were previously approved by VDOT	NA	Section 4.2.1	yes	2
Organizational chart with any updates since the SOQ submittal clearly identified Including addition of the Environmental Compliance Manager and the Contractor Incident Management Coordinator	NA	Section 4.2.1	yes	3
Revised narrative when organizational chart includes updates since the SOQ submittal	NA	Section 4.2.1	yes	2
Design Concept	NA	Section 4.3		4 - 17
Conceptual Roadway Plans and description	NA	Section 4.3.1	yes	5-10; 56-70
Conceptual Structural Plans and description	NA	Section 4.3.2	yes	10-17; 71-80
Project Approach	NA	Section 4.4		18 - 31
Environmental Management	NA	Section 4.4.1	yes	18 - 22
Utilities	NA	Section 4.4.2	yes	22 - 26
Geotechnical	NA	Section 4.4.3	yes	27 - 28
Quality Assurance/ Quality Control (QA/QC)	NA	Section 4.4.4	yes	29 - 31
Construction of Project	NA	Section 4.5		32 - 55

ATTACHMENT 4.0.1.1

HREL Segment 1A

TECHNICAL PROPOSAL CHECKLIST AND CONTENTS

Technical Proposal Component	Form (if any)	RFP Part 1 Cross Reference	Included within page limit?	Technical Proposal Page Reference
Sequence of Construction	NA	Section 4.5.1	yes	32 - 49
Transportation Management Plan	NA	Section 4.5.2	yes	50 - 55
Disadvantaged Business Enterprises (DBE)	NA	Section 4.1.10		
Written statement of percent DBE participation	NA	Section 4.1.10	yes	1
Proposal Schedule	NA	Section 4.6		Section 4.6
Proposal Schedule	NA	Section 4.6	no	Volume II
Proposal Schedule Narrative	NA	Section 4.6	no	Section 4.6
Proposal Schedule in electronic format (CD-ROM)	NA	Section 4.6	no	X



Attachment 3.6.7

List of Approved ATCs Included in Technical Proposal

ATTACHMENT 3.6.6

ALTERNATIVE TECHNICAL CONCEPT (ATC) RESPONSE FORM

ATC ID NUMBER: 1

ATC NAME-DESCRIPTION: Alternate Bridge Construction Phasing/MOT for the I-64 HOV Bridge over I-564 and Little Creek Road

OFFEROR: Wagman/Fay Joint Venture/ Wallace Montgomery

DATE ATC SUBMITTED: July 20, 2022

- ■ (A) The proposed ATC is acceptable for inclusion in the Proposal with such conditions, modifications and/or requirements as identified by VDOT in Attachment 1 of this response.
- ☐ (B) The ATC is not acceptable for inclusion in the Proposal.
- ☐ (C) The submittal does not qualify as an ATC but may be included in the Offeror's Proposal because it appears to be within the requirements of the RFP.

Signed: Ricardo Correa Digitally signed by Ricardo Correa Date: 2022.07.27 17:21:18 -04'00'

VDOT Hampton Roads Major Projects Director

DATE OF ATC RESPONSE: July 27, 2022

ATTACHMENT 3.6.6 (cont.)

ALTERNATIVE TECHNICAL CONCEPT (ATC) RESPONSE FORM

ATC ID NUMBER: 1

ATC NAME-DESCRIPTION: Alternate Bridge Construction Phasing/MOT for the I-64 HOV Bridge over I-564 and Little Creek Road

OFFEROR: Wagman/Fay Joint Venture/ Wallace Montgomery

DATE ATC SUBMITTED: July 20, 2022

ATTACHMENT 1

1. Lane minimum width shall be 11 ft lanes with a minimum offset of 1 ft between the edge of travel and the face of barrier. The requirements for the temporary drainage from Section 2.7.5 will need to be met.
2. In conjunction with the work package submittal that will include this configuration, the details of the lane shifts and signing for maintenance of traffic will be required for the VDOT review and approval.
3. The final detail of the BMB-3A will require design approval from VDOT.
4. In accordance with IIM-LD-259, the single face barrier shall be the grandfathered single face barrier.

ATTACHMENT 3.6.7
LIST OF APPROVED ATCs INCLUDED IN TECHNICAL PROPOSAL

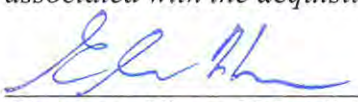
OFFEROR:

List all approved ATCs included in the Technical Proposal along with the page number references from Technical Proposal.

ATC ID Number	ATC Name Description	Date ATC Approved	Technical Proposal Reference Page(s) #
1	Alternate Bridge Construction Phasing/MOT for the I-64 HOV Bridge over I-564 and Little Creek Road	7/27/2022	4; 10; 11; 13; 14; 16; 32; 33; 43; 53; S1; S2

By signing this document, the Offeror hereby confirms that they are agreeing to all conditions that may have accompanied the ATC approval(s). The Offerors shall make a note of RFP Part 4 Section 2.1.10

"If the Contract Documents incorporate any ATCs and Design-Builder, for whatever reason: (a) does not comply with one or more Department conditions of pre-approval for the ATC; (b) does not obtain required third-party approval for the ATC; or (c) fails to implement the ATC, then Design-Builder shall: (1) provide written notice thereof to Department; and (2) comply with the requirements in the Contract Documents that would have applied in the absence of such ATC. Such compliance shall be without any increase in the Contract Price or extension to the Contract Time(s). For the avoidance of doubt, Design-Builder shall not be entitled to any increase in the Contract Price or extension of the Contract Time(s) as a result of any delay, inability or cost associated with the acquisition of any property that may be required to implement any ATC".



[Signature: Offerors POC or Principal Officer]

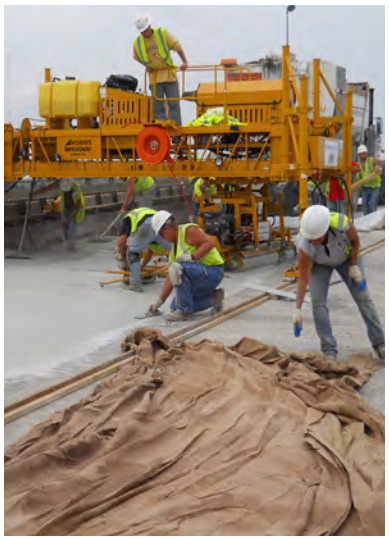
Glen K. Mays, DBPM

[Printed Name]

Vice President & General Manager

[Title]

DATE: August 15, 2022



Attachment 3.7

Form C-78-RFP Acknowledgement of Receipt of RFP, Revisions, and/or Addenda

ATTACHMENT 3.76

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

RFP NO. C00117840DB112

PROJECT NO.: 0064-122-470

ACKNOWLEDGEMENT OF RFP, REVISION AND/OR ADDENDA

Acknowledgement shall be made of receipt of the Request for Proposals (RFP) and/or any and all revisions and/or addenda pertaining to the above designated project which are issued by the Department prior to the Letter of Submittal submission date shown herein. Failure to include this acknowledgement in the Letter of Submittal may result in the rejection of your proposal.

By signing this Attachment 3.76, the Offeror acknowledges receipt of the RFP and/or following revisions and/or addenda to the RFP for the above designated project which were issued under cover letter(s) of the date(s) shown hereon:

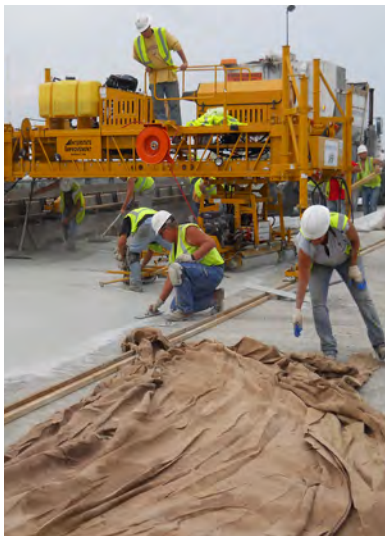
1. Cover letter of RFP – April 28, 2022 (Date)
2. Cover letter of Addendum #1- May 27, 2022 (Date)
3. Cover letter of Addendum #2- June 17, 2022 (Date)
4. Cover letter of Addendum #3- July 13, 2022 (Date)
5. Cover letter of Addendum #4- August 2, 2022 (Date)

SIGNATURE

August 17, 2022
DATE

Glen K. Mays, DBIA
PRINTED NAME

Vice President and General Manager
TITLE



Attachment 9.3.1

Proposal Payment Agreement

ATTACHMENT 9.3.1
PROPOSAL PAYMENT AGREEMENT

THIS PROPOSAL PAYMENT AGREEMENT (this "Agreement") is made and entered into as of this 17th day of August, 2022, by and between the Virginia Department of Transportation ("VDOT"), and Wagman Fay SE a Joint Venture ("Offeror").

WITNESSETH:

WHEREAS, Offeror is one of the entities who submitted Statements of Qualifications ("SOQs") pursuant to VDOT's January 20, 2022 (last addendum February 10, 2022) Request for Qualifications ("RFQ") and was invited to submit proposals in response to a Request for Proposals ("RFP") for the **I-64 Hampton Roads Express Lanes (HREL) Segment 1A, Project No. 0064-122-470** ("Project"), under a design-build contract with VDOT ("Design-Build Contract"); and

WHEREAS, as part of the procurement process for the Project, Offeror has already provided and/or furnished to VDOT, and may continue to provide and/or furnish to VDOT, certain intellectual property, materials, information and ideas, including, but not limited to, such matters that are: (a) conveyed verbally and in writing during proprietary meetings or interviews; and (b) contained in, related to or associated with Offeror's proposal, including, but not limited to, written correspondence, designs, drawings, plans, exhibits, photographs, reports, printed material, tapes, electronic disks, or other graphic and visual aids (collectively "Offeror's Intellectual Property"); and

WHEREAS, VDOT is willing to provide a payment to Offeror, subject to the express conditions stated in this Agreement, to obtain certain rights in Offeror's Intellectual Property, provided that Offeror submits a proposal that VDOT determines to be responsive to the RFP ("Offeror's Proposal"), and either (a) Offeror is not awarded the Design-Build Contract; or (b) VDOT cancels the procurement or decides not to award the Design-Build Contract to any Offeror; and

WHEREAS, Offeror wishes to receive the payment offered by VDOT, in exchange for granting VDOT the rights set forth in this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants and agreements set forth in this Agreement and other good and valuable consideration, the receipt and adequacy of which are acknowledged by the parties, the parties agree as follows:

1. **VDOT's Rights in Offeror's Intellectual Property**. Offeror hereby conveys to VDOT all rights, title and interest, free and clear of all liens, claims and encumbrances, in Offeror's Intellectual Property, which includes, without restriction or limitation, the right of VDOT, and anyone contracting with VDOT, to incorporate any ideas or information from Offeror's Intellectual Property into: (a) the Design-Build Contract and the Project; (b) any other contract awarded in reference to the Project; or (c) any subsequent procurement by VDOT. In receiving all rights, title and interest in Offeror's Intellectual Property, VDOT is deemed to own all intellectual property rights, copyrights, patents, trade secrets, trademarks, and service marks in Offeror's Intellectual Property, and Offeror agrees that it shall, at the request of VDOT, execute all papers and perform all other acts that may be necessary to ensure that VDOT's rights, title and interest in Offeror's Intellectual Property are protected. The rights conferred herein to VDOT include, without limitation, VDOT's ability to use Offeror's Intellectual Property without the obligation to notify or seek permission from Offeror.

2. **Exclusions from Offeror's Intellectual Property**. Notwithstanding Section 1 above, it is understood and agreed that Offeror's Intellectual Property is not intended to include, and Offeror does not convey any rights to, the Escrow Proposal Documents submitted by Offeror in accordance with the RFP.

3. **Proposal Payment**. VDOT agrees to pay Offeror the lump sum amount of **One Hundred and Seventeen Thousand and 00/100 Dollars ($117,000.00)** ("Proposal Payment"), which payment constitutes payment in full to Offeror for the conveyance of Offeror's Intellectual Property to VDOT in accordance with this Agreement. Payment of the Proposal Payment is conditioned upon: (a) Offeror's Proposal being, in the sole discretion of VDOT, responsive to the RFP; (b) Offeror complying with all other terms and conditions of this Agreement; and (c) either (i) Offeror is not awarded the Design-Build Contract, or (ii) VDOT cancels the procurement or decides not to award the Design-Build Contract to any Offeror.

4. **Payment Due Date**. Subject to the conditions set forth in this Agreement, VDOT will make payment of the Proposal Payment to the Offeror within forty-five (45) days after the later of: (a) notice from VDOT that it has awarded the Design-Build Contract to another Offeror; or (b) notice from VDOT that the procurement for the Project has been cancelled and that there will be no Contract Award.

5. **Effective Date of this Agreement**. The rights and obligations of VDOT and Offeror under this Agreement, including VDOT's ownership rights in Offeror's Intellectual Property, vests upon the date that Offeror's Proposal is submitted to VDOT. Notwithstanding the above, if Offeror's Proposal is determined by VDOT, in its sole discretion, to be nonresponsive to the RFP, then Offeror is deemed to have waived its right to obtain the Proposal Payment, and VDOT shall have no obligations under this Agreement.

6. Indemnity. Subject to the limitation contained below, Offeror shall, at its own expense, indemnify, protect and hold harmless VDOT and its agents, directors, officers, employees, representatives and contractors from all claims, costs, expenses, liabilities, demands, or suits at law or equity ("Claims") of, by or in favor of or awarded to any third party arising in whole or in part from: (a) the negligence or wilful misconduct of Offeror or any of its agents, officers, employees, representatives or subcontractors; or (b) breach of any of Offeror's obligations under this Agreement, including its representation and warranty under Section 8 hereof. This indemnity shall not apply with respect to any Claims caused by or resulting from the sole negligence or wilful misconduct of VDOT, or its agents, directors, officers, employees, representatives or contractors.

7. Assignment. Offeror shall not assign this Agreement, without VDOT's prior written consent, which consent may be given or withheld in VDOT's sole discretion. Any assignment of this Agreement without such consent shall be null and void.

8. Authority to Enter into this Agreement. By executing this Agreement, Offeror specifically represents and warrants that it has the authority to convey to VDOT all rights, title, and interest in Offeror's Intellectual Property, including, but not limited to, those any rights that might have been vested in team members, subcontractors, consultants or anyone else who may have contributed to the development of Offeror's Intellectual Property, free and clear of all liens, claims and encumbrances.

9. Miscellaneous.

a. Offeror and VDOT agree that Offeror, its team members, and their respective employees are not agents of VDOT as a result of this Agreement.

b. Any capitalized term used herein but not otherwise defined shall have the meanings set forth in the RFP.

c. This Agreement, together with the RFP, embodies the entire agreement of the parties with respect to the subject matter hereof. There are no promises, terms, conditions, or obligations other than those contained herein or in the RFP, and this Agreement shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties hereto.

d. It is understood and agreed by the parties hereto that if any part, term, or provision of this Agreement is by the courts held to be illegal or in conflict with any law of the Commonwealth of Virginia, validity of the remaining portions or provisions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if the Agreement did not contain the particular part, term, or provisions to be invalid.

e. This Agreement shall be governed by and construed in accordance with the laws of the Commonwealth of Virginia.

IN WITNESS WHEREOF, this Agreement has been executed and delivered as of the day and year first above written.

VIRGINIA DEPARTMENT OF TRANSPORTATION

By: _____

Name: _____

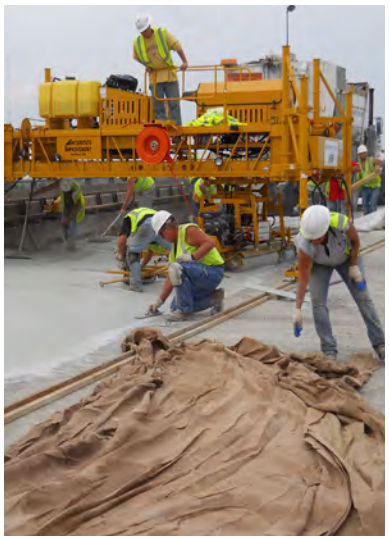
Title: _____

WAGMAN FAY SE a Joint Venture

By: _____

Name: Glen K. Mays

Title: Vice President and General Manager



Attachment 11.8.6 (a) (b)

Certification Regarding Debarment Forms

ATTACHMENT 11.8.6(a)
CERTIFICATION REGARDING DEBARMENT
PRIMARY COVERED TRANSACTIONS

Project No.: 0064-122-470

1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:

a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency.

b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; and have not been convicted of any violations of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification, or destruction of records, making false statements, or receiving stolen property;

c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph 1) b) of this certification; and

d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

_____	August 17, 2022	Vice President and General Manager
Signature	Date	Title

Wagman Fay SE, a Joint Venture
Name of Firm

ATTACHMENT 11.8.6(a)
CERTIFICATION REGARDING DEBARMENT
PRIMARY COVERED TRANSACTIONS

Project No.: 0064-122-470

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b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; and have not been convicted of any violations of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification, or destruction of records, making false statements, or receiving stolen property;

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2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

Signature	August 17, 2022 Date	Vice President and General Manager Title

Wagman Heavy Civil, Inc.
Name of Firm

ATTACHMENT 11.8.6(a)
CERTIFICATION REGARDING DEBARMENT
PRIMARY COVERED TRANSACTIONS

Project No.: 0064-122-470

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b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; and have not been convicted of any violations of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification, or destruction of records, making false statements, or receiving stolen property;

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d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

Signature	August 17, 2022	VICE PRESIDENT
	Date	Title

FAY Southeast
Name of Firm

ATTACHMENT 11.8.6(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-122-470

1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

_____	August 17, 2022	Partner
Signature	Date	Title

Wallace Montgomery & Associates, LLP
Name of Firm

ATTACHMENT 11.8.6(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-122-470

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The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

7.26.22	Vice President
Signature Date	Title

Curtis Contracting, Inc.

Name of Firm

ATTACHMENT 11.8.6(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-122-470

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The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

Signature	Date	Title
Richard K Bowman	July 14, 2022	Director of Right of Way & Utility Coordination

Bowman Consulting Group Ltd.

Name of Firm

ATTACHMENT 11.8.6(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-122-470

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The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

Signature	July 26, 2022 Date	Senior Vice President Title

DMY Engineering Consultants Inc.
Name of Firm

ATTACHMENT 11.8.6(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-122-470

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The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

Signature	_7/13/2022_____ Date	President_____ Title

Hassan Water Resources, PLC_____
Name of Firm

ATTACHMENT 11.8.6(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-122-470

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2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

July 13, 2022

Signature Date

Vice President, Mid-Atlantic Sector Lead

Title

EXP U.S. Services, Inc.

Name of Firm

ATTACHMENT 11.8.6(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-122-470

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2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

Signature	Date	Title
	7.13.2022	President

Fleura Teeter Landscape Architects, Inc.
Name of Firm

ATTACHMENT 11.8.6(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-122-470

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2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

Signature	July 15, 2022 Date	General Manager Title

Iteris, Inc.
Name of Firm

ATTACHMENT 11.8.6(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-122-470

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2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

Signature	Date	Title
[signature]	7/13/2022	President

Polizos & Company
Name of Firm

ATTACHMENT 11.8.6(b)
CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-122-470

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2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

Elizabeth Quinn Vicinski 7/13/2022 President
Signature Date Title

Quinn Consulting Services, Inc.
Name of Firm

ATTACHMENT 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0064-122-470

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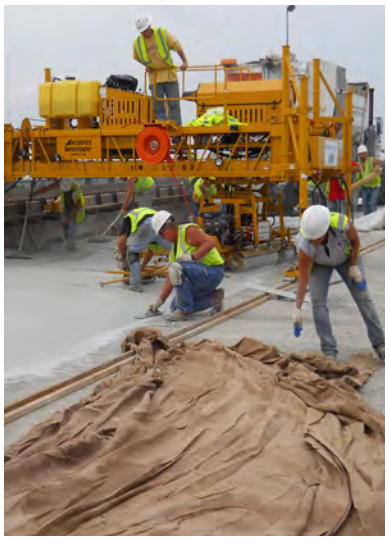
2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

Signature	July 14, 2022 Date	Operations Coordinator Title

Wetland Studies and Solutions, Inc.
Name of Firm



Attachment 4.2.1

Deputy Key Personnel Resumes

ATTACHMENT 4.2.1

DEPUTY KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.

a. Name & Title: **Julia Simo, PE, Project Manager**

b. Project Assignment: **Deputy Design Manager**

c. Name of the Firm with which you are employed at the time of submitting Technical Proposal:
Wallace Montgomery

d. Employment History: With this Firm **2** Years With Other Firms **8** Years

Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below):

Wallace Montgomery

Start Date: June 2020 End Date: Present Position: Project Manager

Responsibilities: Julia manages complex roadway design projects and multidiscipline design teams. She facilitates coordination with project stakeholders, VDOT, FHWA, localities, utility owners, and adjacent/corridor property and business owners. She is well versed in AASHTO's highways/streets and roadside design policies/guidelines as well as the VDOT's Roadway Design and Drainage Manuals and Road & Bridge Standards. Julia is a natural leader that can tackle any issue thrown her way and was recently identified by Civil + Structural Engineer Magazine as one of the 2022 Rising Stars (Top 25 Engineers under 40 years) in the Architectural and Engineering industry.

Virginia Department of Transportation

Start Date: July 2018 End Date: June 2020 Position: Senior Construction Engineer

Responsibilities: Julia was VDOT's eConstruction Program Manager in VDOT's Construction Division. She led a pilot program for the use of ProjectWise Deliverables Management, was responsible for implementing VDOT's PlanGrid Tablet Based Inspection program, and spearheaded the 3D/4D Engineered Models initiatives following FHWA Every Day Counts.

Start Date: June 2015 End Date: July 2018 Position: Structural Engineer

Responsibilities: Julia was responsible for designing, analyzing, and checking structural elements She prepared preliminary and final designs for bridge projects, ensuring compliance with AASHTO LRFD and VDOT specifications. Julia served as a Technical Advisor for structures on Design-Build projects and was responsible for developing RFP requirements and conceptual plans before award and performing structural design reviews after award.

HDR

Start Date: April 2015 End Date: June 2015 Position: Junior Structural Engineer

Responsibilities: Julia was responsible for the design and constructability of a curved and flared Bulb-T bridge carrying Route 13 over Indian Creek. This role included design reviews, QA/QC, and constructability reviews that led to an innovative pier construction method that was successfully built.

Virginia Department of Transportation

Start Date: June 2012 End Date: April 2015 Position: Associate Engineer

Responsibilities: Julia worked on the in-house bridge design projects in Northern Virginia as well as assisted the District's Construction Project Controls Team. She calculated cost estimates for change orders on a complex Design-Build Project.

e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:
University of Richmond, Richmond, Virginia/M.B.A./2019/Data Analytics
George Washington University, Washington, DC/M.S./2014/Civil Engineering
Old Dominion University, Norfolk, Virginia/B.S./2012/Civil Engineering

f. Active Registration: Year First Registered/ Discipline/VA Registration #:
2016/Registered Professional Engineer/VA Registration #0402056898

g. Document the extent and depth of your experience and qualifications relevant to the Project.
1. *Note your role, responsibility, and specific job duties for each project, not those of the firm.*
2. *Note whether experience is with current firm or with other firm.*
3. *Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.*

(List only three (3) relevant projects for which you have performed a similar function. On-call contracts with multiple task orders (on multiple projects) should not be listed as a single project.

VDOT – Albemarle Intersection Improvements Bundling Design-Build, Albemarle County, VA

Project Role: Assistant Design Manager	**With Current Firm?** Yes
Beginning Date: 07/2020	**End Date**: Present

Specific Responsibilities: Julia is leading the roadway design and coordination with subconsultants, contractor, FHWA and VDOT to ensure all facets of the project's design meets the technical requirements and Contract Documents. The contract is a bundle of six separate intersection and interchange safety/operations improvements projects around the City of Charlottesville. Improvements include a diverging diamond interchange (DDI) at I-64 (Exit 124) and US Route 250; a new Rio Mills Road to Berkmar Drive connector roadway; interchange ramp improvements along US 29 at I-64 (Exit 118) and Fontaine Avenue; and converting the US 250 with Route 151 and Route 20 with Routes 649 and 1494 intersections into single lane roundabouts. Julia oversees compliance with the design's QA/QC program to ensure all design submittals, shop drawings, and as-builts are delivered to VDOT with the utmost quality. She regularly coordinates with VDOT and local jurisdictions due to constrained construction sites and restricted MOT durations because of heavy truck and University of Virginia traffic. Most notably, this includes during the redesign of the Diverging Diamond Interchange to accommodate superload vehicles – a first in the country. In addition, she coordinated the design of pedestrian accommodations along Rio Mills Road to avoid additional right-of-way and utility impacts while ensuring contract requirements were met. and analyzed potential impacts caused by Charlottesville Gas relocations to storm sewer in the vicinity of the Diverging Diamond Interchange.

Similarities with the I-64 HREL Segment 1A Design-Build Project:

Design-Build on Time & Budget	Fast Track Project Schedule	Expedited Materials Acquisition
Geotechnical Exploration/Design	Existing Bridge Crossing Upgrades	TMP/MOT Modeling/Design
Drainage/SWM Design	Environmental Permitting	Road & Guardrail/Barrier Design
Utility Relocation Coordination	Stakeholder/Public Outreach	Confined Right of Way Corridor

The success of the project and efficiencies realized by the design team was recently highlighted in the Spring 2022 Edition ASHE Scanner, a publication that has been around since 1965 to highlight transportation accomplishments by the American Society of Highway Engineers.

VDOT – I-66 Outside the Beltway, Northern Virginia

Project Role: Bridge Technical Advisor	**With Current Firm?** No
Beginning Date: 12/2017	**End Date**: 08/2018

Specific Responsibilities: Julia was responsible for design and constructability reviews for the structures that are part of the scope of the I-66 OTB project between the Route 28 Interchange and the I-495 Interchange. These reviews started from preliminary engineering and carried through construction and shop drawing reviews. Julia was required to ensure contract compliance for over 100 structures, this included frequent comment resolution meetings and extensive coordination efforts given the contract review turnaround requirements.

Similarities with the I-64 HREL Segment 1A Design-Build Project:

Design-Build Contract Compliance	Complex Bridge Construction	ITS/Tolling Facilities
Fast Track Schedule	Interstate Roadway/Interchanges	Significant Utility Impacts
Highly Congested Urban Area	Pedestrian & ADA Compliance	Support of Excavation

VDOT–Chatham Bridge, Fredericksburg District, VA ($23.4M)

Project Role: Design Manager	**With Current Firm?** Yes
Beginning Date: 06/2015	**End Date**: 07/2018

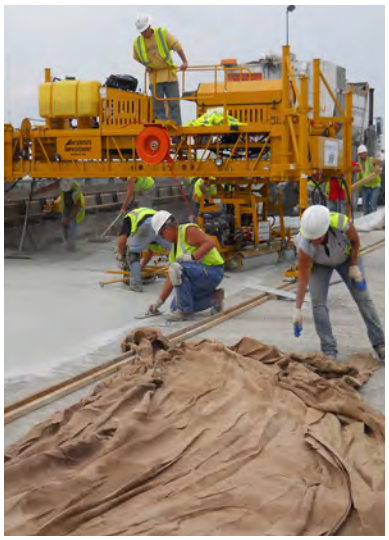
Specific Responsibilities: Julia was responsible for Stage I approval, 30% plans, stakeholder coordination, and development of a 3D engineered model and rendering for this $23.4M project to repair and replace the historic Rte. 3 Bridge over Rappahannock River. The bridge is a 1,007' long 10-span steel bridge. Project consisted of widening the bridge up to current standards, and geometric reconfiguration to replace the existing sidewalks with a new shared use path that ties into an adjacent share use path project. Project included a design waiver for shoulder widths, and an existing wingwall cast against a historic building built in 1814. 3D engineered model and rendering assisted with coordination efforts to close the bridge during construction as opposed to having to maintain one lane of traffic in each direction. Julia designed the bridge to include a shared use path that connects to the Belmont Ferry Farm Trail and successfully coordinated utility relocations so the gas line and Verizon fiber optic bored under the Rappahannock River and were not tied to the structure.

Similarities with the I-64 HREL Segment 1A Design-Build Project:

On-Time or Early Delivery	Highly Congested Urban Area	Innovative Design/Construction
Communicated with Businesses	Fast Track Schedule	Significant Utility Impacts
Commercial ROW Impacts	Pedestrian & ADA Compliance	

The project recently received a 2022 Engineering Excellence Award of Merit from the ACEC – Virginia Chapter.

h. For Key Personnel required to be on-site full-time for the duration of construction, provide a current list of assignments, role, and the anticipated duration of each assignment. **N/A**



Appendix II
Approved Personnel and Organizational Changes

Joint Venture

WAGMAN

FAY SOUTHEAST
S&B USA CONSTRUCTION

Lead Engineer

WALLACE MONTGOMERY

COMMONWEALTH of VIRGINIA

DEPARTMENT OF TRANSPORTATION

Stephen C. Brich, P.E.
Commissioner

1401 East Broad Street
Richmond, Virginia 23219

(804) 786-2701
Fax: (804) 786-2940

August 1, 2022

Mr. Glen Mays
Wagman- Fay SE, a Joint Venture
26000 Simpson Road
North Dinwiddie, VA 23803

Subject: Request for Personnel Changes
I-64 Hampton Roads Express (HREL) Segment 1A
Contract ID# C00117840DB112

Dear Mr. Mays,

Thank you for your request for changes to the Wagman- Fay SE, a Joint Venture (Wagman-Fay SE) team for the above referenced project.

Your letter proposes Julia Simo, P.E. (Wallace & Montgomery) to a role of a Deputy Design Manager. Per Request for Proposal Part 2 Section 4.2.1, this position does not need written approval in accordance with Part 1, Section 11.4. The backup information provided was not reviewed. The Offeror shall submit the required information with their Technical Proposal in accordance with RFP Part 2, Section 4.2.1.

Your letter also proposes changes to two positions proposed with your Statement of Qualifications. The Incident Management Coordinator and the Environmental Compliance Manager you proposed with your SOQ do not meet the requirements of the respective roles as spelled out in RFP Part 2. You proposed Robert Plott (Wagman- Fay SE) as the Incident Management Coordinator and the Julia Conners (Wetland Studies and Solutions, Inc.) as the Environmental Compliance Manager. The changes to your organization chart are permitted provided these individuals meet the requirements of RFP Part 2, Section 2.4.9.2 and Section 2.10.2. The backup information provided was not reviewed. The Offeror shall submit the required updates to their organization chart and narrative with their Technical Proposal in accordance with RFP Part 2, Section 4.2.1.

Also noted in your request are changes to individuals in two non-Key Personnel positions. You are proposing Ryan Luttenberger (Wagman Fay- SE) to replace Dave Baker who has retired. You are proposing Patrick Ramirez, EE, PE (Iteris) to replace Tiger Harris who has left Iteris. These two replacements are approved.

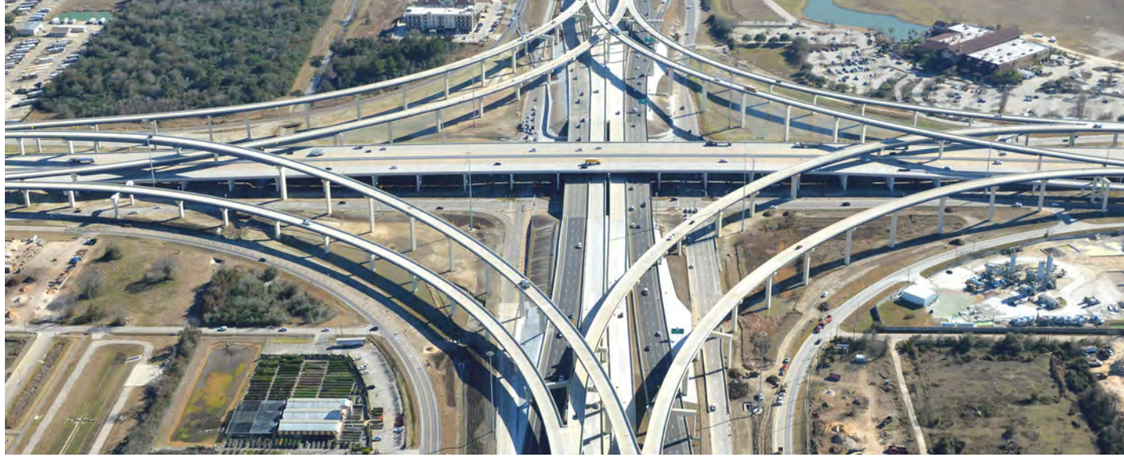
Sincerely,

Stevenson
Bryan eun58966

Digitally signed by
Stevenson Bryan eun58966
Date: 2022.08.01 15:01:32
-04'00'

Bryan W. Stevenson, P.E., DBIA
Senior Project Delivery Engineer
Alternative Project Delivery Division



Electronic Submission

Date
August 17, 2022

Submitted by
Wagman-Fay SE JV
3290 N. Susquehanna Trail
York, PA 17406

Phone 717.764.8521 **Fax** 717.754.2799

www.wagman.com
www.shikunusa.com/faysoutheast

Joint Venture

WAGMAN
General Construction | Heavy Civil | Geotechnical

FAY SOUTHEAST
S&B USA CONSTRUCTION

Lead Engineer

WALLACE MONTGOMERY
ENGINEERS | PLANNERS | SURVEYORS | CONSTRUCTION MANAGERS

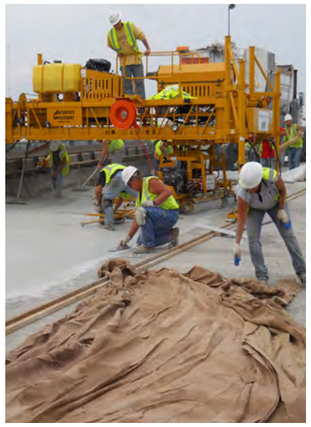
VDOT
Virginia Department of Transportation

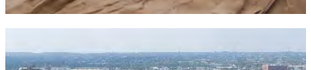
I-64 Hampton Roads Express Lanes (HREL)

Segment 1A

Contract ID No. C00117840DB112

Technical Proposal - Volume II



4.3.1

Conceptual Roadway Plans

Joint Venture

WAGMAN

FAY SOUTHEAST
S&B USA CONSTRUCTION

Lead Engineer

WALLACE MONTGOMERY

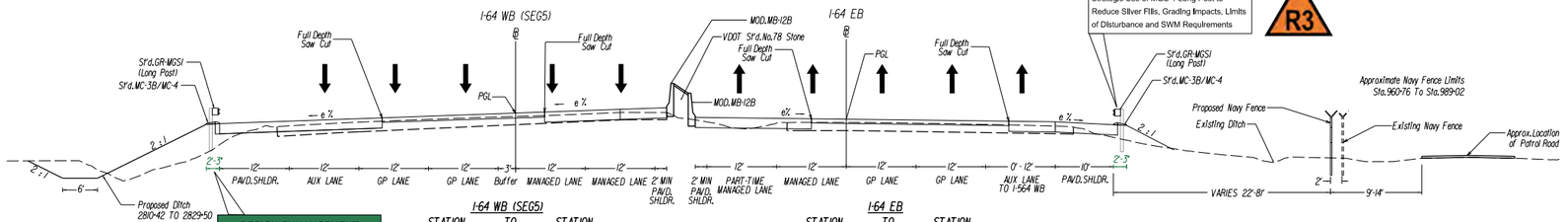
PROJECT MANAGER _____
SURVEYED BY, DATE _____
DESIGN BY _____
SUBSURFACE UTILITY BY, DATE _____

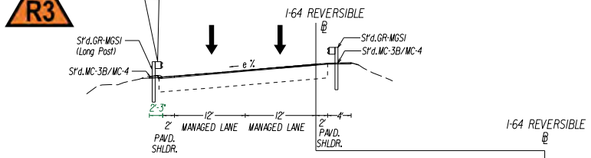
REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	64	0064-122-470, C501, RW201	2A(1)

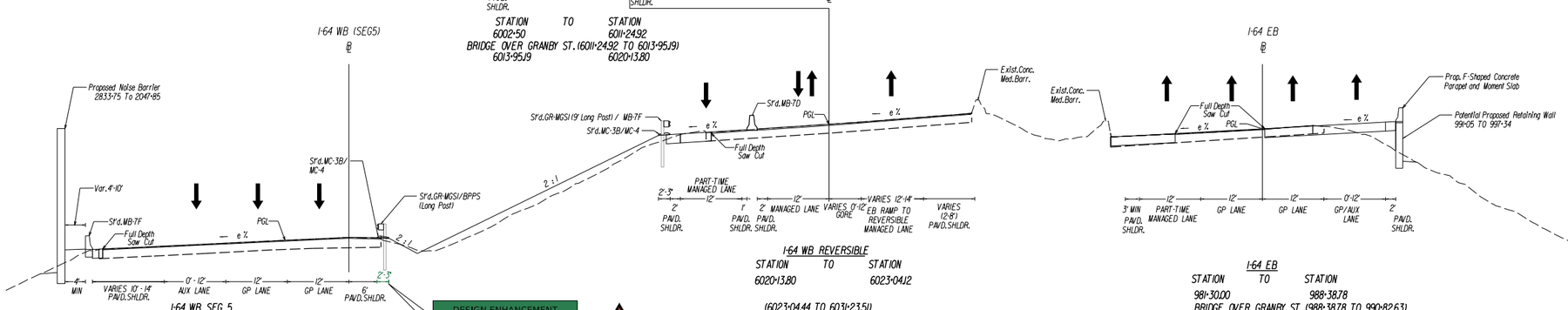
DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

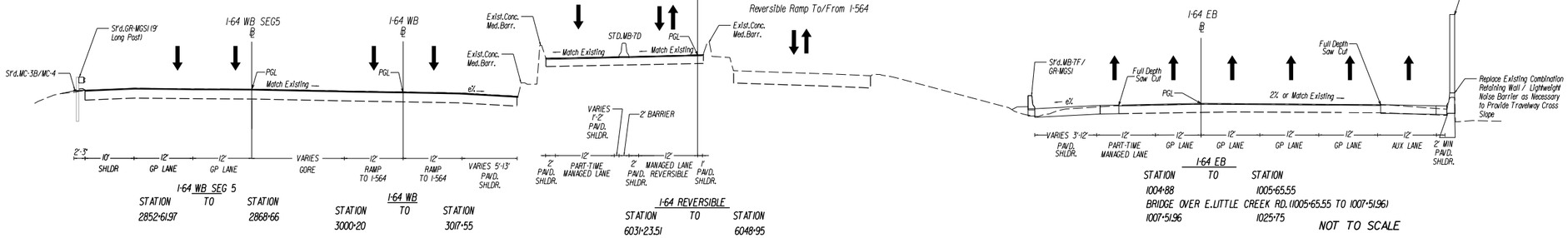
TYPICAL SECTIONS

2. SEE SHEET 2A(5) FOR ADDITIONAL TYPICAL SECTIONS THAT APPLY TO THIS AREA









NOT TO SCALE

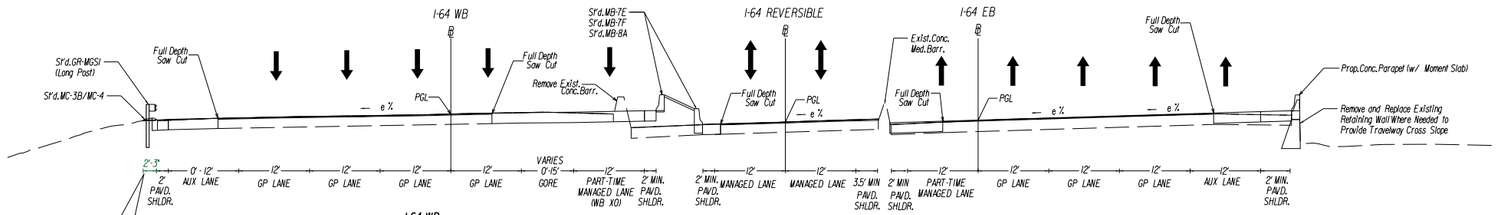
	PROJECT	SHEET NO.
	0064-122-470,	2A(1)

PROJECT MANAGER
SURVEYED BY, DATE
DESIGN BY
SUBSURFACE UTILITY BY, DATE

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	64	0064-122-470, C501, RW201	2A(2)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

TYPICAL SECTIONS



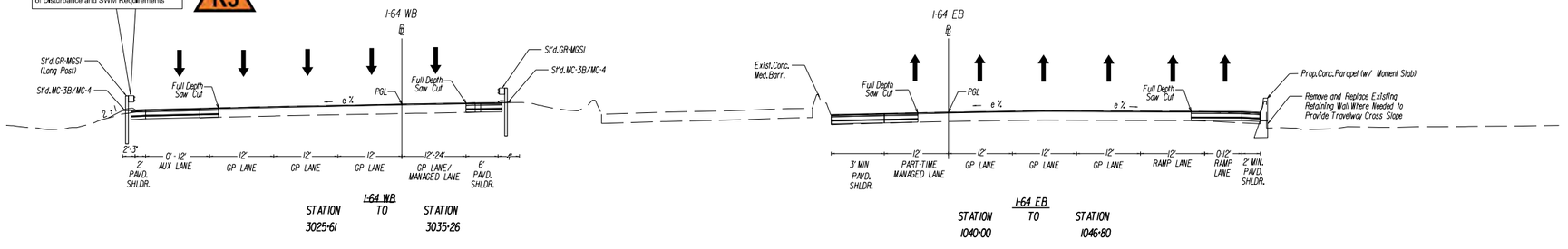
I-64 WB
STATION 3018+12 TO STATION 3025+61

I-64 REVERSIBLE
STATION 6048+95 TO STATION 6059+10

I-64 EB
STATION 1025+75 TO STATION 1040+00

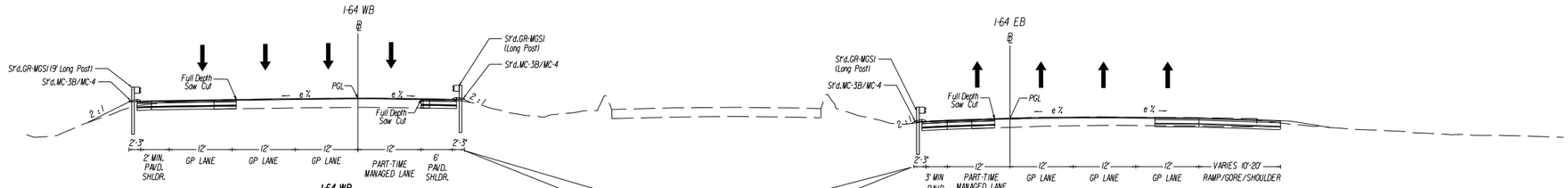
DESIGN ENHANCEMENT
Strategic Use of MGS-1 Long Post to Reduce Silver Fills, Grading Impacts, Limits of Disturbance and SWM Requirements

R3



I-64 WB
STATION 3025+61 TO STATION 3035+26

I-64 EB
STATION 1040+00 TO STATION 1046+80

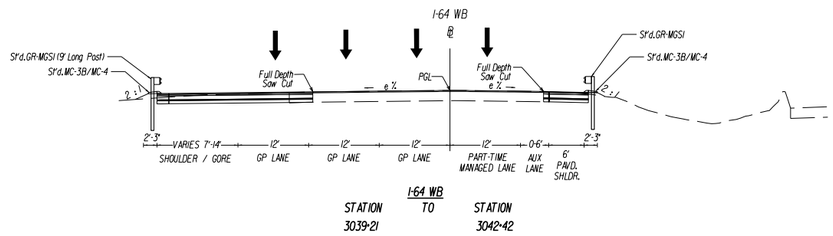


I-64 WB
STATION 3035+26 TO STATION 3039+21

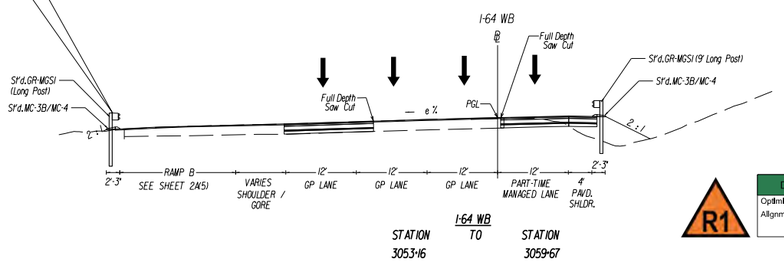
I-64 EB
STATION 1046+80 TO STATION 1054+84

DESIGN ENHANCEMENT
Strategic Use of MGS-1 Long Post to Reduce Silver Fills, Grading Impacts, Limits of Disturbance and SWM Requirements

R3



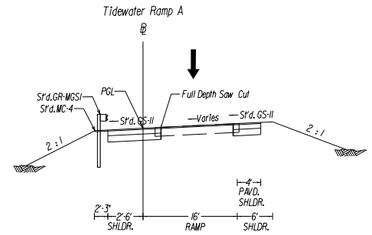
I-64 WB
STATION 3039+21 TO STATION 3042+42



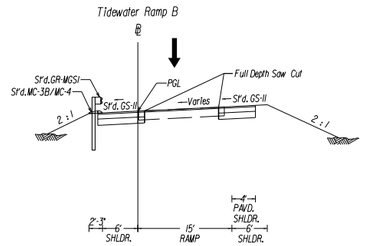
I-64 WB
STATION 3053+16 TO STATION 3059+67

R1

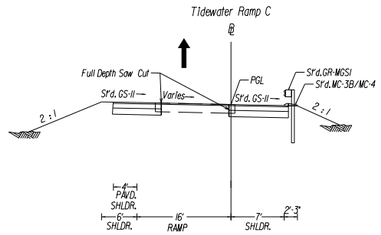
DESIGN ENHANCEMENT
Optimized Cross Section and Vertical Alignment to Reduce Pavement Buildup



TIDEWATER RAMP A
STATION 74+19.42 TO STATION 78+41.00



TIDEWATER RAMP B
STATION 92+85.76 TO STATION 98+71.50



TIDEWATER RAMP C
STATION 40+30.00 TO STATION 45+00.00

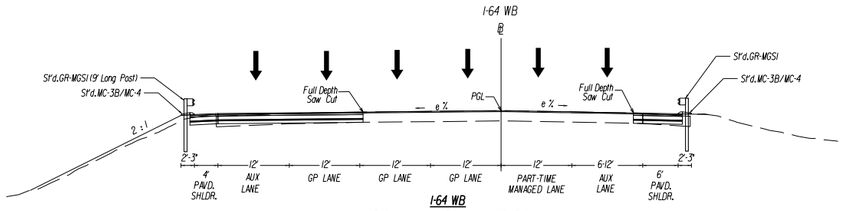
	PROJECT	SHEET NO.
	0064-122-470,	2A(2)

PROJECT MANAGER
SURVEYED BY, DATE
DESIGN BY
SUBSURFACE UTILITY BY, DATE

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	64	0064-122-470, C501, RW201	2A(3)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

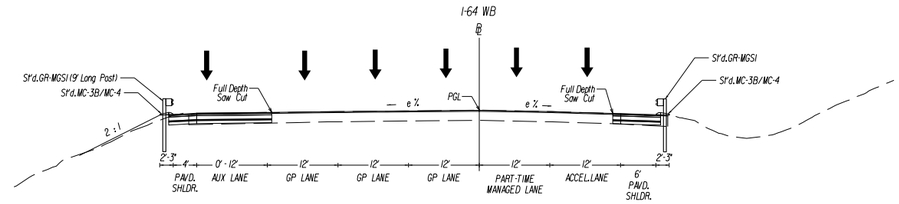
TYPICAL SECTIONS



I-64 WB

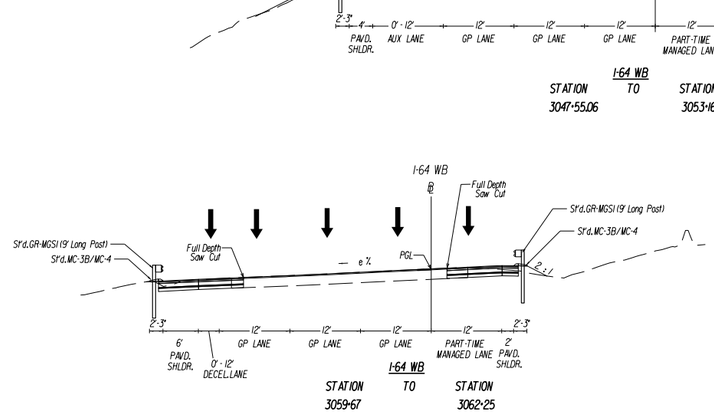
STATION	TO	STATION
3042+42		3045+55.24

TIDEWATER DRIVE BRIDGE (3045+55.24 TO 3047+55.06)



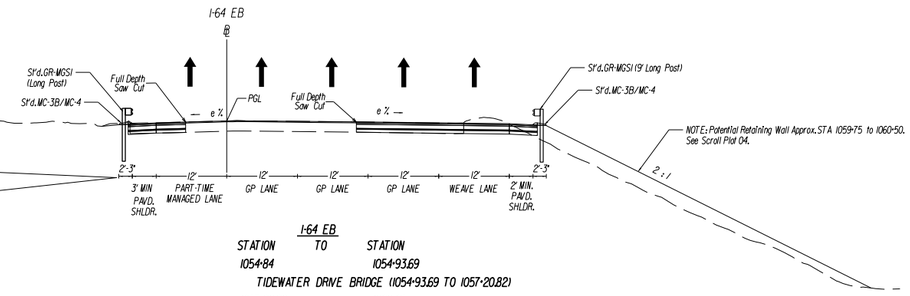
I-64 WB

STATION	TO	STATION
3047+55.06		3053+16



I-64 WB

STATION	TO	STATION
3059+67		3062+25



I-64 EB

STATION	TO	STATION
1054+84		1054+93.69

TIDEWATER DRIVE BRIDGE (1054+93.69 TO 1057+20.82)

1057+20.82		1060+65

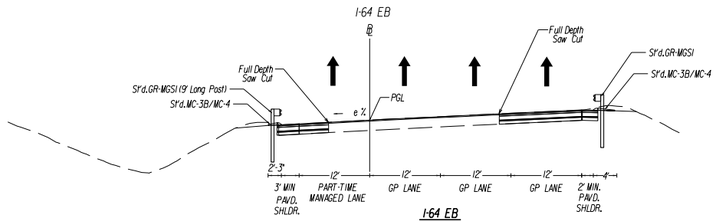
DESIGN ENHANCEMENT

Strategic Use of MGS-1 Long Post to Reduce Silver Fills, Grading Impacts, Limits of Disturbance and SWM Requirements

R3

I-64 WB

STATION	TO	STATION
3059+67		3062+25

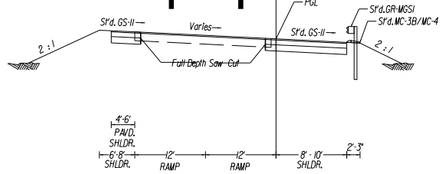


I-64 EB

STATION	TO	STATION
1060+65		1064+20.92

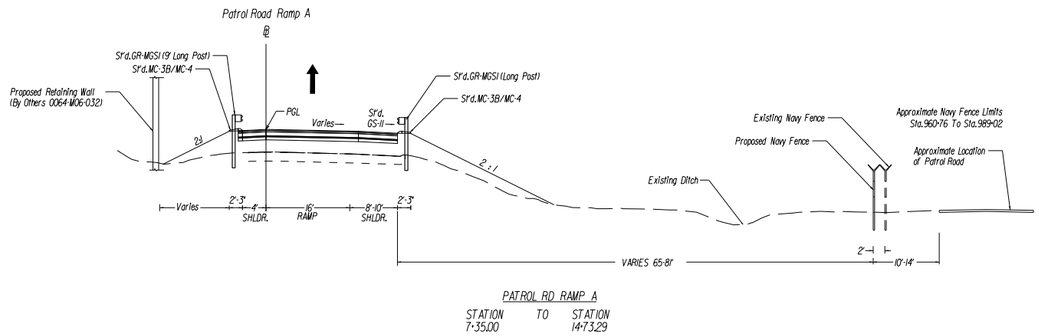
BRIDGE OVER RAMP E (1064+20.92 TO 1065+57.16)

1065+57.16		1070+60



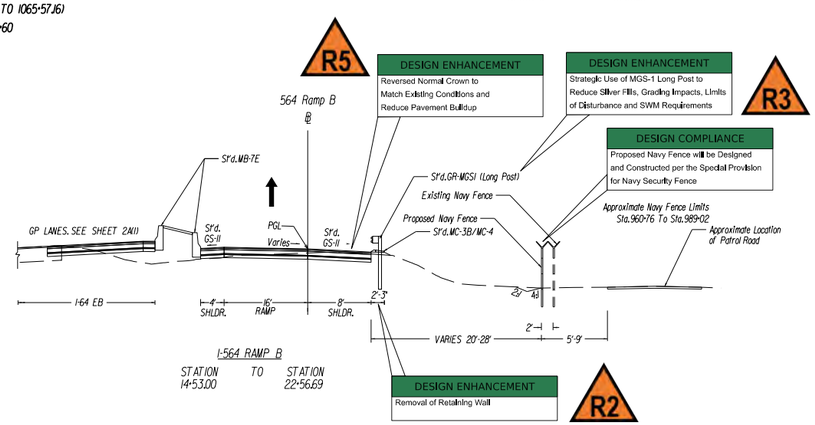
TIDEWATER RAMP D

STATION	TO	STATION
13+53.25		16+85.82



PATROL RD RAMP A

STATION	TO	STATION
7+35.00		14+73.29



I-564 RAMP B

STATION	TO	STATION
14+53.00		22+56.69

R5

DESIGN ENHANCEMENT

Reversed Normal Crown to Match Existing Conditions and Reduce Pavement Buildup

DESIGN ENHANCEMENT

Strategic Use of MGS-1 Long Post to Reduce Silver Fills, Grading Impacts, Limits of Disturbance and SWM Requirements

R3

DESIGN COMPLIANCE

Proposed Navy Fence will be Designed and Constructed per the Special Provision for Navy Security Fence

DESIGN ENHANCEMENT

Removal of Retaining Wall

R2

	PROJECT	SHEET NO.
	0064-122-470,	2A(3)

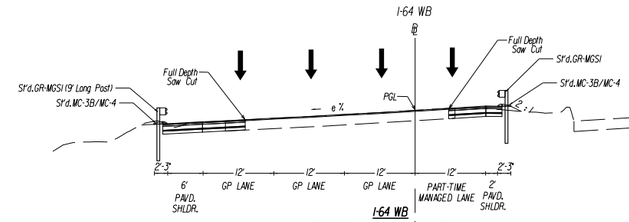
PROJECT MANAGER
SURVEYED BY, DATE
DESIGN BY
SUBSURFACE UTILITY BY, DATE

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	64	0064-122-470, C501, RW201	2A(4)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

TYPICAL SECTIONS

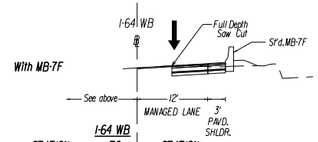
I-64 WB



I-64 WB

STATION	TO	STATION
3062+25		3067+00

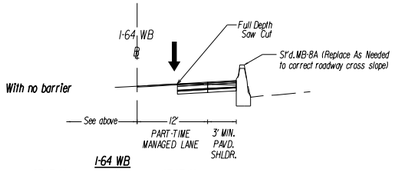
With WB-7F



I-64 WB

STATION	TO	STATION
3067+00		3070+24

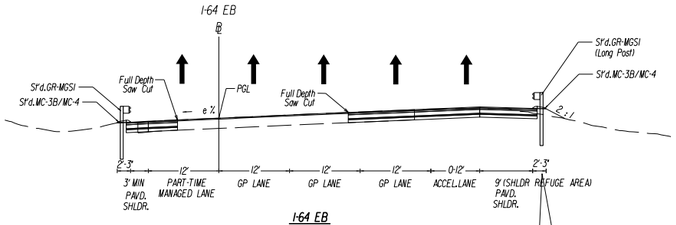
With no barrier



I-64 WB

STATION	TO	STATION
3070+24		3076+66

I-64 EB

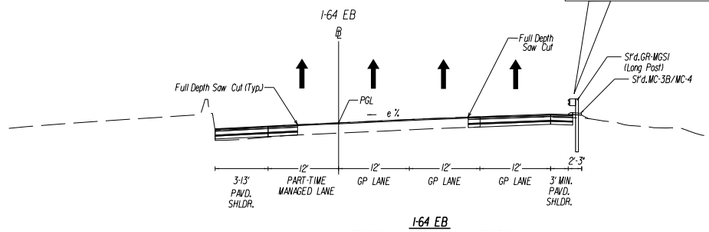


I-64 EB

STATION	TO	STATION
1070+60		1077+29

DESIGN ENHANCEMENT
Strategic Use of MGS-1 Long Post to Reduce Silver Fills, Grading Impacts, Limits of Disturbance and SWM Requirements

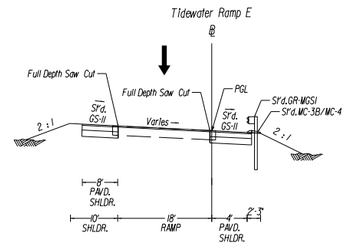
R3



I-64 EB

STATION	TO	STATION
1077+29		1085+50

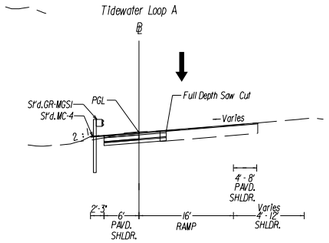
Tidewater Ramp E



TIDEWATER RAMP E

STATION	TO	STATION
62+64.87		65+08.00

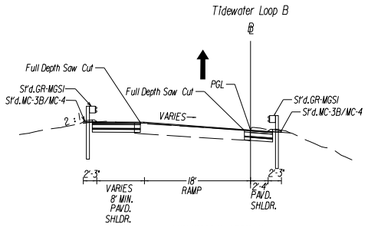
Tidewater Loop A



TIDEWATER LOOP A

STATION	TO	STATION
80+43.00		84+21.43

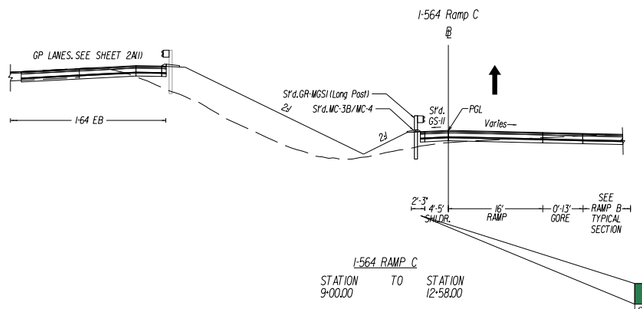
Tidewater Loop B



TIDEWATER LOOP B

STATION	TO	STATION
32+68.27		35+42.00

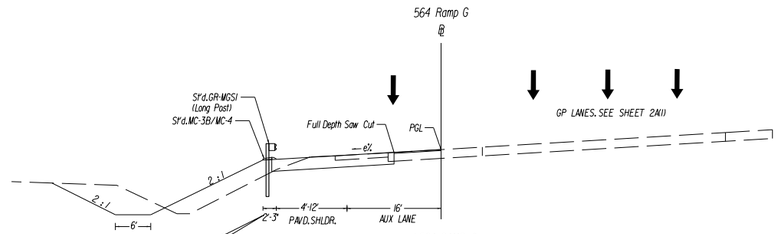
I-564 Ramp C



I-564 RAMP C

STATION	TO	STATION
9+00.00		12+58.00

564 Ramp G



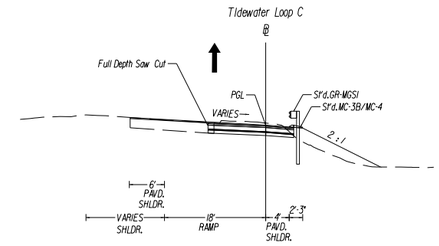
I-564 RAMP G

STATION	TO	STATION
01+59.40		08+39.46

DESIGN ENHANCEMENT
Strategic Use of MGS-1 Long Post to Reduce Silver Fills, Grading Impacts, Limits of Disturbance and SWM Requirements

R3

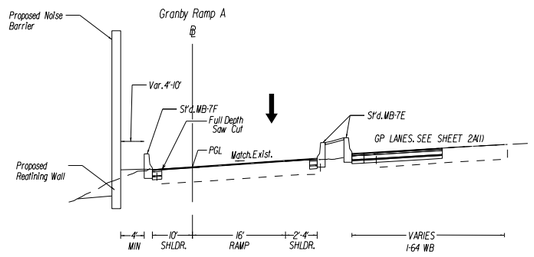
Tidewater Loop C



TIDEWATER LOOP C

STATION	TO	STATION
20+85.05		25+92.00

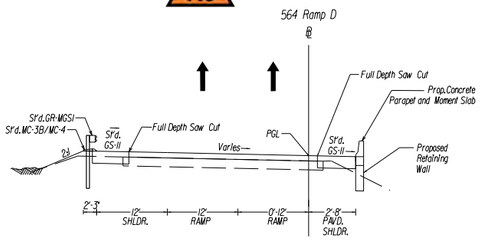
Granby Ramp A



GRANBY RAMP A

STATION	TO	STATION
202+07.93		210+58.98

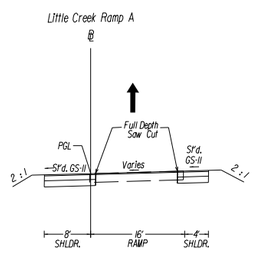
564 Ramp D



I-564 RAMP D

STATION	TO	STATION
31+00.00		40+15.51

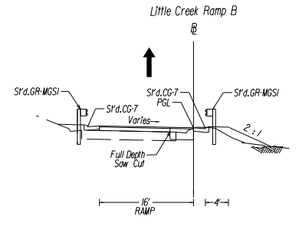
Little Creek Ramp A



LITTLE CREEK RAMP A

STATION	TO	STATION
10+11.00		15+76.38

Little Creek Ramp B



LITTLE CREEK RAMP B

STATION	TO	STATION
10+52.07		20+71.00

NOT TO SCALE	PROJECT 0064-122-470,	SHEET NO. 2A(4)

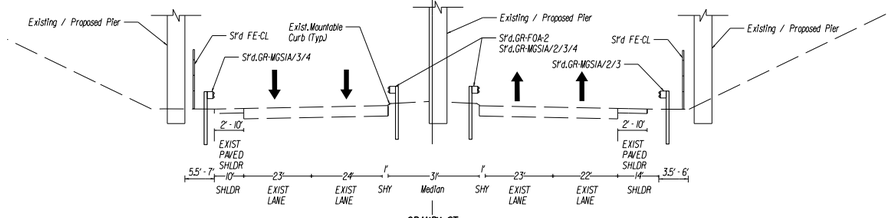
PROJECT MANAGER
SURVEYED BY, DATE
DESIGN BY
SUBSURFACE UTILITY BY, DATE

TYPICAL SECTIONS

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	64	0064-122-470, C501, RW201	2A(5)

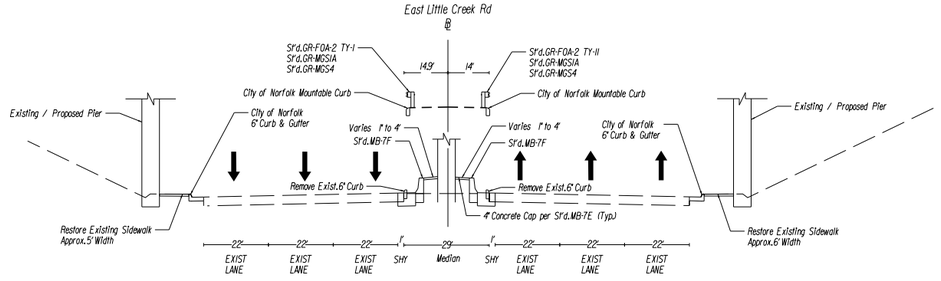
DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Granby St
℄



GRANBY ST

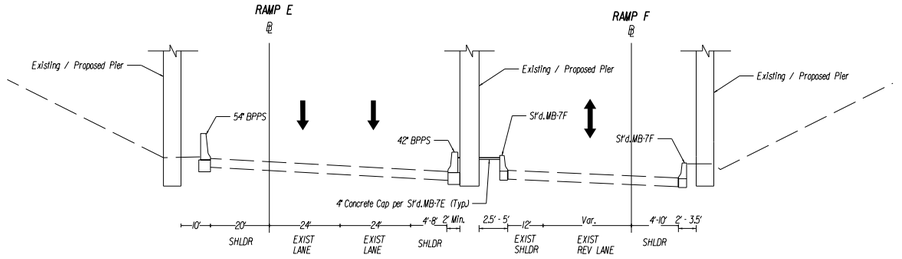
East Little Creek Rd
℄



EAST LITTLE CREEK RD

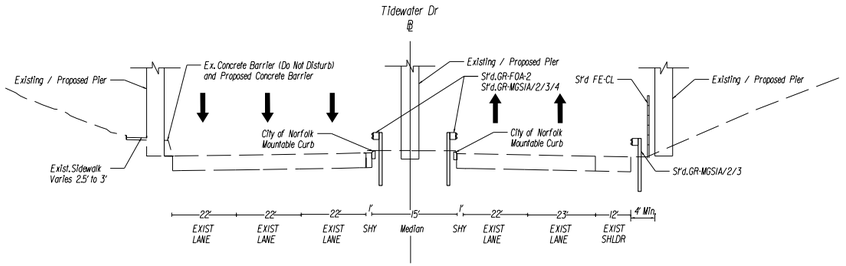
RAMP E
℄

RAMP F
℄



I-564

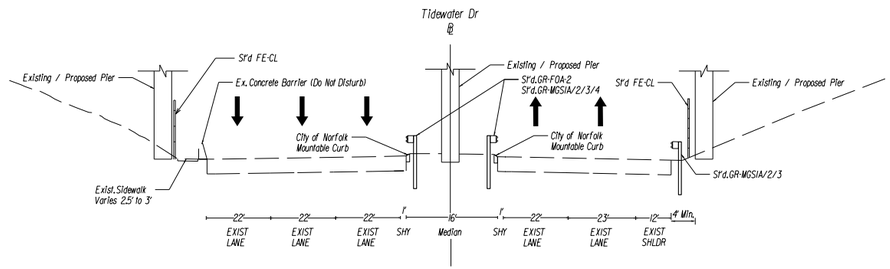
Tidewater Dr
℄



TIDEWATER DRIVE

STATION	TO	STATION
51+57.50		55+00.00

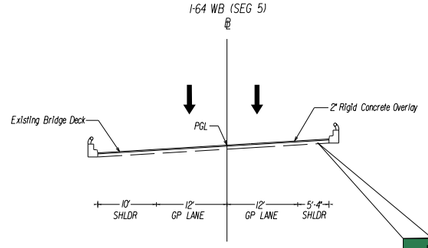
Tidewater Dr
℄



TIDEWATER DRIVE

STATION	TO	STATION
55+00.00		59+18.73

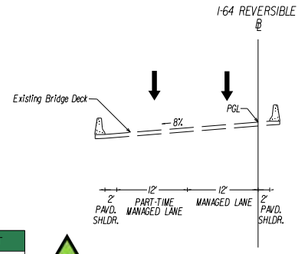
I-64 WB (SEG 5)
℄



I-64 WB OVER GRANBY ST

STATION	TO	STATION
2832+06.92		2834+90.65

I-64 REVERSIBLE
℄



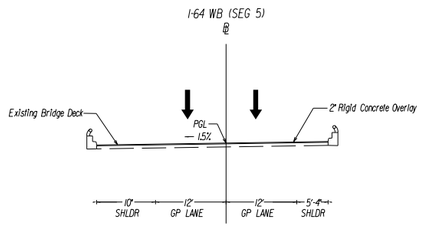
I-64 REVERSIBLE HOV OVER GRANBY ST.

STATION	TO	STATION
6011+24.51		6013+96.87

DESIGN ENHANCEMENT
Strategic Use of Very Early Strength Latex to Reduce Duration and Traffic Impacts

S4

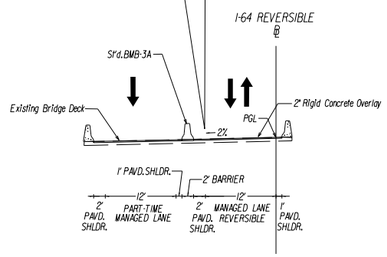
I-64 WB (SEG 5)
℄



I-64 WB OVER LITTLE CREEK RD.

STATION	TO	STATION
2847+91.01		2852+67.78

I-64 REVERSIBLE
℄



I-64 REVERSIBLE HOV OVER I-564 AND LITTLE CREEK RD.

STATION	TO	STATION
6023+04.44		6031+23.51

	PROJECT	SHEET NO.
	0064-122-470,	2A(5)

PROJECT MANAGER _____
SURVEYED BY, DATE _____
DESIGN BY _____
SUBSURFACE UTILITY BY, DATE _____

CURVE DATA

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	64	0064-122-470, C501, RW201	2A(6)

Curve No.	Location	Delta	Degree	Radius	Tangent	Length	E	V
64 EB (1)	PC 961+52.56 PI 964+77.02 PRC 968+01.08	4° 50' 40" Lt	0° 44' 49"	7,670.00'	324.46'	648.52'	2.2%	60 MPH
64 EB (2)	PRC 968+01.08 PI 969+47.36 PT 970+93.61	1° 27' 27" Rt	0° 29' 54"	11,500.00'	146.27'	292.53'	2.0%	60 MPH
64 EB (3)	PC 976+05.95 PI 977+39.96 PT 978+73.96	0° 30' 43" Lt	0° 11' 28"	30,000.00'	134.01'	268.02'	2.0%	80 MPH
64 EB (4)	PC 981+26.97 PI 982+52.13 PCC 983+76.97	7° 05' 03" Lt	2° 50' 01"	2,022.00'	125.16'	250.00'	Match Existing (5.7%)	54 MPH
64 EB (5)	PCC 983+76.97 PI 991+31.79 PCC 998+10.33	44° 23' 32" Lt	3° 05' 49"	1,850.00'	754.82'	1433.36'	Match Existing (5.7% to 6.8%)	52 MPH To 55 MPH
64 EB (6)	PCC 998+10.33 PI 999+35.45 PT 1000+60.33	6° 08' 33" Lt	2° 27' 35"	2,322.00'	125.12'	250.00'	Match Existing Bridge (6.0%) Transition to 2.0%	60 MPH
64 EB (7)	PC 1008+00.91 PI 1010+50.89 PRC 1013+00.80	2° 29' 26" Lt	0° 29' 54"	11,500.00'	249.98'	499.89'	2.0%	60 MPH
64 EB (8)	PRC 1013+00.80 PI 1017+54.50 PRC 1022+02.72	15° 25' 33" Rt	1° 42' 37"	3,350.00'	453.70'	901.92'	Match Existing (6.0%) Transition to 2.0%	72 MPH
64 EB (9)	PRC 1022+02.72 PI 1026+15.37 PCC 1030+27.72	3° 52' 28" Lt	0° 28' 11"	12,200.00'	412.66'	825.00'	Match Existing (2.0%)	60 MPH
64 EB (10)	PCC 1030+27.72 PI 1036+06.27 PT 1041+81.78	10° 10' 22" Lt	0° 52' 53"	6,500.00'	578.55'	1154.07'	Match Existing (3.0% to 4.8%)	72 MPH
64 EB (11)	PC 1060+71.14 PI 1072+64.96 PT 1083+33.42	45° 14' 33" Lt	1° 59' 59"	2,865.00'	1193.83'	2,262.29'	Match Existing (3.7% to 5.6%)	60 MPH
64 EXP (1)	PC 6002+95.55 PI 6006+86.18 PCC 6010+70.55	17° 45' 42" Lt	2° 17' 31"	2,500.00'	390.63'	775.00'	Match Existing (6.0%)	59 MPH
64 EXP (2)	PCC 6010+70.55 PI 6012+60.59 PCC 6014+49.37	11° 26' 08" Lt	3° 01' 07"	1,898.00'	190.04'	378.82'	Match Existing (6.8% to 8.0%)	60 MPH to 70 MPH
64 EXP (3)	PCC 6014+49.37 PI 6018+89.07 PT 6023+09.37	29° 25' 03" Lt	3° 25' 14"	1,675.00'	439.70'	860.00'	Match Existing (8.0%)	65 MPH
64 EXP (4)	PC 6036+18.16 PI 6039+49.32 PT 6042+77.41	13° 29' 24" Rt	2° 02' 47"	2,800.00'	331.16'	659.26'	Match Existing (6.5%)	72 MPH
64 EXP (5)	PC 6048+95.35 PI 6057+71.30 PT 6066+36.43	15° 35' 13" Lt	0° 53' 43"	6,400.00'	875.95'	1,741.09'	Match Existing (2.0%)	74 MPH
64 WB_1 (1)	PC 2806+00.00 PI 2806+82.13 PCC 2807+64.26	0° 49' 06" Lt	0 29' 54"	11,500.00'	82.13'	164.26'	2.0%	60 MPH
64 WB_1 (2)	PCC 2807+64.26 PI 2809+60.58 PT 2811+56.80	3° 12' 47" Lt	0° 49' 07"	7,000.00'	196.32'	392.55'	2.2%	60 MPH
64 WB_1 (3)	PC 2824+67.60 PI 2827+44.33 PCC 2830+17.60	15° 40' 41" Lt	2° 51' 02"	2,010.00'	276.73'	550.00'	Match Existing (6.0%)	56 MPH
64 WB_1 (4)	PCC 2830+17.60 PI 2834+08.07 PCC 2837+89.76	21° 01' 39" Lt	2° 43' 23"	2,104.00'	390.47'	772.16'	Match Existing (6.0%)	57 MPH
64 WB_1 (5)	PCC 2837+89.76 PI 2841+06.05 PT 2844+14.76	21° 42' 11" Lt	3° 28' 21"	1,650.00'	316.29'	625.00'	Match Existing (4.5% to 6.0%)	42 MPH to 51 MPH
64 WB_1 (6)	PC 2856+06.78 PI 2860+98.97 PT 2865+85.58	14° 55' 52" Rt	1° 31' 32"	3,756.00'	492.19'	978.80'	Match Existing (3.5% to 4.7%)	54 MPH to 64 MPH
64 WB_2 (1)	PC 3005+01.91 PI 3008+95.51 PT 3012+84.33	15° 27' 31" Rt	1° 58' 33"	2,900.00'	393.60'	782.42'	Match Existing (5.2%)	60 MPH
64 WB_2 (2)	PC 3016+13.83 PI 3026+72.56 PT 3037+10.90	19° 27' 29" Lt	0° 55' 40"	6,175.00'	1,058.73'	2,097.08'	Match Existing (1.5% to 2.6%)	45 MPH to 56 MPH
64 WB_2 (3)	PC 3057+57.50 PI 3066+57.74 PT 3074+75.97	42° 10' 04" Lt	2° 27' 14"	2,335.00,	900.24'	1,718.47'	Match Existing (4.4% to 6.2%)	49 MPH to 60 MPH
64 WB_XO (1)	PC 95+79.54 PI 99+88.64 PCC 103+96.21	8° 35' 09" Lt	1° 03' 05"	5,450.00'	409.10'	816.67'	3.0%	60 MPH
64 XO_2 (2)	PCC 103+96.21 PI 106+25.91 PT 108+55.37	4° 27' 16" Lt	0° 58' 12"	5,906.06'	229.70'	459.16'	2.8%	60 MPH
64 XO_2 (3)	PC 108+55.38 PI 110+05.70 PT 111+55.96	2° 47' 01" Lt	0° 55' 34"	6,187.00'	150.32'	300.58'	NA	NA
564 RAMP B (1)	PC 15+06.62 PI 18+08.72 PT 21+10.30	5° 45' 53" Lt	0° 57' 18"	6,000.00'	302.09'	603.68'	4.0% Transition to 2.0%	50 MPH
564 Ramp B (2)	PC 22+62.30 PI 25+53.12 PT 28+00.00	53° 53' 59" Rt	10° 01' 00"	57.20.00'	290.82'	538.10'	NA	NA
564 Ramp D (1)	PC 30+68.82 PI 35+13.52 PT 39+37.64	30° 06' 54" Rt	3° 27' 58"	1,653.00'	444.70'	868.83'	5.8% Transition to 2.0%	50 MPH

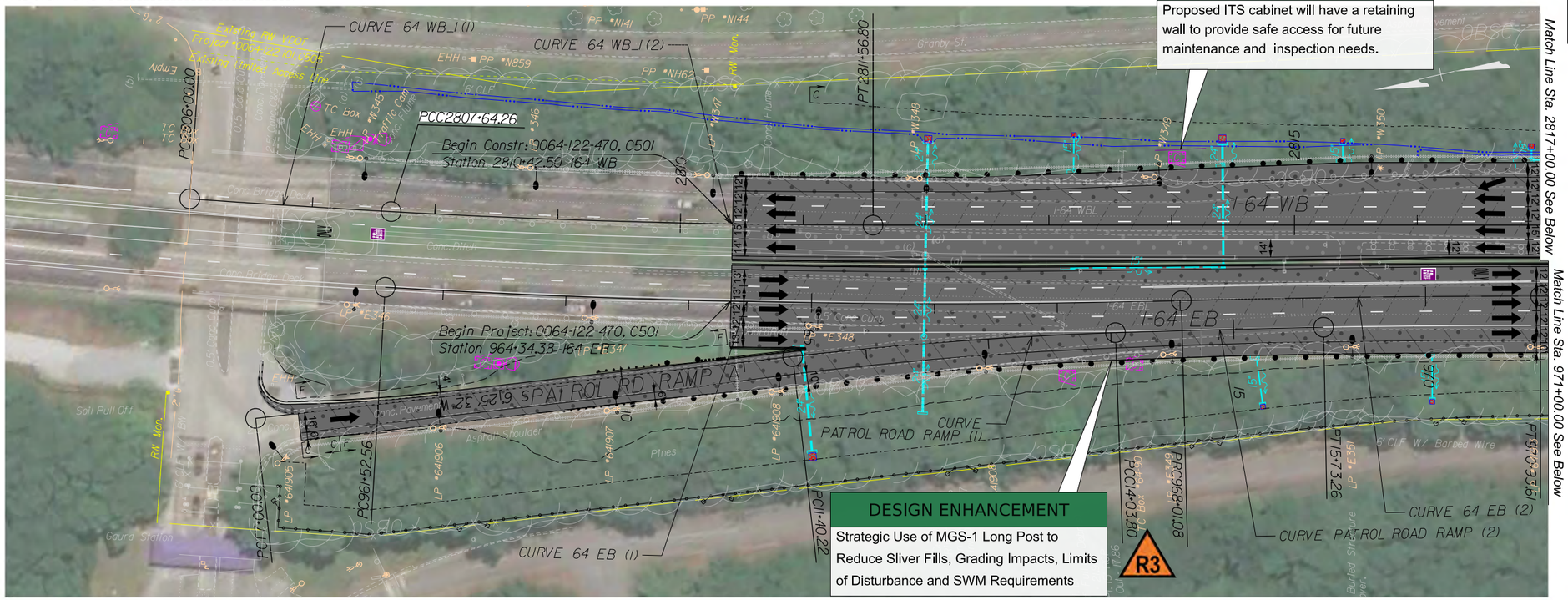
Curve No.	Location	Delta	Degree	Radius	Tangent	Length	E	V
564 Ramp G (1)	PC 2+01.10 PI 3+97.40 PT 5+91.16	15° 57' 48" Lt	4° 05' 33"	1,400.00'	196.30'	390.05'	Match Existing (6.0%)	47 MPH
564 Ramp G (2)	PC 6+55.55 PI 7+45.60 PCC 8+35.61	3° 10' 03" Lt	1° 45' 33"	3,257.00'	90.05'	180.05'	Match Existing (2.0%)	35 MPH
564 Ramp G (3)	PCC 8+35.61 PI 10+69.66 PT 13+01.92	12° 18' 04" Lt	2° 38' 17"	2,172.00'	234.06'	466.32'	NA	NA
ELC Ramp A (1)	PC 14+85.21 PI 16+08.19 PCC 17+30.97	5° 37' 57" Lt	2 17' 21"	2,500.00'	122.98'	245.77'	Match Existing (2.0%)	35 MPH
ELC Ramp A (2)	PCC 17+30.97 PI 18+92.74 PT 20+54.43	3° 01' 29" Lt	0° 56' 06"	6,127.00'	161.76'	323.45'	NA	NA
ELC Ramp B (1)	PC 11+01.62 PI 11+61.98 PT 12+22.33	2° 18' 20" Lt	1° 54' 35"	3,000.00'	60.36'	120.71'	Match Existing (2.0%)	30 MPH
ELC Ramp B (2)	PC 17+21.01 PI 18+96.52 PCC 20+71.35	8° 46' 37" Rt	2° 30' 19"	2,287.00'	175.51'	350.54'	Match Existing (6.0%)	60 MPH
ELC Ramp B (3)	PCC 20+71.35 PI 22+14.98 PT 23+58.43	4° 59' 58" Rt	1° 44' 29"	3,290.00'	143.63'	287.08'	NA	NA
Granby Ramp A (1)	PC 200+49.08 PI 201+50.19 PT 202+47.16	28° 22' 22" Lt	14° 19' 26"	400.00'	101.11'	198.08'	Match Existing (8.0%)	NA
Granby Ramp A (2)	PC 203+95.83 PI 205+46.13 PCC 206+95.83	8° 48' 53" Lt	2° 56' 18"	1,950.00'	150.30'	300.00'	3.5%	35 MPH
Granby Ramp A (3)	PCC 206+95.83 PI 208+79.33 PCC 210+58.98	20° 17' 58" Lt	5° 35' 23"	1,250.00'	183.50'	363.15'	6.8%	45 MPH
Granby Ramp A (4)	PCC 210+58.98 PI 211+01.68 PT 211+44.37	3° 01' 53" Lt	3° 33' 00"	1,614.00'	42.71'	85.39'	Match Mainline	41 MPH
Patrol Road Ramp A (1)	PC 11+40.22 PI 12+72.08 PCC 14+03.80	4° 37' 57" Rt	1° 45' 27"	3,260.00'	131.86'	263.58'	2.5%	40 MPH
Patrol Road Ramp A (2)	PCC 14+03.80 PI 14+88.53 PT 15+73.26	0° 50' 41" Rt	0° 29' 45"	11,493.00'	84.73'	169.46'	Match Mainline (2.0%)	59 MPH
TW Loop A (1)	PC 80+11.01 PI 82+04.37 PCC 82+86.01	103° 39' 37" Lt	37° 41' 41"	152.00'	193.37'	275.00'	8.0%	25 MPH
TW Loop A (2)	PCC 82+86.01 PI 83+53.68 PT 84+16.94	35° 43' 22" Lt	27° 17' 01"	210.00'	67.67	130.93'	7.4%	25 MPH
TW Loop B (1)	PC 32+68.27 PI 33+88.10 PCC 34+96.28	43° 32' 38" Rt	19° 05' 55"	300.00'	119.83'	228.01'	6.4%	25 MPH
TW Loop B (2)	PCC 34+96.28 PI 35+94.28 PT 36+71.13	65° 24' 43" Rt	37° 24' 32"	153.16'	98.35	174.86'	6.4%	20 MPH
TW Loop C (1)	PC 20+00.00 PI 20+43.28 PCC 20+85.05	26° 11' 37" Rt	30° 47' 47"	186.05'	43.28'	85.05'	NA	NA
TW Loop C (2)	PCC 20+85.05 PI 27+98.56 PT 25+50.65	152° 26' 19" Rt	32° 44' 26"	175.00'	713.51'	465.60'	7.8%	25 MPH
TW Ramp A (1)	PC 70+00.00 PI 72+23.51 PCC 74+46.82	4° 10' 42" Lt	0° 56' 06"	6,127.00'	223.51'	446.82'	NA	NA
TW Ramp A (2)	PCC 74+46.82 PI 75+97.20 PCC 77+38.98	33° 28' 43" Lt	11° 27' 33"	500.00'	150.38'	292.16'	7.2%	35 MPH
TW Ramp A (3)	PCC 77+38.98 PI 77+93.35 PT 78+47.41	10° 37' 13" Lt	9° 47' 39"	585.00'	54.37'	108.43'	6.6%	34 MPH
TW Ramp B (1)	PC 97+11.92 PI 97+92.09 PT 98+71.92	9° 10' 04" Lt	5° 43' 46"	1,000.00	80.17'	160.00'	4.2%	30 MPH
TW Ramp C (1)	PC 40+18.60 PI 42+48.10 PRC 44+72.92	20° 01' 26" Rt	4° 24' 27"	1,300.00'	229.50'	454.33'	4.2%	35 MPH
TW Ramp C (2)	PRC 44+72.92 PI 46+47.45 PT 48+21.57	6° 51' 27" Lt	1° 58' 01"	2,913.00'	174.53'	348.65'	NA	NA
TW Ramp D (1)	PC 13+53.25 PI 15+36.82 PT 17+05.11	40° 19' 11" Rt	11° 27' 33"	500.00'	183.57'	351.85'	Match Existing (5.0%)	25 MPH
TW Ramp E (1)	PC 62+61.32 PI 63+72.10 PCC 64+78.86	26° 41' 23" Rt	12° 16' 08"	467.00'	110.78'	217.54'	Match Existing (5.3%)	25 MPH
TW Ramp E (2)	PCC 64+78.86 PI 65+93.89 PT 67+05.41	24° 29' 29" Rt	10° 48' 38"	530.00'	115.03'	226.55'	5.3%	35 MPH

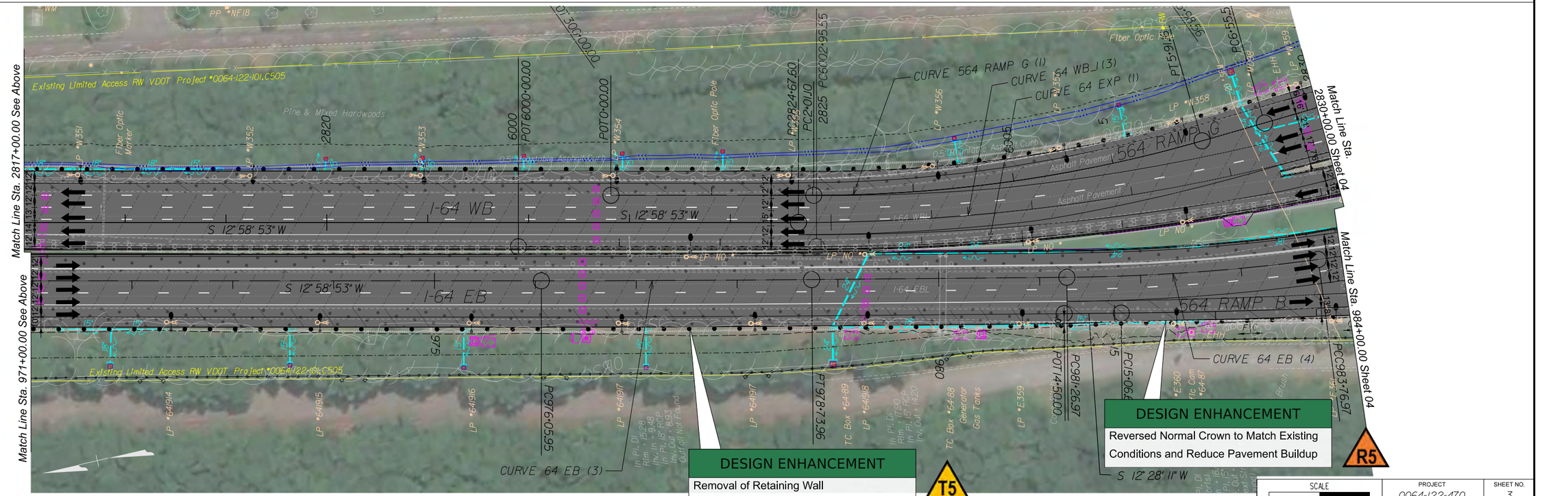
	PROJECT	SHEET NO.
	0064-122-470,	2A(6)

PROJECT MANAGER _____
SURVEYED BY, DATE _____
DESIGN BY _____
SUBSURFACE UTILITY BY, DATE _____

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	64	0064-122-470, C501, RW201	3

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT





SCALE 0 50' 100'

PROJECT	SHEET NO.
0064-122-470,	3

PROJECT MANAGER _____
SURVEYED BY, DATE _____
DESIGN BY _____
SUBSURFACE UTILITY BY, DATE _____

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	64	0064-122-470, C501, RW201	4

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

DESIGN ENHANCEMENT
Relocated ITS Cabinet and Retaining Wall to Avoid Conflict with Proposed Drainage

DESIGN COMPLIANCE
Proposed noise wall detailed per the RFP to reduce grading impacts.

T5

CURVE 564 RAMP G (2)
CURVE GRANBY RAMP A (1)
CURVE 564 RAMP G (3)
CURVE GRANBY RAMP A (3)
CURVE GRANBY RAMP A (2)
Match Line Sta. 2830+00.00 Sheet 03
Match Line Sta. 2841+00.00 Sheet 05
Match Line Sta. 984+00.00 Sheet 03
Match Line Sta. 996+00.00 Sheet 05
CURVE 64 WB (4)
CURVE 64 EXP (2)
CURVE 64 WB (3)
CURVE 64 EXP (3)
CURVE 64 EB (5)
CURVE 564 RAMP B (1)
CURVE 564 RAMP B (2)
GRANBY STREET
Existing Limited Access R/W
Proposed Limited Access Line
S 10° 55' 06" E
S 3° 37' 01" W
S 6° 42' 18" W
S 78° 08' 29" E

DESIGN ENHANCEMENT
Removal of Retaining Wall

R2

DESIGN ENHANCEMENT
Reversed Normal Crown to Match Existing Conditions and Reduce Pavement Buildup

R5

UTILITY RELOCATION
Offeror's Technical Proposal Table 4.4.2.2 Utility location #3 - DBT to relocate 16" Watermain

DESIGN ENHANCEMENT
Special footing design to avoid Verizon, Corwn Castle, Lumen, and Windstrem Fiber Optic Ductbank.

Legend

- Denotes Full Depth Pavement
- Denotes Mill & Overlay
- Denotes Demolition of Pavement
- Denotes Proposed Bridge
- Denotes Prop. R/W (Offeror's Prop. R/W is the same as RFP)
- Denotes Exist. R/W
- Denotes Exist. Property Line
- Denotes Exist. Government Property Line
- Denotes Potential Retaining Wall
- Denotes Potential Noise Barrier
- Denotes Prop. Guardrail
- Denotes Prop. Travel Lane
- Denotes Wetland
- Denotes Proposed Tolling/ ITS Infrastructure
- Denotes Proposed Lighting
- Denotes Proposed Navy Fence
- Denotes Proposed Drainage/SWM
- Denotes Exist. Utilities

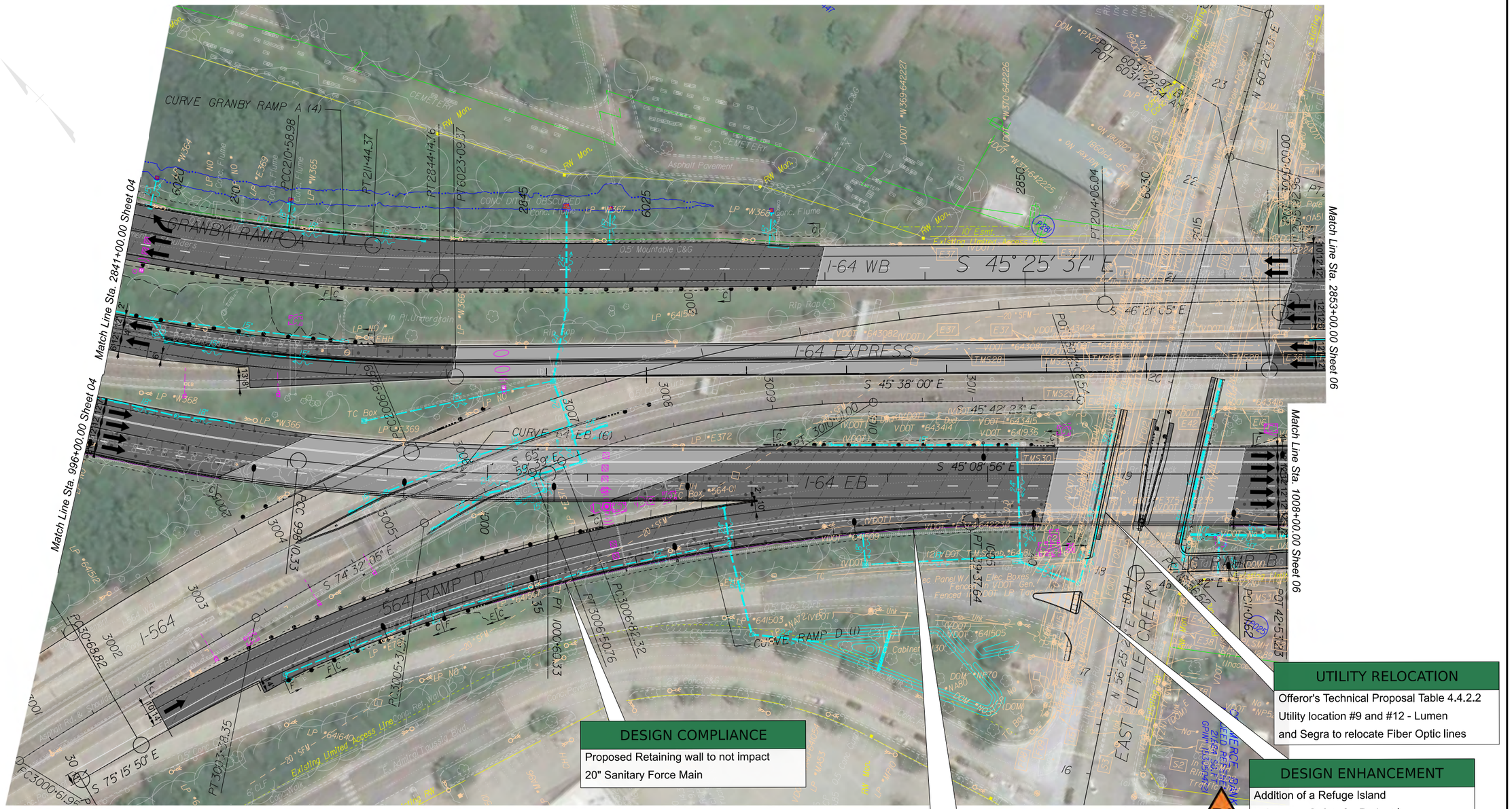
Note:
Impacted VDOT Electric Cable and Streetlight Electric Cables to be relocated by th DBT in conjunction with the proposed ITS Plans.

SCALE	PROJECT	SHEET NO.
0 50' 100'	0064-122-470,	4

PROJECT MANAGER _____
SURVEYED BY, DATE _____
DESIGN BY _____
SUBSURFACE UTILITY BY, DATE _____

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	64	0064-122-470, C501, RW201	5

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT



DESIGN COMPLIANCE

Proposed Retaining wall to not impact
20" Sanitary Force Main

UTILITY RELOCATION

Offeror's Technical Proposal Table 4.4.2.2
Utility location #9 and #12 - Lumen
and Segra to relocate Fiber Optic lines

DESIGN ENHANCEMENT

Addition of a Refuge Island
to Improve Safety for Pedestrians

R4

DESIGN ENHANCEMENT

Proposed Retaining Wall Removed by
Detailing the Proposed MSE WingWall
to Protect Existing ITS Facilities

S4

Note:
Impacted VDOT Electric Cable and Streetlight Electric Cables to be relocated by th DBT in conjunction with the proposed ITS Plans.

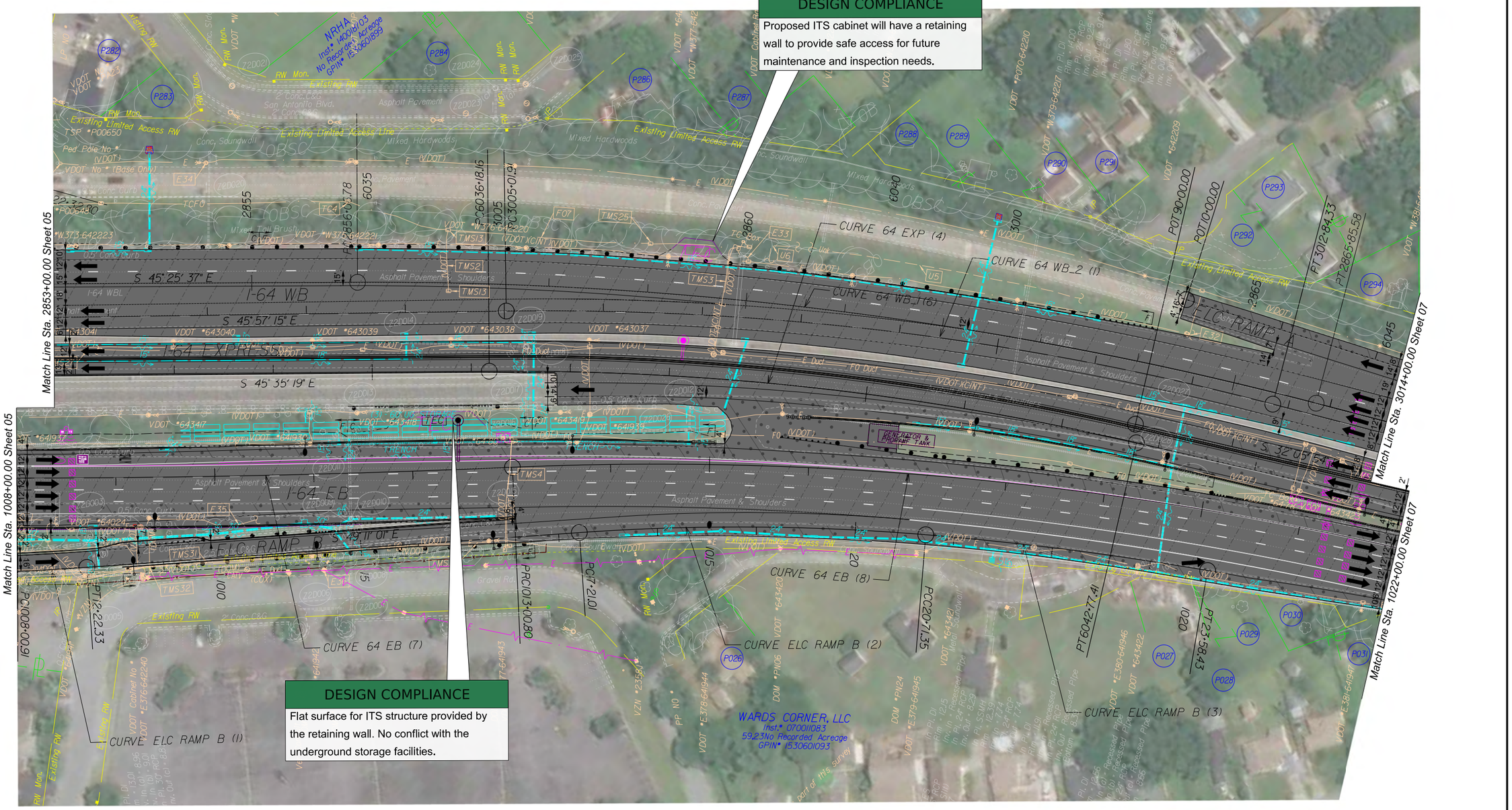
SCALE	PROJECT	SHEET NO.
0 50' 100'	0064-122-470,	5

WAGMAN General Construction | Heavy Civil | Geotechnical
FAY SOUTHEAST S&B USA CONSTRUCTION
WALLACE MONTGOMERY

PROJECT MANAGER _____
SURVEYED BY, DATE _____
DESIGN BY _____
SUBSURFACE UTILITY BY, DATE _____

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	64	0064-122-470, C501, RW201	6

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT



Legend

- Denotes Full Depth Pavement
- Denotes Mill & Overlay
- Denotes Demolition of Pavement
- Denotes Proposed Bridge
- Denotes Prop. R/W (Offeror's Prop. R/W is the same as RFP)
- Denotes Exist. R/W
- Denotes Exist. Property Line
- Denotes Exist. Government Property Line
- Denotes Potential Retaining Wall
- Denotes Potential Noise Barrier
- Denotes Prop. Guardrail
- Denotes Prop. Travel Lane
- Denotes Wetland
- Denotes Proposed Tolling/ ITS Infrastructure
- Denotes Proposed Lighting
- Denotes Proposed Navy Fence
- Denotes Proposed Drainage/SWM
- Denotes Exist. Utilities

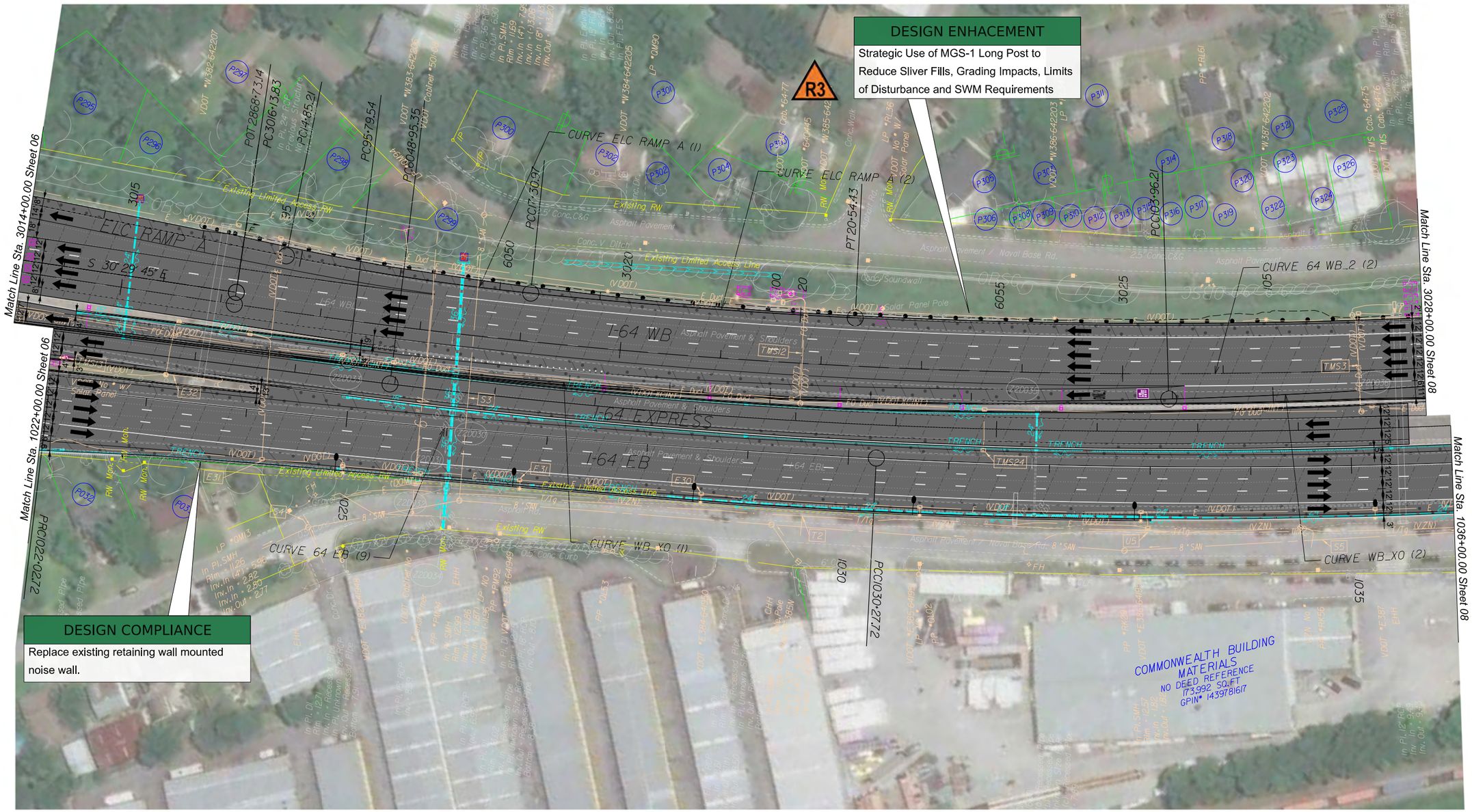
Note:
Impacted VDOT Electric Cable and Streetlight Electric Cables to be relocated by th DBT in conjunction with the proposed ITS Plans.

SCALE	PROJECT	SHEET NO.
0 50' 100'	0064-122-470,	6

PROJECT MANAGER _____
SURVEYED BY, DATE _____
DESIGN BY _____
SUBSURFACE UTILITY BY, DATE _____

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	64	0064-122-470, C501, RW201	7

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT



Legend

- Denotes Full Depth Pavement
- Denotes Mill & Overlay
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- Denotes Proposed Bridge
- Denotes Prop. R/W (Offeror's Prop. R/W is the same as RFP)
- Denotes Exist. R/W
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- Denotes Potential Noise Barrier
- Denotes Prop. Guardrail
- Denotes Prop. Travel Lane
- Denotes Wetland
- Denotes Proposed Tolling/ ITS Infrastructure
- Denotes Proposed Lighting
- Denotes Proposed Navy Fence
- Denotes Proposed Drainage/SWM
- Denotes Exist. Utilities

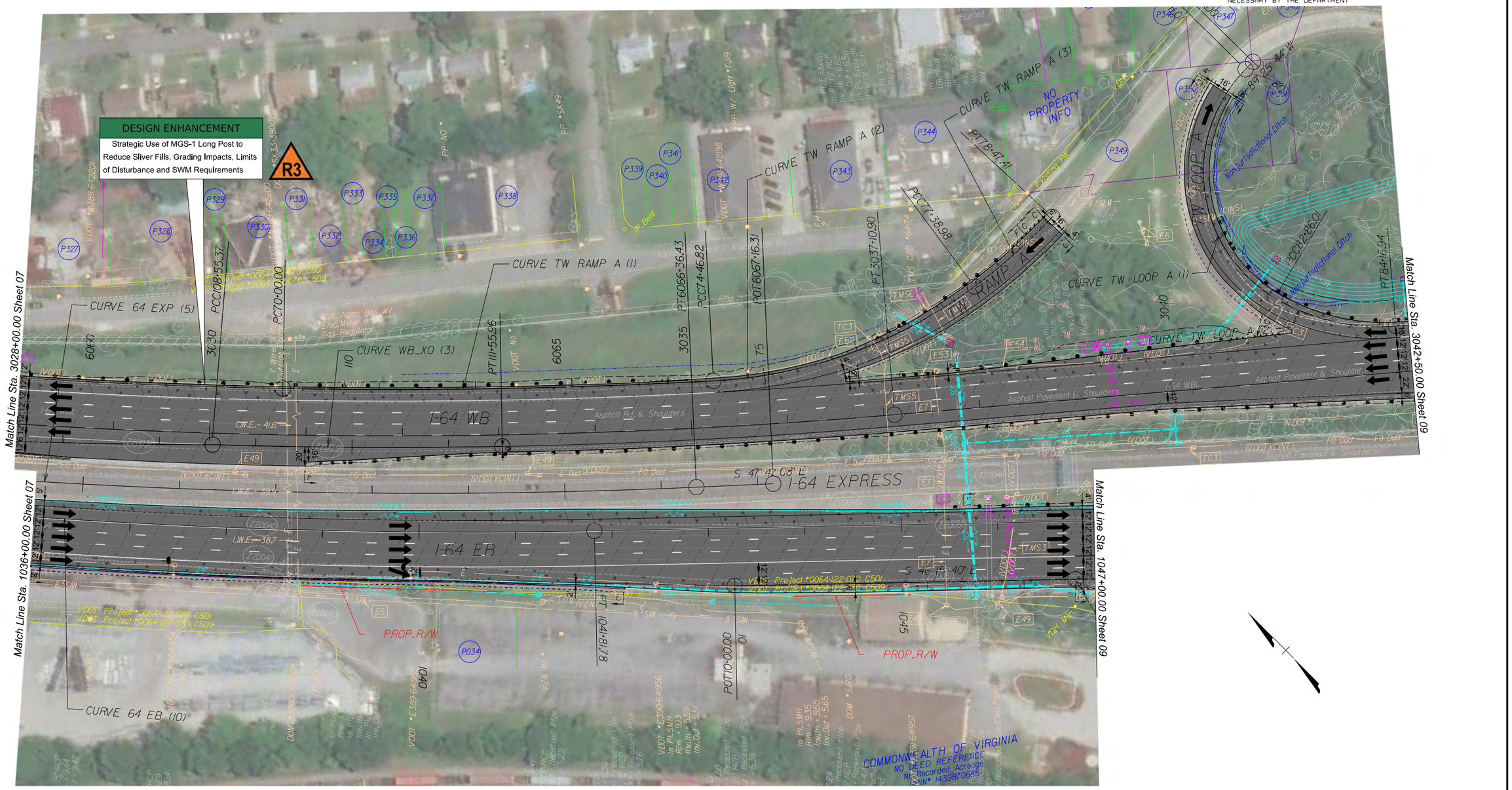
Note:
Impacted VDOT Electric Cable and Streetlight Electric Cables to be relocated by th DBT in conjunction with the proposed ITS Plans.

SCALE	PROJECT	SHEET NO.
0 50' 100'	0064-122-470,	7

PROJECT MANAGER _____
SURVEYED BY, DATE _____
DESIGN BY _____
SUBSURFACE UTILITY BY, DATE _____

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	64	0064-122-470, C501, RW201	8

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT



Legend

- *Denotes Full Depth Pavement*
- *Denotes Mill & Overlay*
- *Denotes Demolition of Pavement*
- *Denotes Proposed Bridge*
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- *Denotes Proposed Lighting*
- *Denotes Proposed Navy Fence*
- *Denotes Proposed Drainage/SWM*
- *Denotes Exist. Utilities*

Note:
Impacted VDOT Electric Cable and Streetlight Electric Cables to be relocated by th DBT in conjunction with the proposed ITS Plans.

SCALE	PROJECT	SHEET NO.
0 50' 100'	0064-122-470,	8

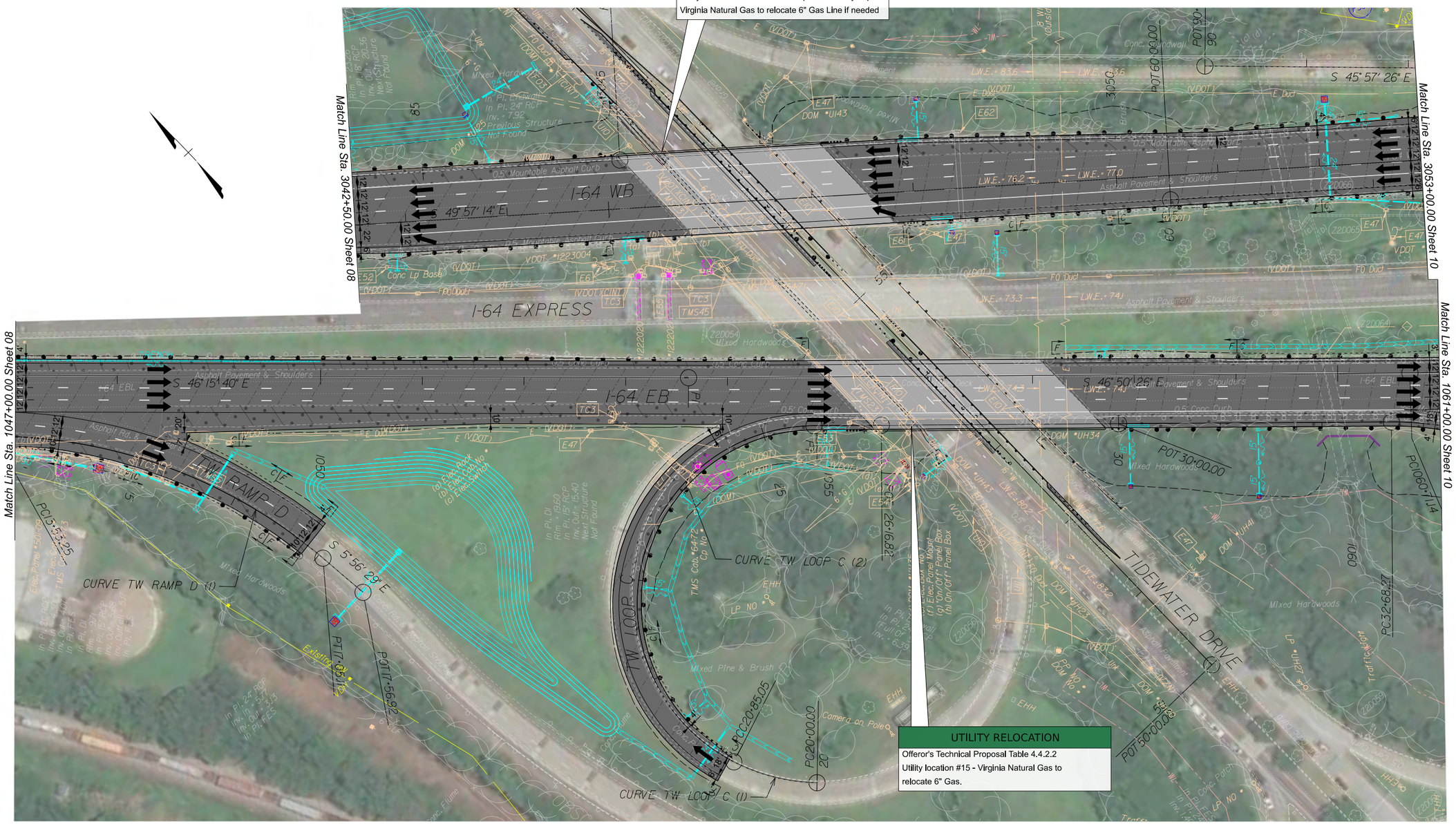
PROJECT MANAGER _____
SURVEYED BY, DATE _____
DESIGN BY _____
SUBSURFACE UTILITY BY, DATE _____

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	64	0064-122-470, C501, RW201	9

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

UTILITY RELOCATION

Offeror's Technical Proposal Table 4.4.2.2
Utility location #19 - Test Hole required to verify depth.
Virginia Natural Gas to relocate 6" Gas Line if needed



UTILITY RELOCATION

Offeror's Technical Proposal Table 4.4.2.2
Utility location #15 - Virginia Natural Gas to relocate 6" Gas.

Legend

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- *Denotes Mill & Overlay*
- *Denotes Demolition of Pavement*
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- Denotes Prop. R/W (Offeror's Prop. R/W Is the same as RFP)
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- *Denotes Proposed Lighting*
- *Denotes Proposed Navy Fence*
- *Denotes Proposed Drainage/SWM*
- *Denotes Exist. Utilities*

Note:
Impacted VDOT Electric Cable and Streetlight Electric Cables to be relocated by th DBT in conjunction with the proposed ITS Plans.

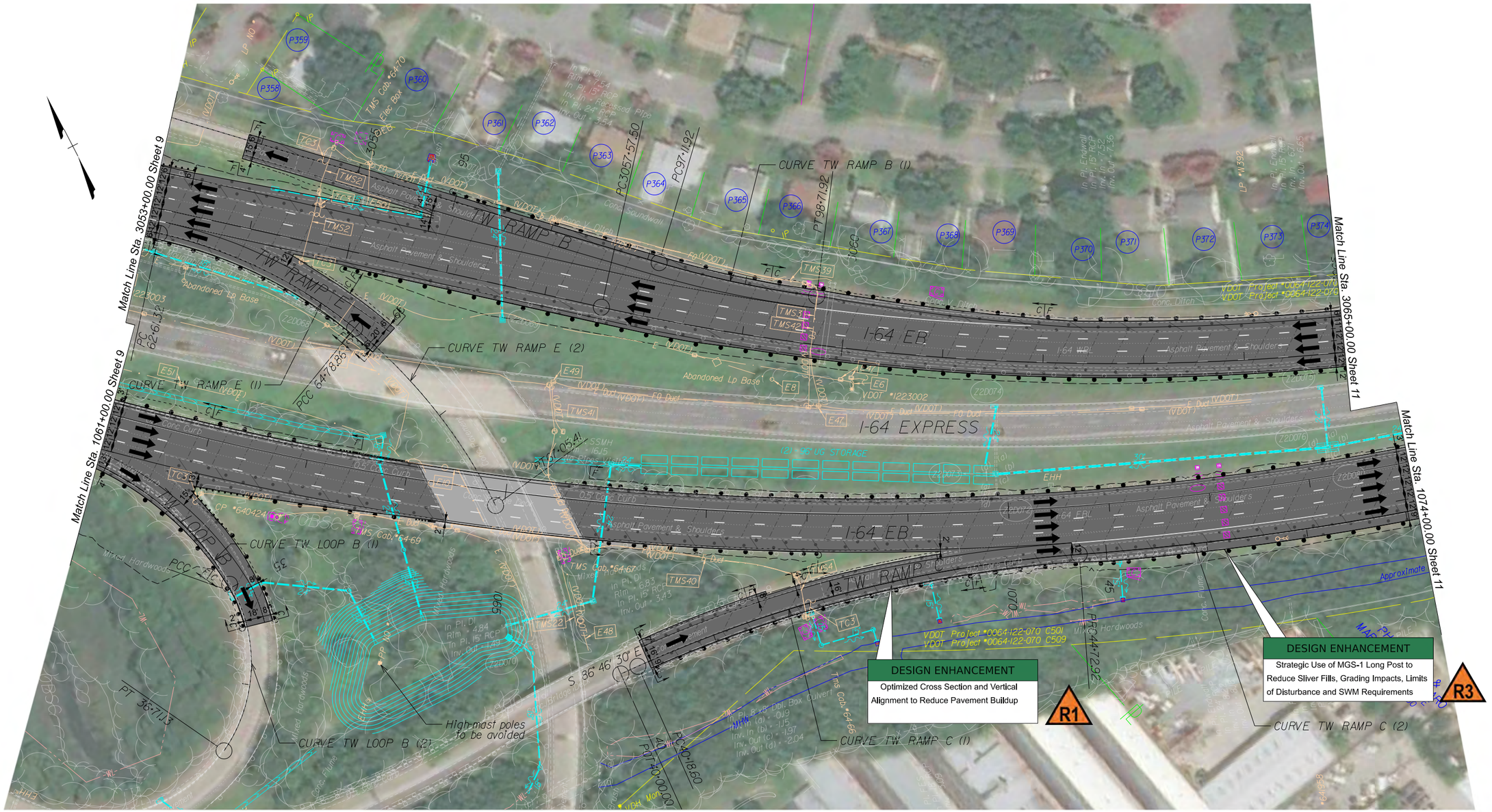
SCALE	PROJECT	SHEET NO.
0 50' 100'	0064-122-470,	9

WAGMAN General Construction | Heavy Civil | Geotechnical
FAY SOUTHEAST S&B USA CONSTRUCTION
WALLACE MONTGOMERY

PROJECT MANAGER _____
SURVEYED BY, DATE _____
DESIGN BY _____
SUBSURFACE UTILITY BY, DATE _____

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	64	0064-122-470, C501, RW201	10

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT



Legend

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- *Denotes Proposed Drainage/SWM*
- *Denotes Exist. Utilities*

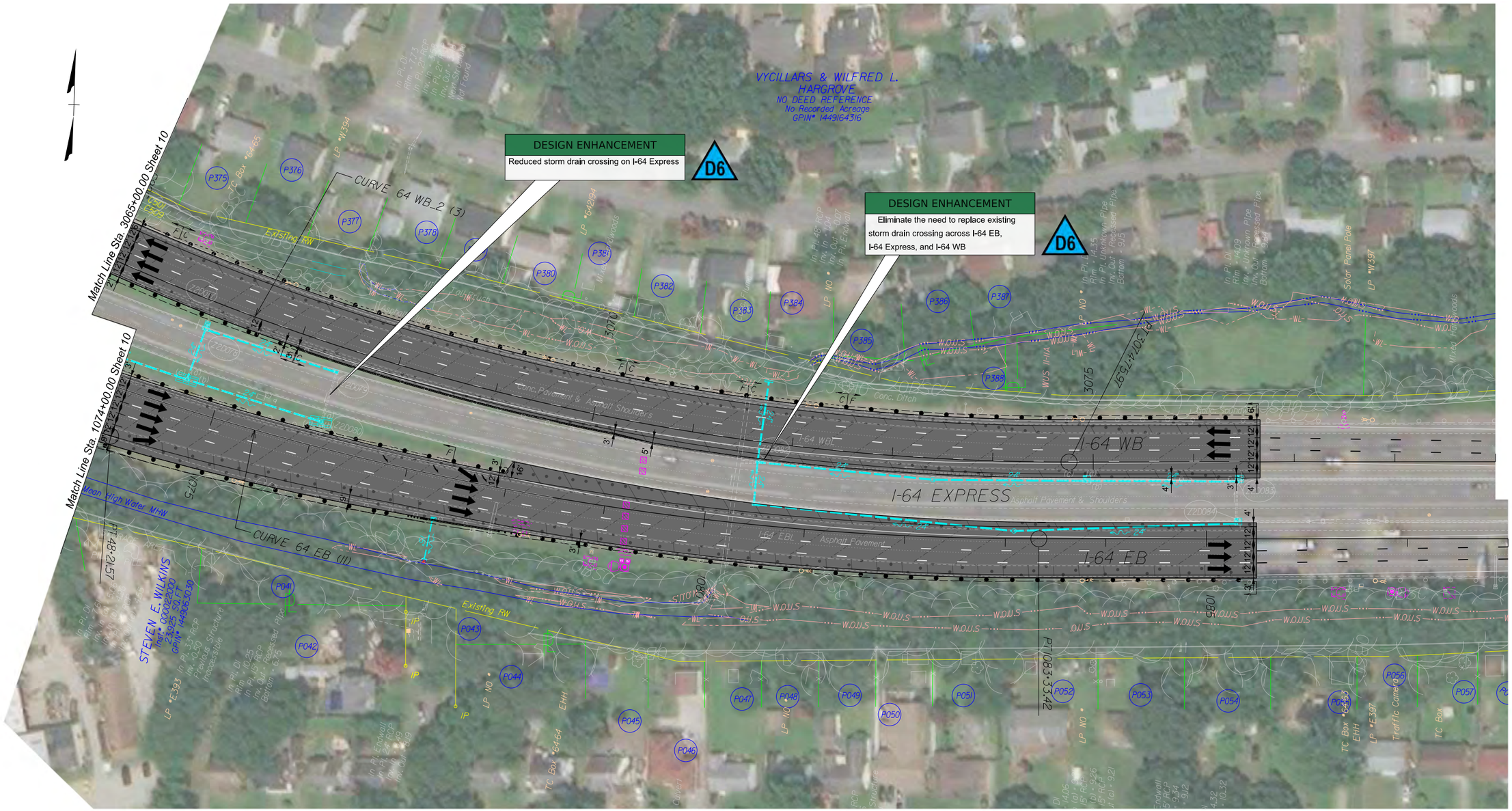
Note:
Impacted VDOT Electric Cable and Streetlight Electric Cables to be relocated by th DBT in conjunction with the proposed ITS Plans.

SCALE	PROJECT	SHEET NO.
0 50' 100'	0064-122-470,	10

PROJECT MANAGER _____
SURVEYED BY, DATE _____
DESIGN BY _____
SUBSURFACE UTILITY BY, DATE _____

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	64	0064-122-470, C501, RW201	11

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT



Legend

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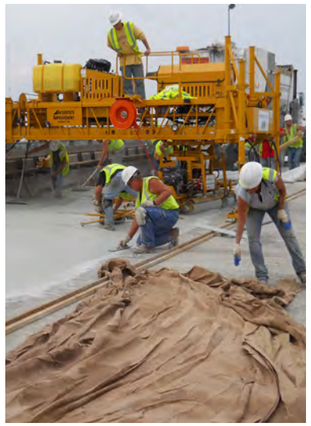
- *Denotes Exist. Utilities*

Note:
Impacted VDOT Electric Cable and Streetlight Electric Cables to be relocated by th DBT in conjunction with the proposed ITS Plans.

SCALE	PROJECT	SHEET NO.
0 50' 100'	0064-122-470,	11



4.3.2

Conceptual Structural Plans

Joint Venture

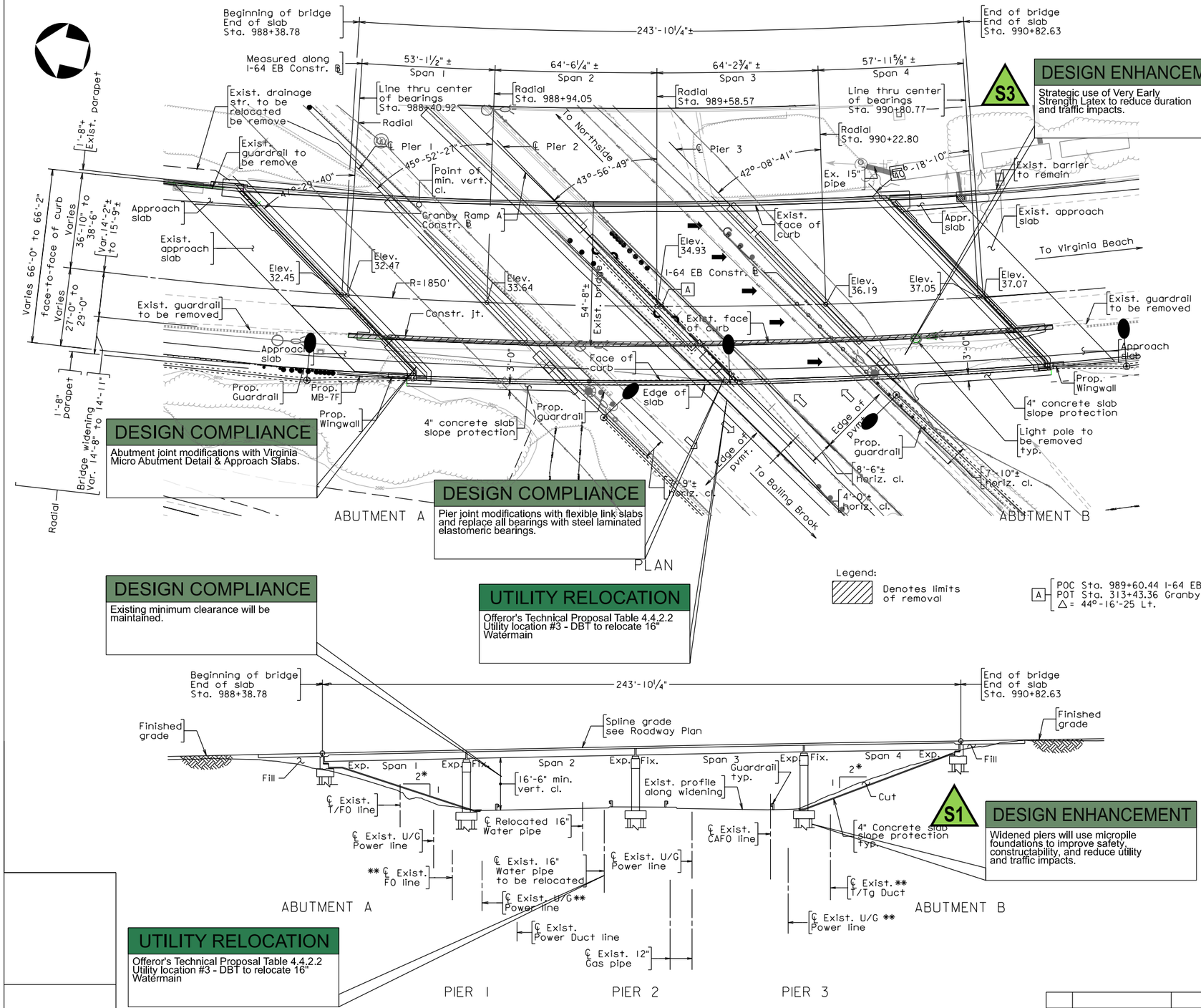
WAGMAN

FAY SOUTHEAST
S&B USA CONSTRUCTION

Lead Engineer

WALLACE MONTGOMERY

STATE	FEDERAL AID		STATE		SHEET NO.
	ROUTE	PROJECT	ROUTE	PROJECT	
VA.	—	NHPP-064-3(520)	64	0064-122-470, BXXX	1
Federal Structure No. 000000000020902			FHWA Construction and Scour Code:		X27I-SN
Federal Stewardship and Oversight Code:			F0	UPC No.	119637



DEVELOPED SECTION ALONG WIDENING

* Normal to abutment. Slope to match existing.

** Utilities in conflict with the proposed foundations shall be relocated.

Scale: 1" = 20', unless otherwise shown

DESIGN EXCEPTION(S):

Stopping Sight Distance for I-64 GP lane pending VDOT approval.

Superelevation Rate on existing bridge pending VDOT approval.

Shoulder Width pending VDOT approval.

GENERAL NOTES:

Width: 65'-4" to 66'-5" face-to-face of curbs includes widening of 12'-6"± to 14'-2"± on the right side of traffic.

Span layout: 53'-1½"± - 64'-6¼"± - 64'-2¾"± - 57'-11⅝"±
Simple steel plate girder spans.

Capacity: HL-93 loading (widened portion only). HS20-44 for existing.

Specifications:

Construction: Virginia Department of Transportation Road and Bridge Specifications, 2020.

Design: AASHTO LRFD Bridge Design Specifications, 8th Edition, 2017; and VDOT Modifications.

Standards: Virginia Department of Transportation Road and Bridge Standards, 2016; including all current revision.

These plans are incomplete unless accompanied by the Supplemental Specifications and Special Provisions included in the contract documents.

Design loading includes 20 psf allowance for construction tolerances and construction methods.

Design loading includes 15 psf allowance for future wearing surface.

Bridge No. of existing bridge is 2876. Plan No. is 155-01 and 155-01A.

The existing structure is designated a Type B structure in accordance with Sec. 411.

Note:
Impacted VDOT Electric Cable and Streetlight Electric Cables to be relocated by the DBT in conjunction with the proposed ITS Plans.

VDOT

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

PROPOSED BRIDGE ON
I-64 EB OVER GRANBY STREET
CITY OF NORFOLK
2.63 MI. E. OF RTE. 60 (4TH VIEW STREET)
PROJ. 0064-122-470, BXXX

WALLACE MONTGOMERY
RICHMOND, VA
STRUCTURAL ENGINEER

PLANS BY:	WALLACE MONTGOMERY
COORDINATED:	MATT DAVIS, P.E.
SUPERVISED:	DAVID BORUSIEWICZ, P.E.
DESIGNED:	PETER ERONY, P.E.
DRAWN:	CHRIS ANDERSON
CHECKED:	

No.	Description	Date
REVISIONS		
For Table of Revisions, see Sheet 2.		

Recommended for Approval: _____ _____
District Project Development Engineer — Date

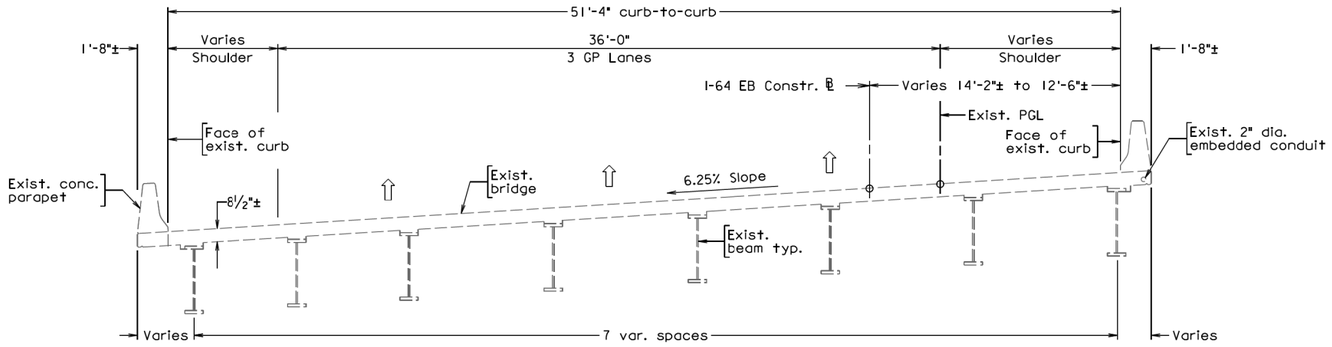
Approved: _____ _____
District Administrator — Date

Date: _____

155-01B

Sheet 1 of

STATE	FEDERAL AID		STATE		SHEET
	ROUTE	PROJECT	ROUTE	PROJECT	NO.
VA.	—		64	0064-122-470, BXXX	2



EXISTING TRANSVERSE SECTION

DESIGN COMPLIANCE

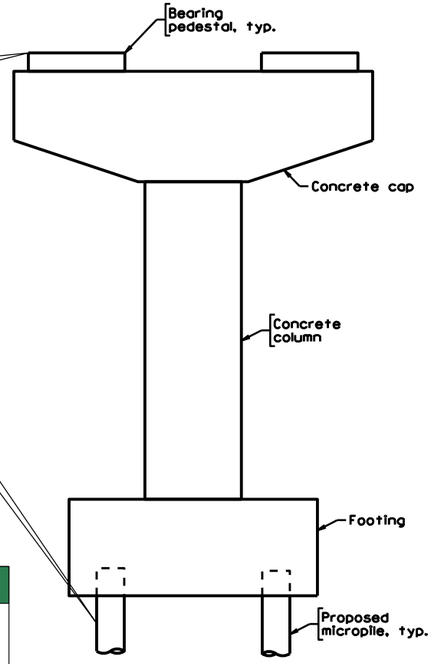
Pier joint modifications with flexible link slabs and replace all bearings with steel laminated elastomeric bearings.

S3 DESIGN ENHANCEMENT

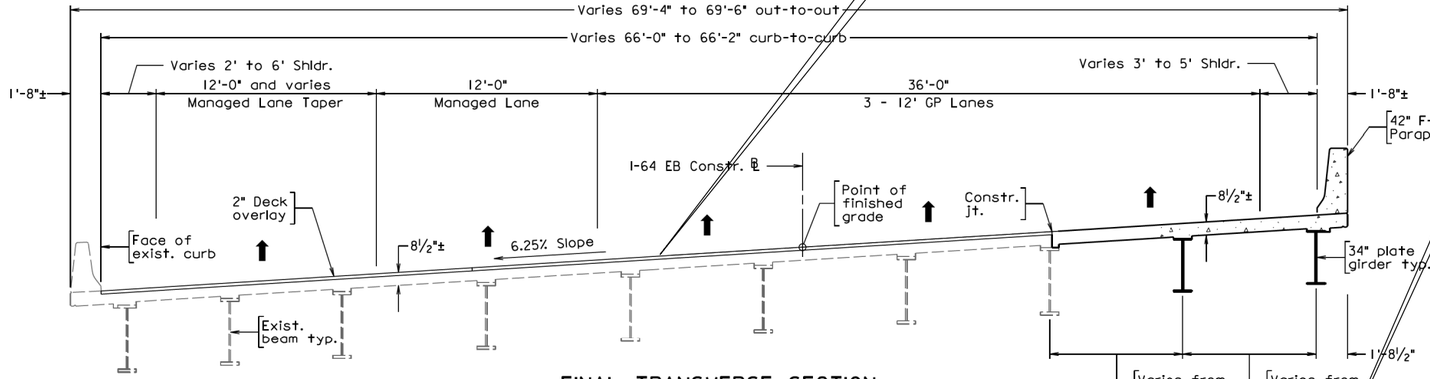
Strategic use of Very Early Strength Latex to reduce duration and traffic impacts.

S1 DESIGN ENHANCEMENT

Widened piers will use micropile foundations to improve safety, constructability, and reduce utility and traffic impacts.



PROPOSED PIER WIDENING



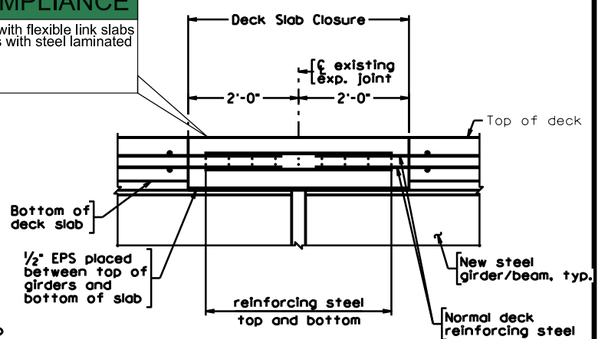
FINAL TRANSVERSE SECTION

DESIGN COMPLIANCE

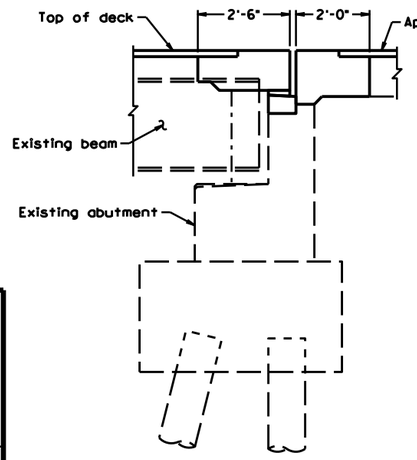
Abutment joint modifications with Virginia Micro Abutment Detail & Approach Slabs.

DESIGN COMPLIANCE

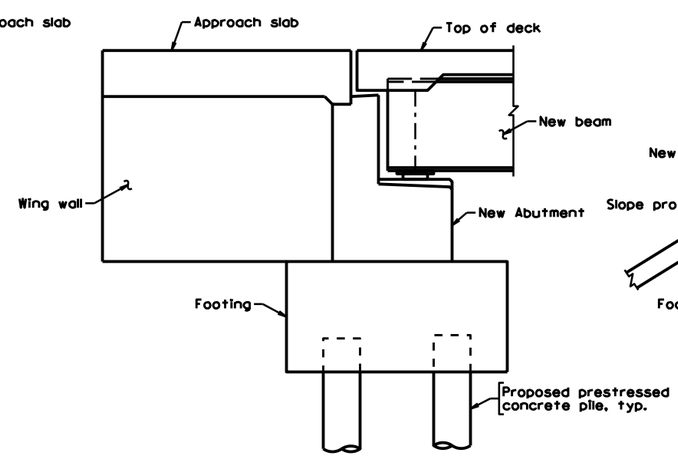
Pier joint modifications with flexible link slabs and replace all bearings with steel laminated elastomeric bearings.



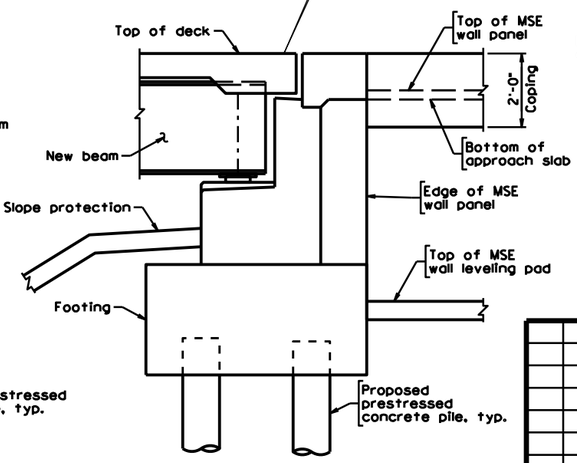
FLEXIBLE LINK SLAB DETAIL



MODIFIED EXISTING ABUTMENT SECTION



PROPOSED ABUTMENT A SECTION



PROPOSED ABUTMENT B SECTION

Scale: ¼" = 1'-0", unless otherwise noted

Bonnie Montgomery
Richmond, VA
Structural Engineer

No.	Description	Date
Revisions		

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

STRUCTURE AND BRIDGE DIVISION

I-64 EB OVER GRANBY STREET
TYPICAL SECTIONS & DETAILS

Designed: M.F.D.	Date	Plan No.	Sheet No.
Drawn: C.G.L.	June 2022	155-01B	2 of 2
Checked: D.A.B.			

STATE	FEDERAL AID		STATE		SHEET NO.
	ROUTE	PROJECT	ROUTE	PROJECT	
VA.	—	NHPP-064-3(520)	64	0064-122-470, BXXX	1
Federal Structure No. 000000000020900			FHWA Construction and Scour Code:		X271-SN
Federal Stewardship and Oversight Code:		FO		UPC No. 119637	

DESIGN EXCEPTION(S):

Stopping Sight Distance for I-64 GP lane pending VDOT approval.

Superelevation Rate on existing bridge pending VDOT approval.

Shoulder Width pending VDOT approval.

GENERAL NOTES:

Width: 53'-3" to 53'-11" face-to-face of curbs, including 18'-5" to 19'-3" widening on right of traffic.

Span layout: 74'-10"± - 114'-6"± - 110'-11⅝"± - 112'-5½"± simple steel plate girder spans.

Capacity: HL-93 loading (widened portion only). HS20-44 for existing.

Specifications:

Construction: Virginia Department of Transportation Road and Bridge Specifications, 2020.

Design: AASHTO LRFD Bridge Design Specifications, 8th Edition, 2017; and VDOT Modifications.

Standards: Virginia Department of Transportation Road and Bridge Standards, 2016; including all current revision.

These plans are incomplete unless accompanied by the Supplemental Specifications and Special Provisions included in the contract documents.

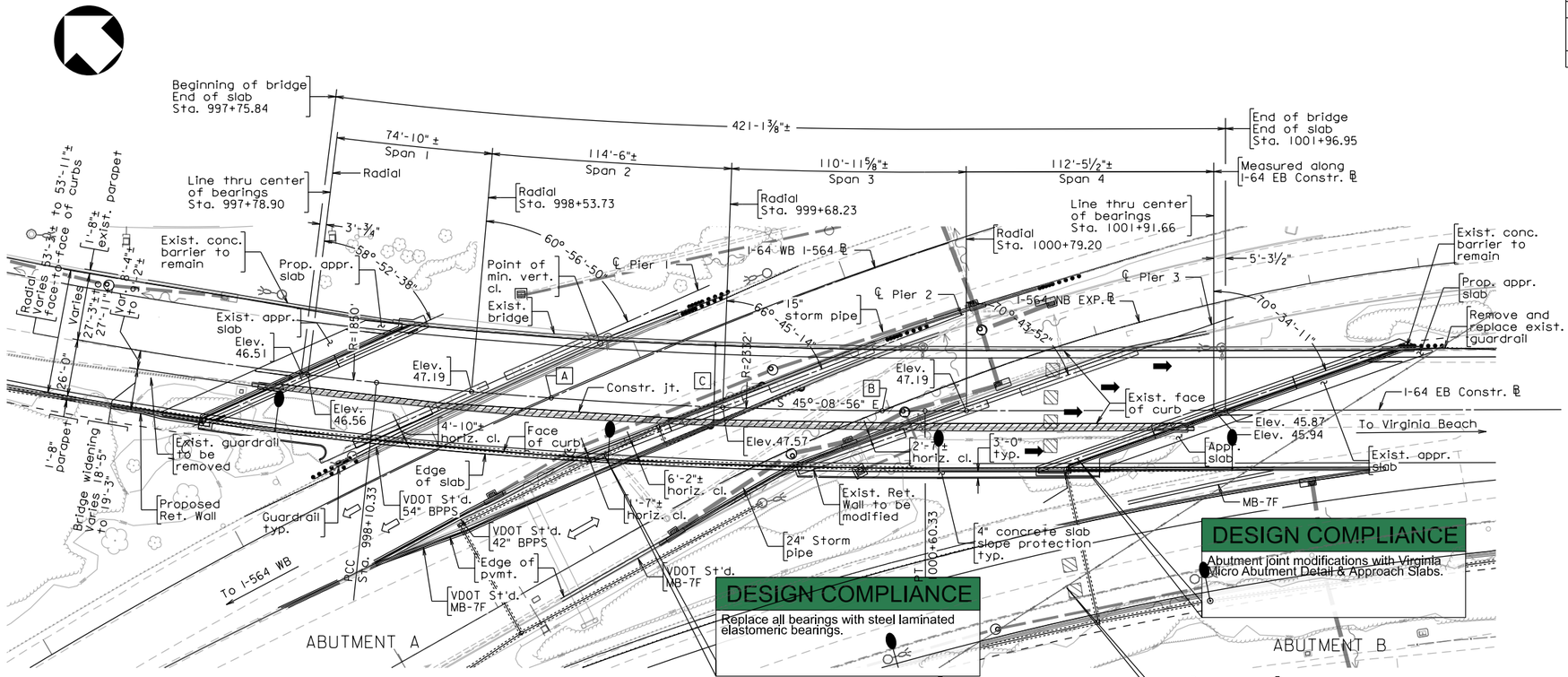
Design loading includes 20 psf allowance for construction tolerances and construction methods.

Design loading includes 15 psf allowances for future wearing surface.

Bridge No. of existing bridge is 122-2873. Plan No. is 155-02.

The existing structure is designated a Type B structure in accordance with Sec. 411.

Note:
Impacted VDOT Electric Cable and Streetlight Electric Cables to be relocated by the DBT in conjunction with the proposed ITS Plans.



DEVELOPED SECTION ALONG WIDENING

* Normal to abutment. Slope to match existing.

** Utilities in conflict with the proposed foundations shall be relocated.

Scale: 1" = 30'

COMMONWEALTH OF VIRGINIA

DEPARTMENT OF TRANSPORTATION

PROPOSED BRIDGE ON
I-64 EB OVER I-564
CITY OF NORFOLK
0.1 MI. E. OF RTE. 460 (GRANBY STREET)
PROJ. 0064-122-470, BXXX

WALLACE MONTGOMERY
RICHMOND, VA
STRUCTURAL ENGINEER

PLANS BY:	WALLACE MONTGOMERY
COORDINATED:	MATT DAVIS, P.E.
SUPERVISED:	DAVID BORUSIEWICZ, P.E.
DESIGNED:	PETER ERONY, P.E.
DRAWN:	CHRIS ANDERSON
CHECKED:	

No.	Description	Date
REVISIONS		
For Table of Revisions, see Sheet 2.		

Recommended for Approval: _____ District Project Development Engineer Date

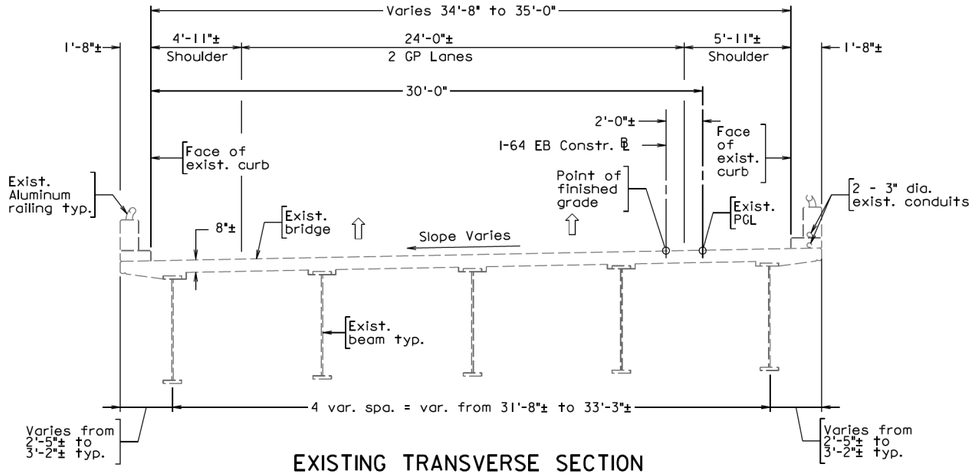
Approved: _____ District Administrator Date

Date: _____

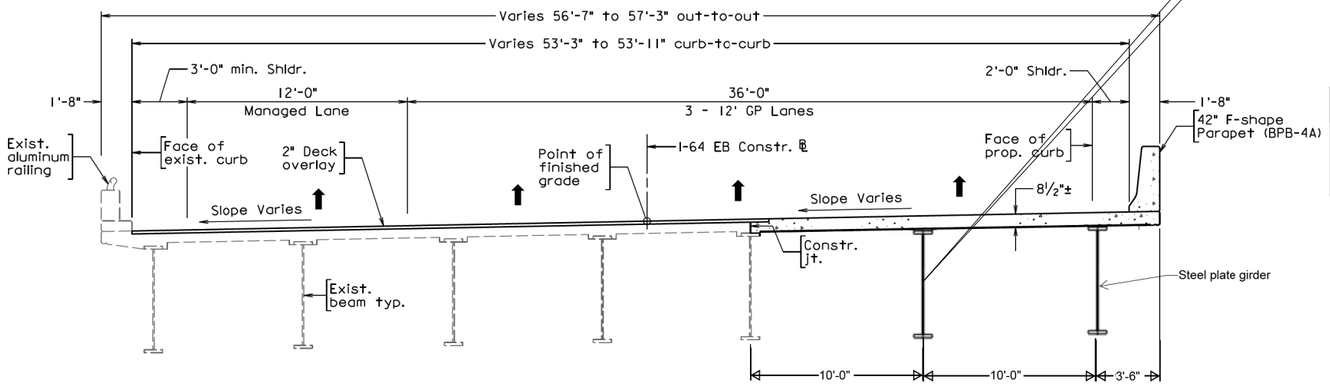
155-02A

Sheet 1 of

STATE	FEDERAL AID		STATE		SHEET NO.
	ROUTE	PROJECT	ROUTE	PROJECT	
VA.	—		64	0064-122-470, BXXX	2



EXISTING TRANSVERSE SECTION



FINAL TRANSVERSE SECTION

DESIGN COMPLIANCE

Replace all bearings with steel laminated elastomeric bearings.

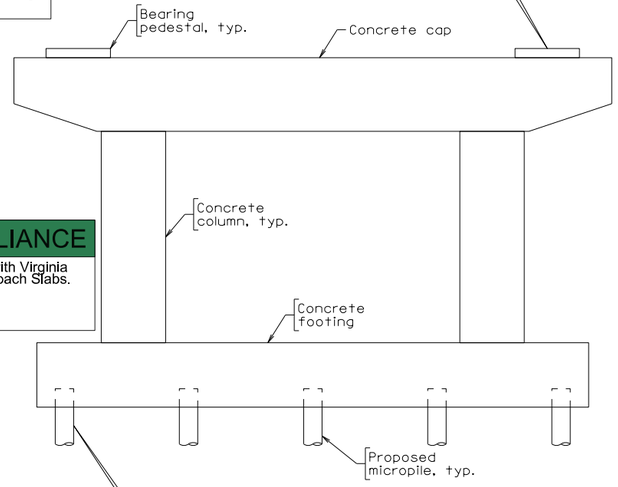
DESIGN ENHANCEMENT

S2

Widened superstructure will utilize one less girder line to reduce future maintenance and inspeciton associated with total steel area and number of bearings.

DESIGN COMPLIANCE

Abutment joint modifications with Virginia Micro Abutment Detail & Approach Slabs.



TYPICAL PROPOSED PIER ELEVATION

DESIGN ENHANCEMENT

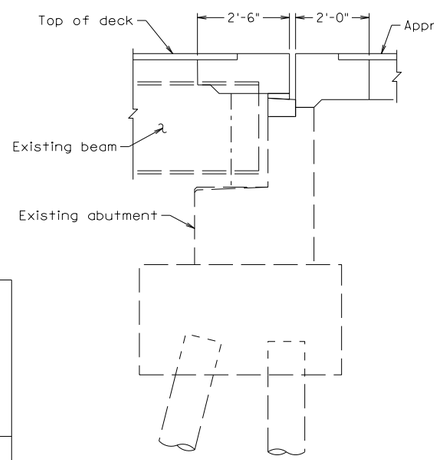
S1

Widened piers will use micropile foundations to improve safety, constructability, and reduce utility and traffic impacts.

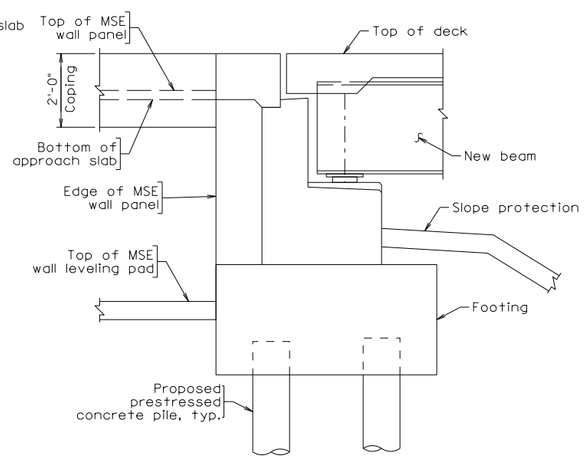
DESIGN ENHANCEMENT

S1

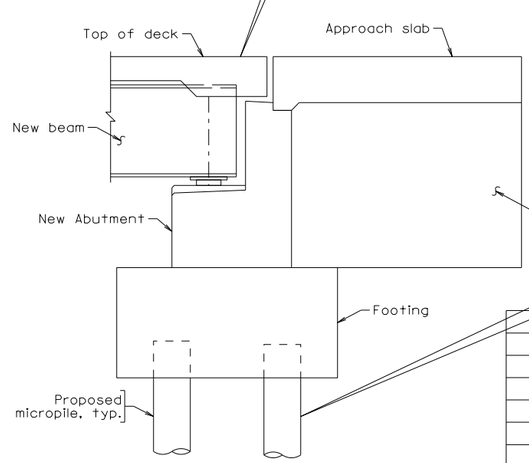
Widened abutment will use micropile foundations to improve safety, constructability, and reduce utility and traffic impacts.



MODIFIED EXISTING ABUTMENT SECTION



PROPOSED ABUTMENT A SECTION



PROPOSED ABUTMENT B SECTION

Scale: ¼" = 1'-0", unless otherwise noted

Wallace Montgomery
Richmond, VA
Structural Engineer

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

STRUCTURE AND BRIDGE DIVISION

I-64 EB OVER I-564
TYPICAL SECTIONS & DETAILS

No.	Description	Date
Revisions		

Designed: M.G.D.....
Drawn: .....S.W.A.....
Checked: .R.A.R.....

Date	Plan No.	Sheet No.
June 2022	155-02A	2 of 2

STATE	FEDERAL AID		STATE		SHEET NO.
	ROUTE	PROJECT	ROUTE	PROJECT	
VA.	—	NHPP-064-3(520)	64	0064-122-470, BXXX	1
Federal Structure No. 000000000020892			FHWA Construction and Scour Code:		X27I-SN
Federal Stewardship and Oversight Code:		F0		UPC No. 119637	

DESIGN EXCEPTION(S):

Shoulder Width pending VDOT approval.

Vertical Clearance pending VDOT approval.

GENERAL NOTES:

Width: 77'-0"± face-to-face of curbs, including 12'-5" to 12'-8" widening on right of traffic.

Span layout: 43'-6¼" - 53'-11⅛" - 53'-8½" - 32'-6⅜" simple steel plate girder spans.

Capacity: HL-93 loading (widened portion only). HS20-44 for existing.

Specifications:

Construction: Virginia Department of Transportation Road and Bridge Specifications, 2020.

Design: AASHTO LRFD Bridge Design Specifications, 8th Edition, 2017; and VDOT Modifications.

Standards: Virginia Department of Transportation Road and Bridge Standards, 2016; including all current revision.

These plans are incomplete unless accompanied by the Supplemental Specifications and Special Provisions included in the contract documents.

Design loading includes 20 psf allowance for construction tolerances and construction methods.

Design loading includes 15 psf allowances for future wearing surface.

Bridge No. of existing bridge is 2867. Plan No. is 209-05.

The existing structure is designated a Type B structure in accordance with Sec. 411.

Note:
Impacted VDOT Electric Cable and Streetlight Electric Cables to be relocated by the DBT in conjunction with the proposed ITS Plans.

DESIGN COMPLIANCE
Abutment joint modifications with Virginia Micro Abutment Detail & Approach Slabs.

DESIGN COMPLIANCE
Pier joint modifications with flexible link slabs and replace all bearings with steel laminated elastomeric bearings.

DESIGN ENHANCEMENT
Special Retaining Wall Design to avoid impacts to ITS Cabinets.

S4

PLAN

ABUTMENT A

ABUTMENT B

PIER 1

PIER 2

PIER 3

DEVELOPED SECTION ALONG WIDENING

Scale: 1/16" = 1'-0"

UTILITY RELOCATION
Offeror's Technical Proposal Table 4.4.2.2
Utility location #9 and #12 - Lumen and Segra to relocate Fiber Optic Lines

DESIGN ENHANCEMENT
Impacts avoided to existing 16" Watermain. Relocation not required.

S1

DESIGN COMPLIANCE
Existing minimum clearance will be maintained.

DESIGN ENHANCEMENT
Impacts avoided to existing electric duct adjacent to pier.

S1

UTILITY RELOCATION
Offeror's Technical Proposal Table 4.4.2.2
Utility location #9 and #12 - Lumen and Segra to relocate Fiber Optic Lines

DESIGN ENHANCEMENT
Impacts avoided to existing 16" Watermain. Relocation not required.

S1

DESIGN ENHANCEMENT
Widened piers will use micropile foundations to improve safety, constructability, and reduce utility and traffic impacts.

S1

* Utilities in conflict with the proposed foundations shall be relocated.

** Normal to abutment, Slope to match existing.

Legend:
Denotes limits of removal

No.	Description	Date

REVISIONS

For Table of Revisions, see Sheet 2.

WALLACE MONTGOMERY
RICHMOND, VA
STRUCTURAL ENGINEER

PLANS BY:	WALLACE MONTGOMERY
COORDINATED:	MATT DAVIS, P.E.
SUPERVISED:	DAVID BORUSIEWICZ, P.E.
DESIGNED:	PETER ERONY, P.E.
DRAWN:	CHRIS ANDERSON
CHECKED:	

VDOT

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

PROPOSED BRIDGE ON
I-64 EB OVER LITTLE CREEK ROAD
CITY OF NORFOLK
0.33 MI. EAST OF RTE. 460 (GRANBY STREET)
PROJ. 0064-122-470, BXXX

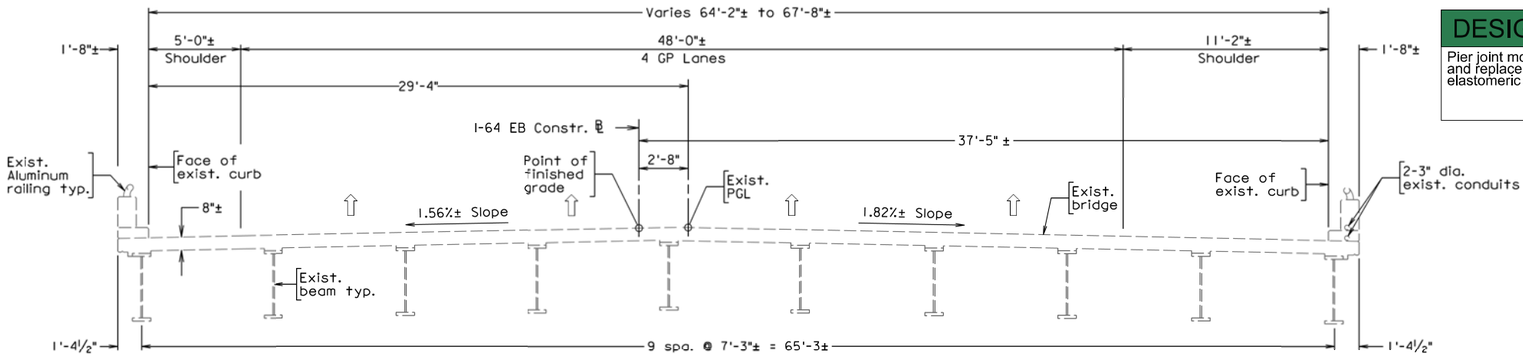
Recommended for Approval: _____ _____
District Project Development Engineer Date

Approved: _____ _____
District Administrator Date

209-05A

Date: _____ Sheet 1 of

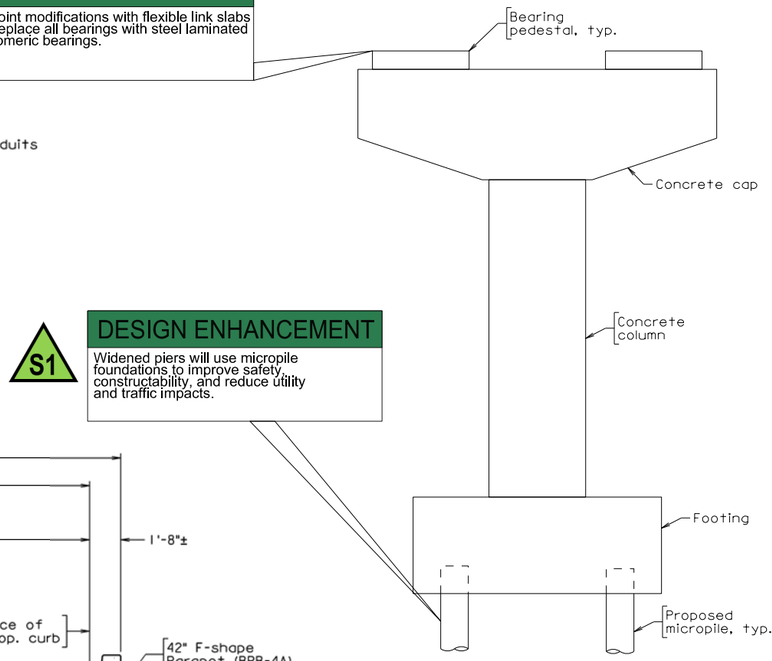
STATE	FEDERAL AID		STATE		SHEET NO.
	ROUTE	PROJECT	ROUTE	PROJECT	
VA.	—		64	0064-122-470, BXXX	2



EXISTING TRANSVERSE SECTION

DESIGN COMPLIANCE

Pier joint modifications with flexible link slabs and replace all bearings with steel laminated elastomeric bearings.

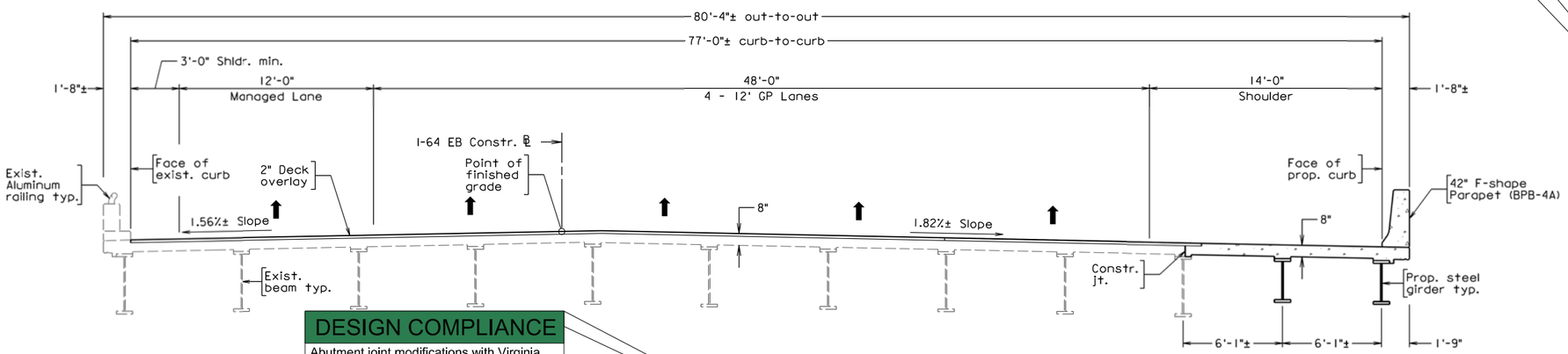


PROPOSED PIER WIDENING

DESIGN ENHANCEMENT

S1

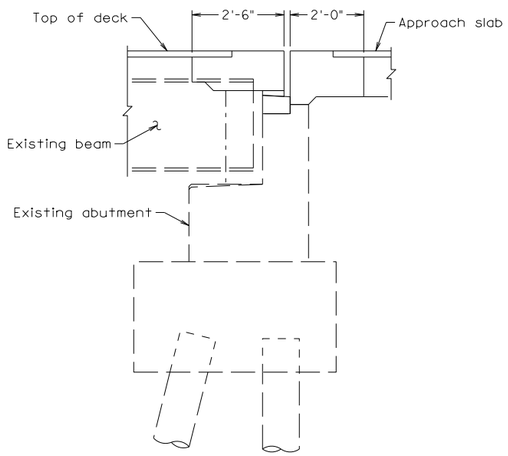
Widened piers will use micropile foundations to improve safety, constructability, and reduce utility and traffic impacts.



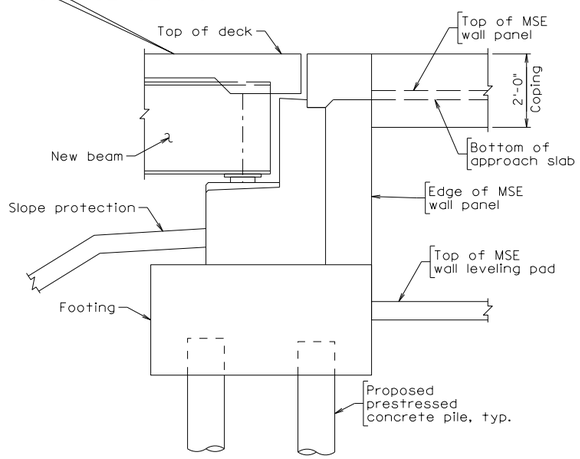
FINAL TRANSVERSE SECTION

DESIGN COMPLIANCE

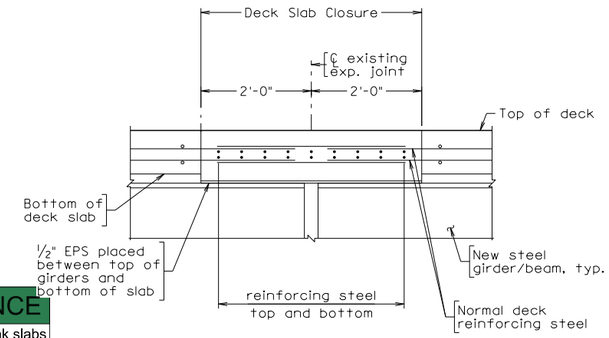
Abutment joint modifications with Virginia Micro Abutment Detail & Approach Slabs.



MODIFIED EXISTING ABUTMENT SECTION



PROPOSED ABUTMENT SECTION



DESIGN COMPLIANCE

Pier joint modifications with flexible link slabs and replace all bearings with steel laminated elastomeric bearings.

FLEXIBLE LINK SLAB DETAIL

Scale: ¼" = 1'-0", unless otherwise noted

Wallace Montgomery
Richmond, VA
Structural Engineer

No.	Description	Date
Revisions		

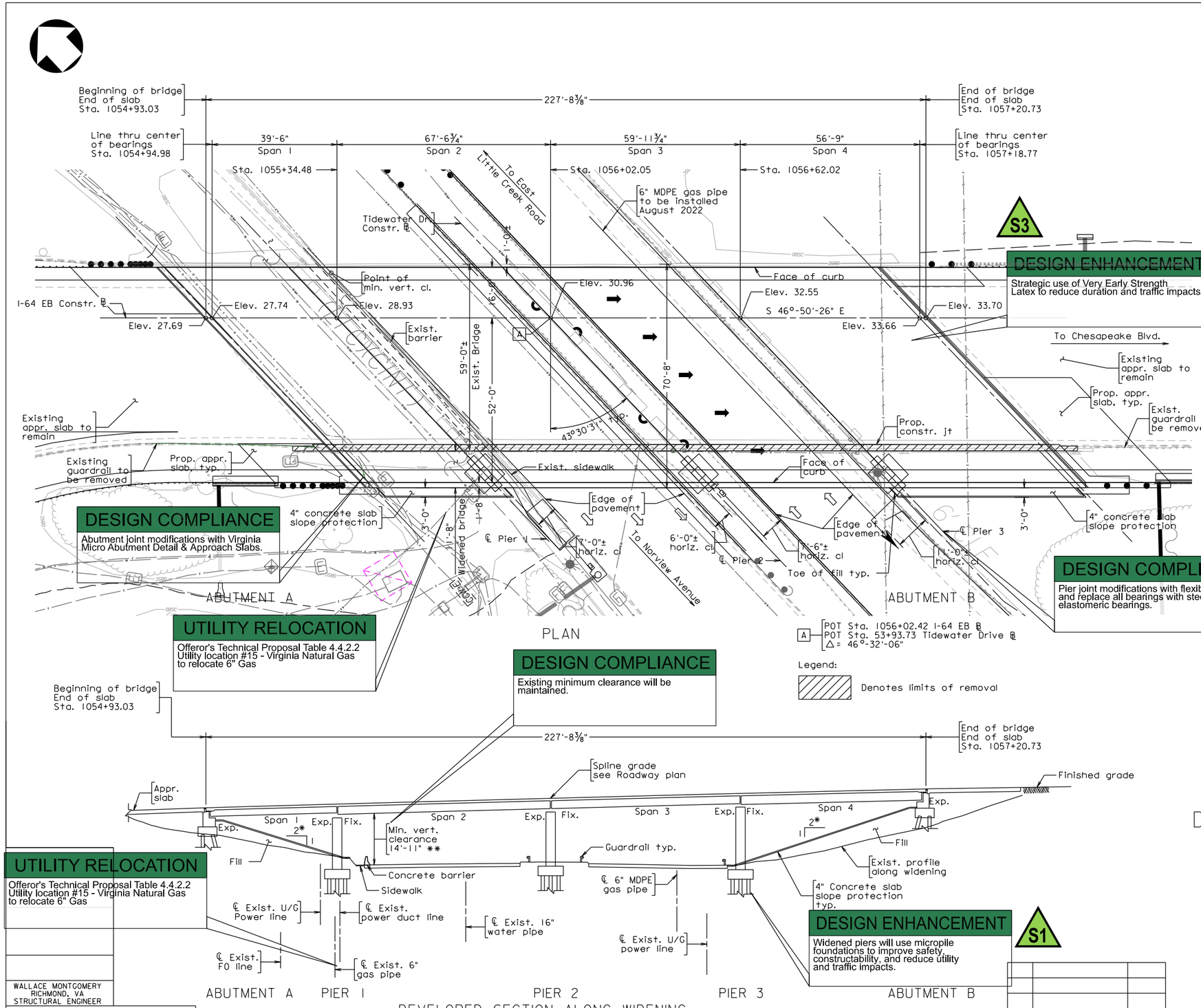
COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

STRUCTURE AND BRIDGE DIVISION

I-64 EB OVER LITTLE CREEK ROAD
TYPICAL SECTIONS & DETAILS

Designed: M.F.D.	Date	Plan No.	Sheet No.
Drawn: C.G.A.	June 2022	209-05A	2 of 2
Checked: R.J.B.			

STATE	FEDERAL AID		STATE		SHEET NO.
	ROUTE	PROJECT	ROUTE	PROJECT	
VA.	—	NHPP-064-3(520)	64	0064-122-470, BXXX	1
Federal Structure No. 000000000020841			FHWA Construction and Scour Code:		X27I-SN
Federal Stewardship and Oversight Code:		FO		UPC No. 119637	



* Normal to abutment, slope to match existing.

** Minimum vertical clearance based on survey.

Scale: 1/16" = 1'-0"

WALLACE MONTGOMERY
RICHMOND, VA
STRUCTURAL ENGINEER

PLANS BY:	WALLACE MONTGOMERY
COORDINATED:	MATT DAVIS, P.E.
SUPERVISED:	DAVID BORUSIEWICZ, P.E.
DESIGNED:	PETER ERONY, P.E.
DRAWN:	CHRIS ANDERSON
CHECKED:	

No.	Description	Date
REVISIONS		
For Table of Revisions, see Sheet 2.		

DESIGN EXCEPTION(S):

Shoulder Width pending VDOT approval.

Vertical Clearance pending VDOT approval.

GENERAL NOTES:

Width: 68'-0" face-to-face of curbs. Includes widening of 11'-8" on the right of traffic.

Span layout: 39'-6" - 67'-6¾" - 59'-11¾" - 56'-9" simple steel plate girder spans.

Capacity: HL-93 loading (widened portion only). HS20-44 for existing.

Specifications:

Construction: Virginia Department of Transportation Road and Bridge Specifications, 2020.

Design: AASHTO LRFD Bridge Design Specifications, 8th Edition, 2017; and VDOT Modifications.

Standards: Virginia Department of Transportation Road and Bridge Standards, 2016; including all current revisions.

These plans are incomplete unless accompanied by the Supplemental Specifications and Special Provisions included in the contract documents.

Design loading includes 20 psf allowance for construction tolerances and construction methods.

Design loading includes 15 psf allowance for future wearing surface.

Bridge No. of existing bridge is 2814. Plan No. is 155-04, 155-04A and 155-04C.

The existing structure is designated a Type B structure in accordance with Sec. 411.

Note:
Impacted VDOT Electric Cable and Streetlight Electric Cables to be relocated by the DBT in conjunction with the proposed ITS Plans.

VDOT

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

PROPOSED BRIDGE ON
I-64 EB OVER TIDEWATER DRIVE
CITY OF NORFOLK
1.0 MI. NW OF CHESAPEAKE BLVD.
PROJ. 0064-122-470, BXXX

Recommended for Approval: _____ _____
District Project Development Engineer — Date

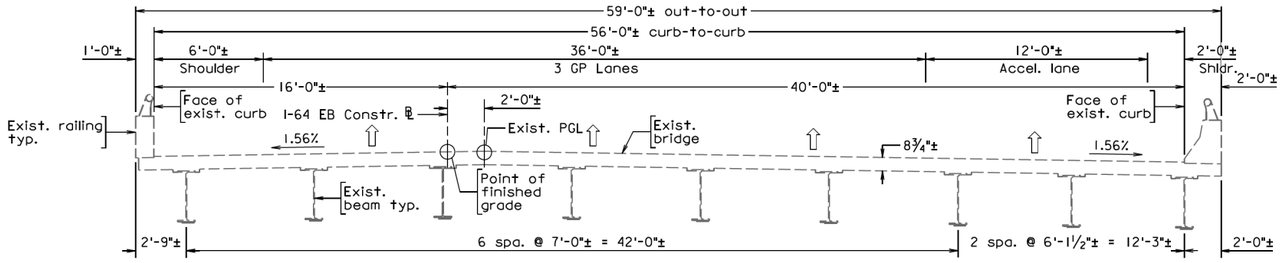
Approved: _____ _____
District Administrator — Date

155-04D

Date: _____ Sheet 1 of

WAGMAN General Construction | Heavy Civil | Geotechnical
FAY SOUTHEAST S&B USA CONSTRUCTION
WALLACE MONTGOMERY

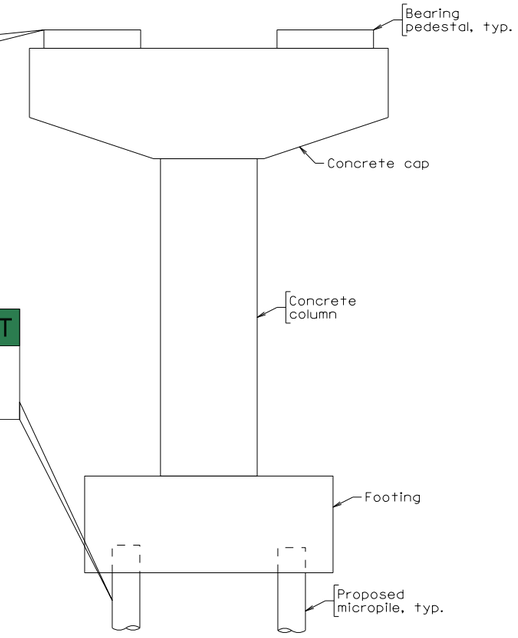
STATE	FEDERAL AID		STATE		SHEET NO.
	ROUTE	PROJECT	ROUTE	PROJECT	
VA.	—		64	0064-122-470, BXXX	2



EXISTING TRANSVERSE SECTION

DESIGN COMPLIANCE

Pier joint modifications with flexible link slabs and replace all bearings with steel laminated elastomeric bearings.



PROPOSED PIER WIDENING

S3 DESIGN ENHANCEMENT

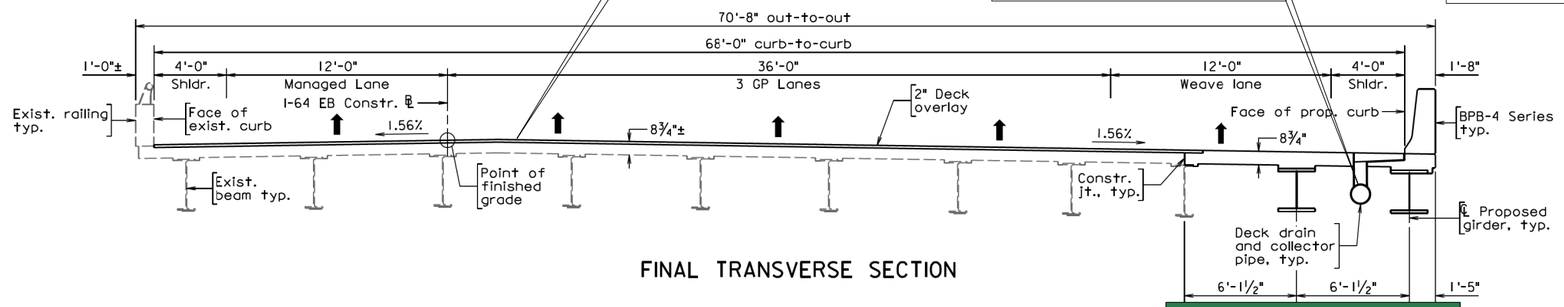
Strategic use of Very Early Strength Latex to reduce duration and traffic impacts.

DESIGN COMPLIANCE

Drainage systems will control spread and mitigate hydroplaning concerns.

S1 DESIGN ENHANCEMENT

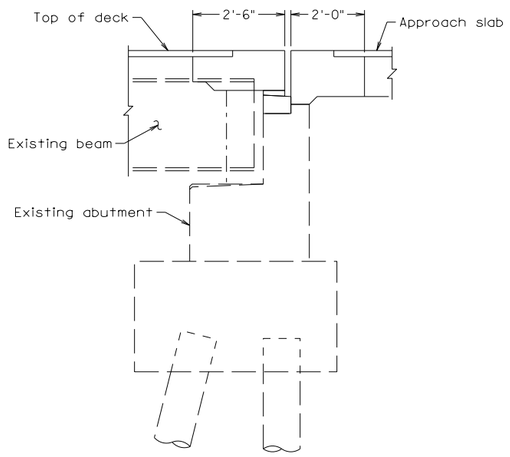
Widened piers will use micropile foundations to improve safety, constructability, and reduce utility and traffic impacts.



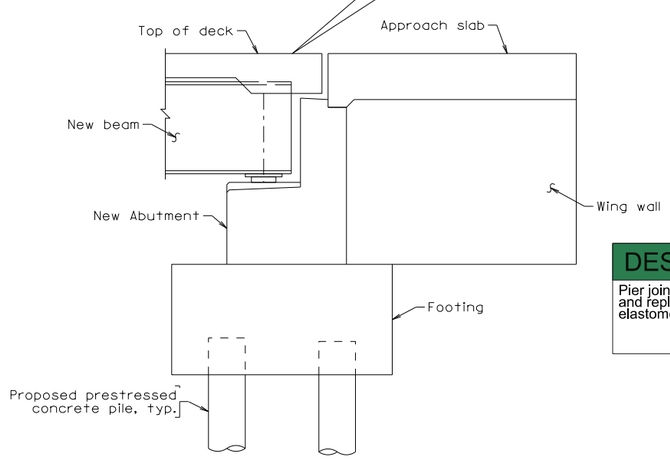
FINAL TRANSVERSE SECTION

DESIGN COMPLIANCE

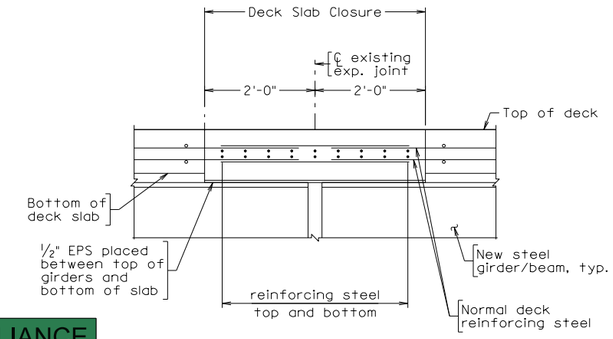
Abutment joint modifications with Virginia Micro Abutment Detail & Approach Slabs.



MODIFIED EXISTING ABUTMENT SECTION



PROPOSED ABUTMENT SECTION



FLEXIBLE LINK SLAB DETAIL

DESIGN COMPLIANCE

Pier joint modifications with flexible link slabs and replace all bearings with steel laminated elastomeric bearings.

Scale: ¼" = 1'-0", unless otherwise noted

Wallace Montgomery
Richmond, VA
Structural Engineer

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION
STRUCTURE AND BRIDGE DIVISION

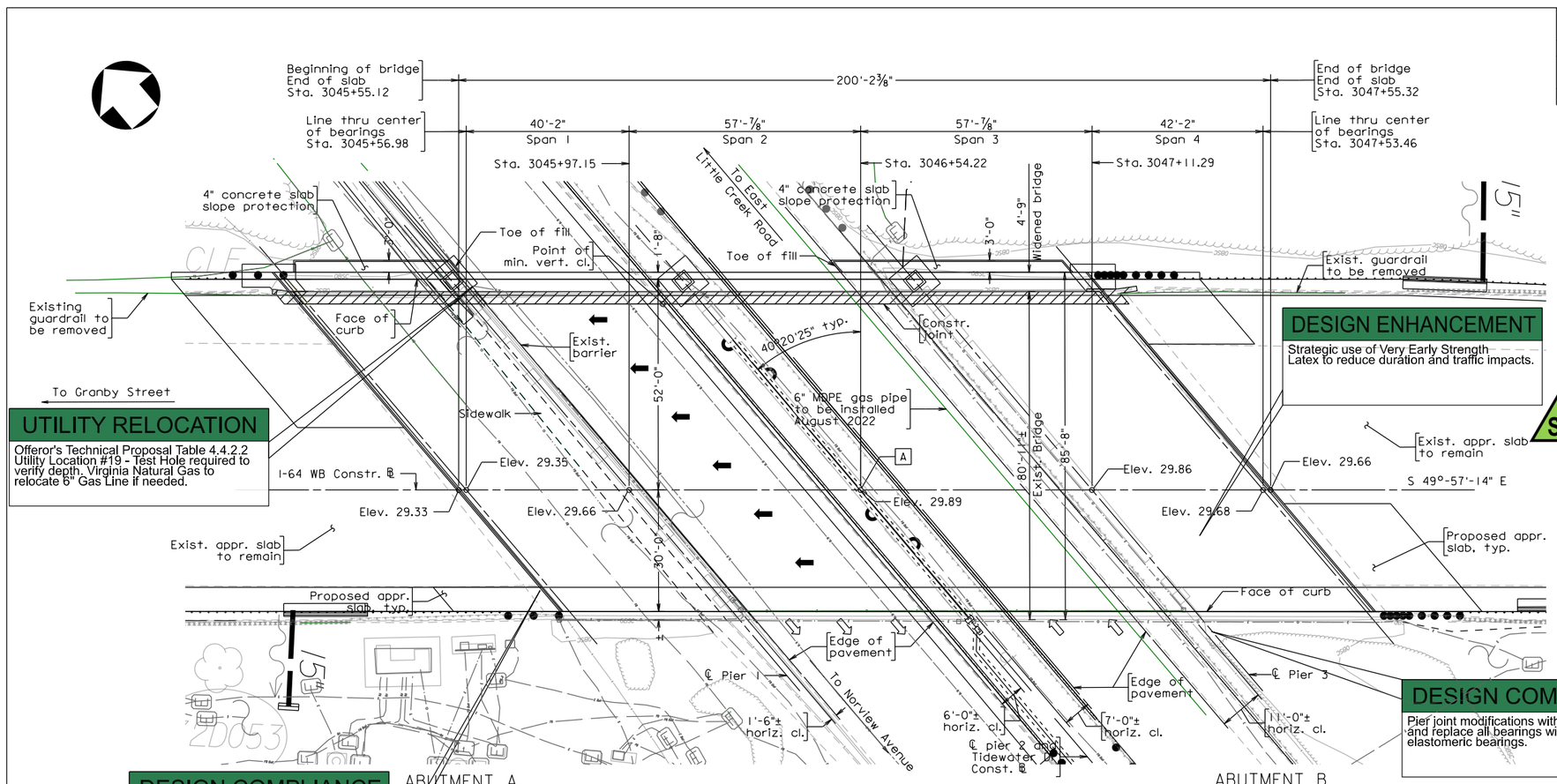
I-64 EB OVER TIDEWATER DR.
TYPICAL SECTIONS & DETAILS

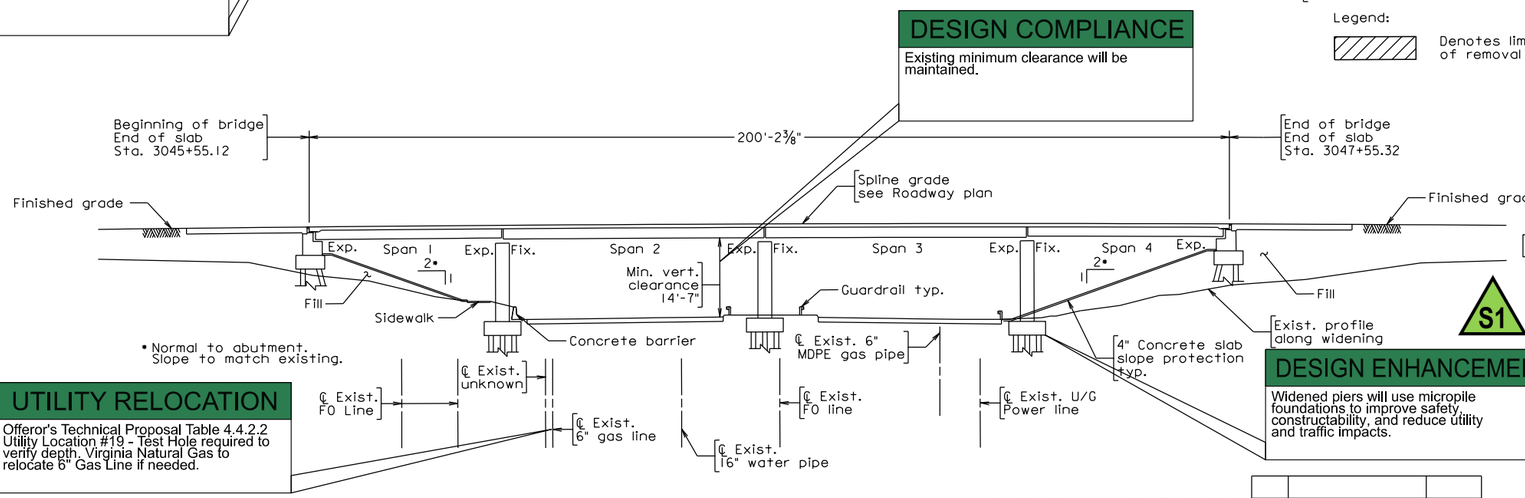
No.	Description	Date
Revisions		

Designed: M.A.D.
Drawn: S.G.A.
Checked: R.A.R.

Date	Plan No.	Sheet No.
June 2022	155-04D	2 of 2

STATE	FEDERAL AID		STATE		SHEET NO.
	ROUTE	PROJECT	ROUTE	PROJECT	
VA.	—	NHPP-064-3(520)	64	0064-122-470, BXXX	1
Federal Structure No. 000000000020843			FHWA Construction and Scour Code:		X271-SN
Federal Stewardship and Oversight Code:		FO		UPC No.	119637





DEVELOPED SECTION ALONG WIDENING

Scale: 1/16" = 1'-0"

DESIGN EXCEPTION(S):

Shoulder Width pending VDOT approval.

Vertical Clearance pending VDOT approval.

GENERAL NOTES:

Width: 82'-0" face-to-face of curbs. (includes widening of 4'-9" on the right of traffic)

Span layout: 40'-2" - 57'-⅞" - 57'-⅞" - 42'-2" simple steel plate girder spans

Capacity: HL-93 loading (widened portion only). HS20-44 for existing.

Specifications:

Construction: Virginia Department of Transportation Road and Bridge Specifications, 2020.

Design: AASHTO LRFD Bridge Design Specifications, 8th Edition, 2017; and VDOT Modifications.

Standards: Virginia Department of Transportation Road and Bridge Standards, 2016; including all current revisions.

These plans are incomplete unless accompanied by the Supplemental Specifications and Special Provisions included in the contract documents.

Design loading includes 20 psf allowance for construction tolerances and construction methods.

Design loading includes 15 psf allowance for future wearing surface.

Bridge No. of existing bridge is 2815. Plan No. is 155-04, 155-04A and 155-05B.

The existing structure is designated a Type B structure in accordance with Sec. 411.

VDOT

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

PROPOSED BRIDGE ON
I-64 WB OVER TIDEWATER DRIVE
CITY OF NORFOLK
1.0 MI. NW OF CHESAPEAKE BLVD.
PROJ. 0064-122-470, BXXX

Recommended for Approval: _____ _____
District Project Development Engineer — Date

Approved: _____ _____
District Administrator — Date

155-04E

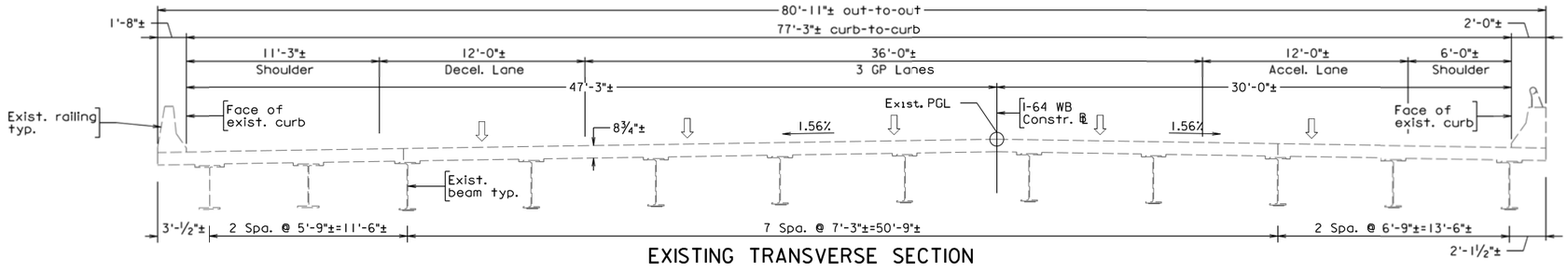
Date: _____ Sheet 1 of

No.	Description	Date
REVISIONS		
For Table of Revisions, see Sheet 2.		

WALLACE MONTGOMERY
RICHMOND, VA
STRUCTURAL ENGINEER

PLANS BY:	WALLACE MONTGOMERY
COORDINATED:	MATT DAVIS, P.E.
SUPERVISED:	DAVID BORUSIEWICZ, P.E.
DESIGNED:	PETER ERONY, P.E.
DRAWN:	CHRIS ANDERSON
CHECKED:	

STATE	FEDERAL AID		STATE		SHEET
	ROUTE	PROJECT	ROUTE	PROJECT	NO.
VA.	—		64	0064-122-470, BXXX	2



EXISTING TRANSVERSE SECTION

DESIGN COMPLIANCE

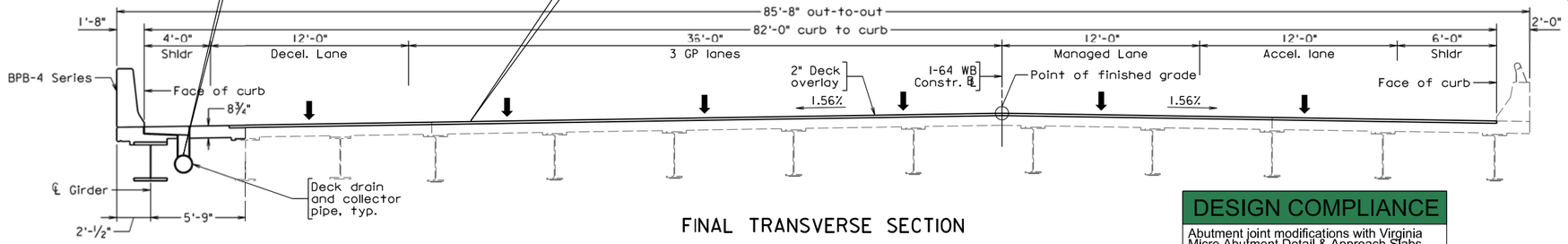
Drainage systems will control spread and mitigate hydroplaning concerns.

DESIGN ENHANCEMENT S3

Strategic use of Very Early Strength Latex to reduce duration and traffic impacts.

DESIGN ENHANCEMENT S1

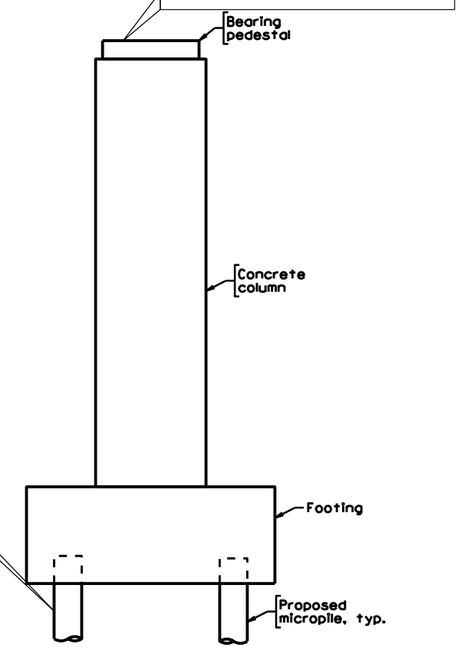
Widened piers will use micropile foundations to improve safety, constructability, and reduce utility and traffic impacts.



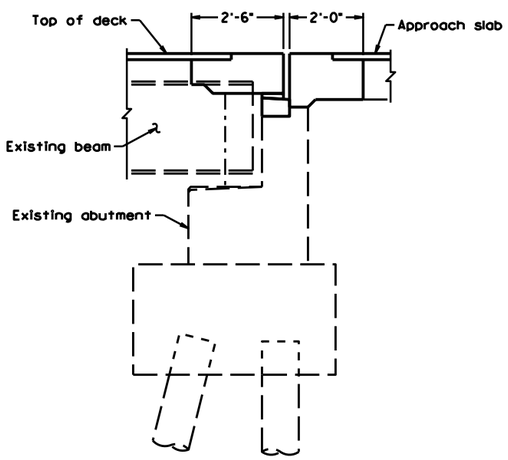
FINAL TRANSVERSE SECTION

DESIGN COMPLIANCE

Pier joint modifications with flexible link slabs and replace all bearings with steel laminated elastomeric bearings.



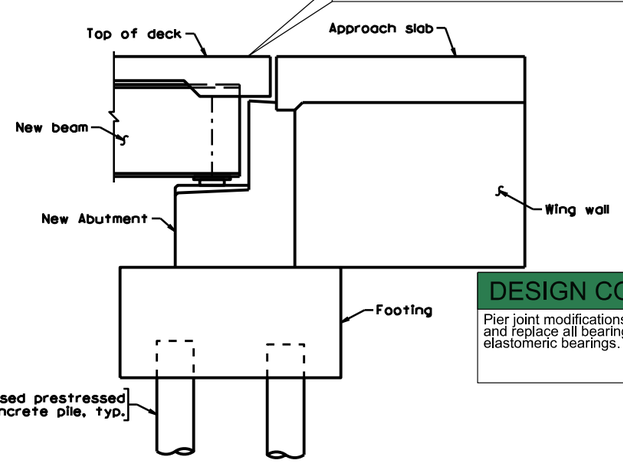
PROPOSED PIER WIDENING



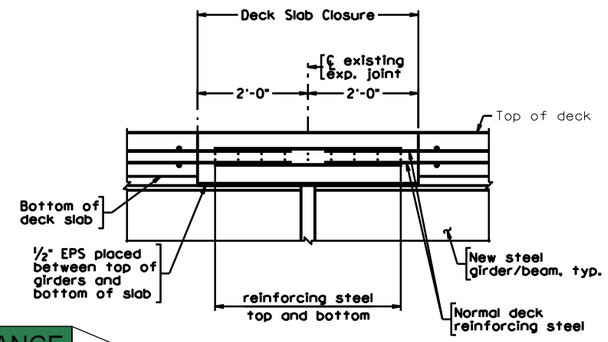
MODIFIED EXISTING ABUTMENT SECTION

DESIGN COMPLIANCE

Abutment joint modifications with Virginia Micro Abutment Detail & Approach Slabs.



PROPOSED ABUTMENT SECTION



DESIGN COMPLIANCE

Pier joint modifications with flexible link slabs and replace all bearings with steel laminated elastomeric bearings.

FLEXIBLE LINK SLAB DETAIL

Scale: ¼" = 1'-0", unless otherwise noted

Bonnie Montgomery
Richmond, VA
Structural Engineer

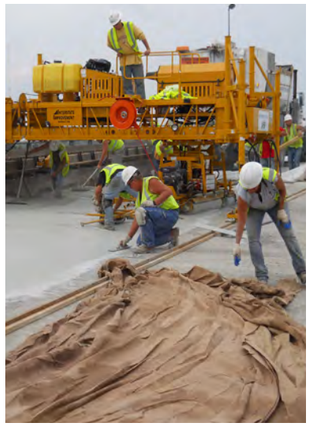
No.	Description	Date
Revisions		

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

STRUCTURE AND BRIDGE DIVISION

I-64 WB OVER TIDEWATER DR.
TYPICAL SECTIONS & DETAILS

Designed: M.F.A.	Date	Plan No.	Sheet No.
Drawn: C.G.A.	June 2022	155-04E	2 of 2
Checked: M.F.A.			



4.6.1

Proposal Schedule

Joint Venture

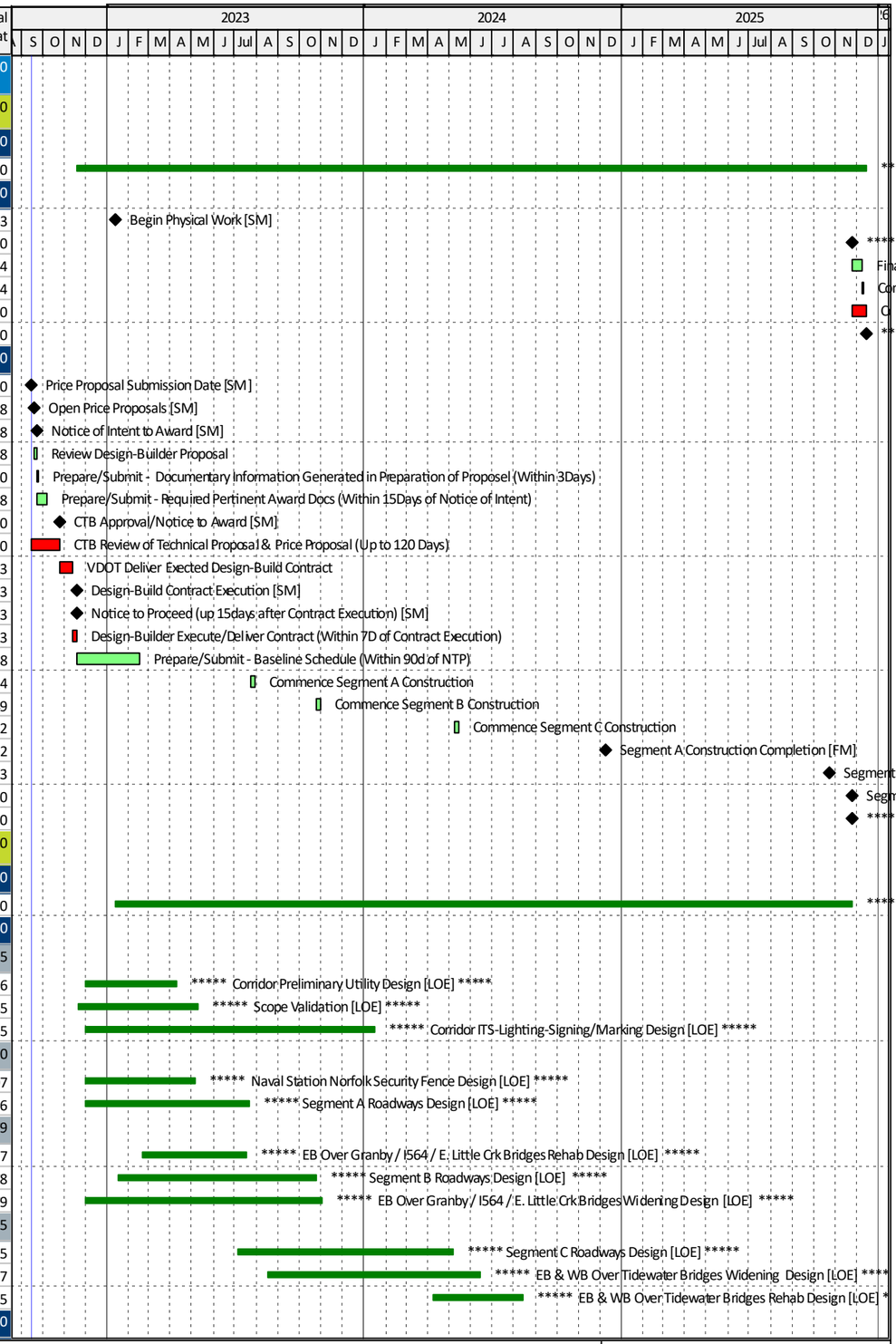
WAGMAN

FAY SOUTHEAST
S&B USA CONSTRUCTION

Lead Engineer

WALLACE MONTGOMERY

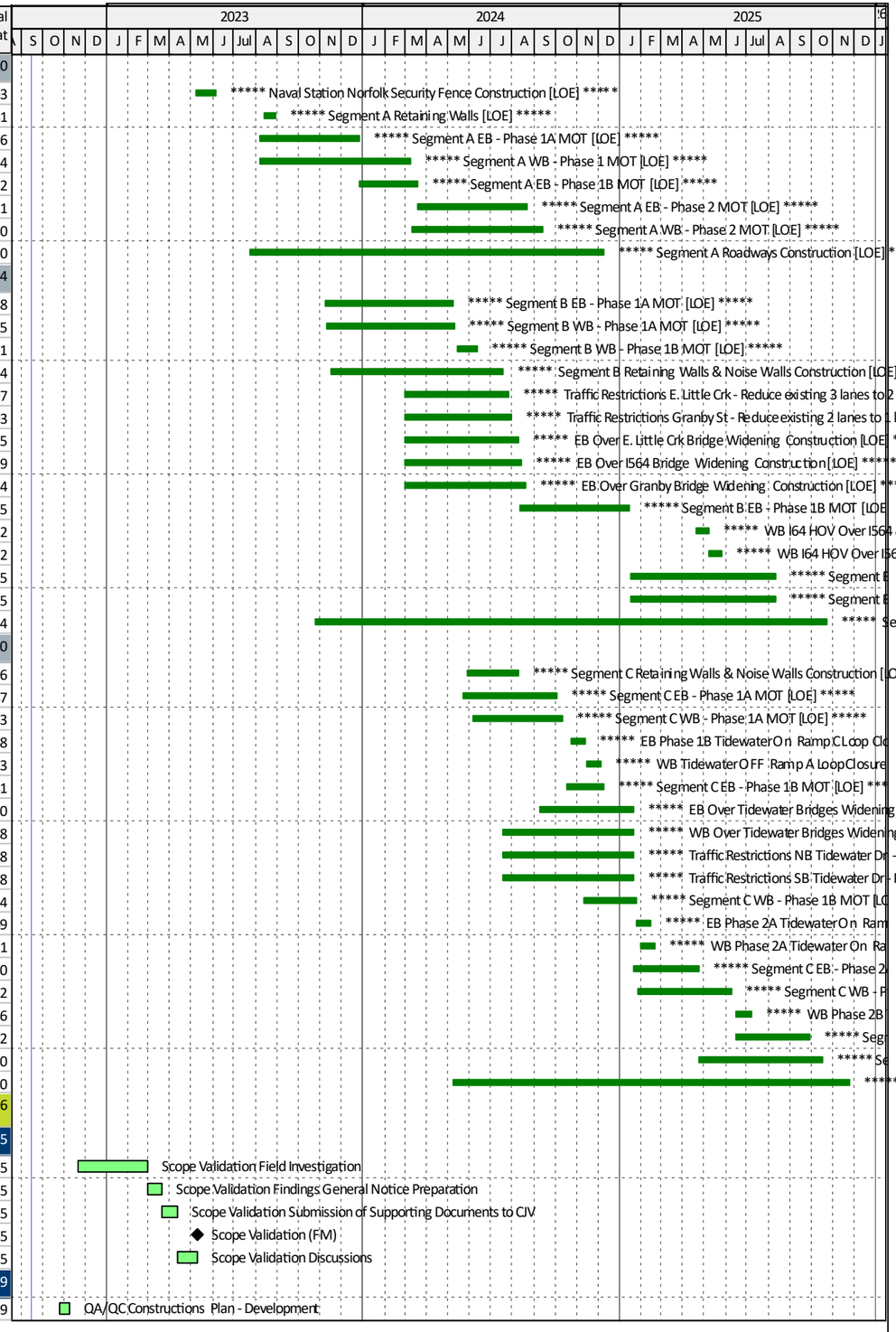
Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
VDOT I-64 HREL SEGMENT 1A BID SCHEDULE		789	15-Sep-22	15-Dec-25	0
##### CONTRACT ADMINISTRATION #####		789	15-Sep-22	15-Dec-25	0
===== OVERALL CONTRACT DURATION =====		1122	19-Nov-22	15-Dec-25	0
MS.1130	***** Project Duration [LOE] *****	1122	19-Nov-22	15-Dec-25	0
===== CONTRACT MILESTONES =====		1067	13-Jan-23	15-Dec-25	0
MS.1140	Begin Physical Work [SM]	0	13-Jan-23		363
MS.1220	**** Construction Substantial Completion ****	0		25-Nov-25	0
MS.1210	Final Inspection Walkthrough	14	25-Nov-25	09-Dec-25	4
MS.1250	Complete Construction Punchlist	2	09-Dec-25	11-Dec-25	4
MS.1200	Contract Closeout	20	25-Nov-25	15-Dec-25	0
MS.1260	**** Contract Final Completion (15DEC25) ****	0		15-Dec-25*	0
===== OVERALL PROJECT MILESTONES ====		777	15-Sep-22	25-Nov-25	0
MS.1000	Price Proposal Submission Date [SM]	0	15-Sep-22		0
MS.1020	Open Price Proposals [SM]	0	20-Sep-22		18
MS.1040	Notice of Intent to Award [SM]	0		23-Sep-22	18
MS.1030	Review Design-Builder Proposal	3	20-Sep-22	23-Sep-22	18
MS.1060	Prepare/Submit - Documentary Information Generated in Preparation of Proposel (Within 3Days)	3	23-Sep-22	26-Sep-22	30
MS.1050	Prepare/Submit - Required Pertinent Award Docs (Within 15Days of Notice of Intent)	15	23-Sep-22	08-Oct-22	18
MS.1070	CTB Approval/Notice to Award [SM]	0	26-Oct-22		0
MS.1010	CTB Review of Technical Proposal & Price Proposal (Up to 120 Days)	41	15-Sep-22	26-Oct-22	0
MS.1080	VDOT Deliver Exected Design-Build Contract	19	26-Oct-22	14-Nov-22	13
MS.1100	Design-Build Contract Execution [SM]	0	19-Nov-22		13
MS.1110	Notice to Proceed (up 15days after Contract Execution) [SM]	0	19-Nov-22		13
MS.1090	Design-Builder Execute/Deliver Contract (Within 7D of Contract Execution)	5	14-Nov-22	19-Nov-22	13
MS.1120	Prepare/Submit - Baseline Schedule (Within 90d of NTP)	90	19-Nov-22	17-Feb-23	328
MS.1150	Commence Segment A Construction	5	24-Jul-23	31-Jul-23	114
MS.1160	Commence Segment B Construction	5	26-Oct-23	01-Nov-23	49
MS.1170	Commence Segment C Construction	5	08-May-24	15-May-24	22
MS.1180	Segment A Construction Completion [FM]	0		10-Dec-24	232
MS.1190	Segment B Construction Completion [FM]	0		22-Oct-25	23
MS.1230	Segment C Construction Completion [FM]	0		25-Nov-25	0
MS.1240	**** Unique Milestone: Open All Lane's and Traffic in it's final Configation **** [FM]	0		25-Nov-25	0
##### EXECUTIVE SUMMARY & MILESTONES #####		1100	21-Nov-22	25-Nov-25	20
===== TOTAL PHYSICAL WORK DURATION =====		1047	13-Jan-23	25-Nov-25	0
SM.1000	***** Total Physical Work Duration [LOE] *****	1047	13-Jan-23	25-Nov-25	0
===== Design Packages =====		632	21-Nov-22	14-Aug-24	440
===== Corridor =====		421	21-Nov-22	16-Jan-24	115
SM.DS.1040	***** Corridor Preliminary Utility Design [LOE] *****	129	02-Dec-22	10-Apr-23	186
SM.DS.1000	***** Scope Validation [LOE] *****	170	21-Nov-22	10-May-23	245
SM.DS.1050	***** Corridor ITS-Lighting-Signing/Marking Design [LOE] *****	410	02-Dec-22	16-Jan-24	115
===== Segment A =====		231	02-Dec-22	21-Jul-23	830
SM.DS.1020	***** Naval Station Norfolk Security Fence Design [LOE] *****	154	02-Dec-22	05-May-23	907
SM.DS.1030	***** Segment A Roadways Design [LOE] *****	231	02-Dec-22	21-Jul-23	56
===== Segment B =====		336	02-Dec-22	03-Nov-23	79
SM.DS.1070	***** EB Over Granby / I564 / E. Little Crk Bridges Rehab Design [LOE] *****	147	20-Feb-23	17-Jul-23	137
SM.DS.1060	***** Segment B Roadways Design [LOE] *****	282	16-Jan-23	25-Oct-23	78
SM.DS.1010	***** EB Over Granby / I564 / E. Little Crk Bridges Widening Design [LOE] *****	336	02-Dec-22	03-Nov-23	79
===== Segment C =====		406	05-Jul-23	14-Aug-24	5
SM.DS.1080	***** Segment C Roadways Design [LOE] *****	307	05-Jul-23	07-May-24	35
SM.DS.1090	***** EB & WB Over Tidewater Bridges Widening Design [LOE] *****	302	17-Aug-23	14-Jun-24	27
SM.DS.1100	***** EB & WB Over Tidewater Bridges Rehab Design [LOE] *****	128	08-Apr-24	14-Aug-24	5
===== Constrcution =====		932	08-May-23	25-Nov-25	20



Start: 15-Sep-22
End: 15-Dec-25
Data: 15-Sep-22
Run: 16-Aug-22

Critical Remaining Work
Remaining Work
Actual Work
Changed Work
Remaining Level of Effort
Actual Level of Effort
Delay/Impact
Adverse Weather
Additional/Extra Work

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
===== Segment A =====		582	08-May-23	10-Dec-24	350
SM.CN.1000	***** Naval Station Norfolk Security Fence Construction [LOE] *****	29	08-May-23	06-Jun-23	903
SM.CN.1040	***** Segment A Retaining Walls [LOE] *****	15	14-Aug-23	29-Aug-23	541
SM.CN.1020	***** Segment A EB - Phase 1A MOT [LOE] *****	142	07-Aug-23	27-Dec-23	366
SM.CN.1030	***** Segment A WB - Phase 1 MOT [LOE] *****	214	07-Aug-23	08-Mar-24	354
SM.CN.1090	***** Segment A EB - Phase 1B MOT [LOE] *****	83	27-Dec-23	19-Mar-24	372
SM.CN.1160	***** Segment A EB - Phase 2 MOT [LOE] *****	156	19-Mar-24	22-Aug-24	371
SM.CN.1150	***** Segment A WB - Phase 2 MOT [LOE] *****	185	11-Mar-24	12-Sep-24	350
SM.CN.1010	***** Segment A Roadways Construction [LOE] *****	505	24-Jul-23	10-Dec-24	350
===== Segment B =====		727	26-Oct-23	22-Oct-25	54
SM.CN.1060	***** Segment B EB - Phase 1A MOT [LOE] *****	181	09-Nov-23	08-May-24	128
SM.CN.1070	***** Segment B WB - Phase 1A MOT [LOE] *****	182	10-Nov-23	10-May-24	75
SM.CN.1180	***** Segment B WB - Phase 1B MOT [LOE] *****	28	14-May-24	11-Jun-24	71
SM.CN.1080	***** Segment B Retaining Walls & Noise Walls Construction [LOE] *****	246	16-Nov-23	19-Jul-24	514
SM.CN.1140	***** Traffic Restrictions E. Little Crk - Reduce existing 3 lanes to 2 lane [LOE] *****	148	29-Feb-24	26-Jul-24	507
SM.CN.1130	***** Traffic Restrictions Granby St - Reduce existing 2 lanes to 1 lane [LOE] *****	153	29-Feb-24	31-Jul-24	203
SM.CN.1120	***** EB Over E. Little Crk Bridge Widening Construction [LOE] *****	162	29-Feb-24	09-Aug-24	35
SM.CN.1110	***** EB Over I564 Bridge Widening Construction [LOE] *****	167	29-Feb-24	14-Aug-24	189
SM.CN.1100	***** EB Over Granby Bridge Widening Construction [LOE] *****	172	29-Feb-24	19-Aug-24	184
SM.CN.1250	***** Segment B EB - Phase 1B MOT [LOE] *****	156	12-Aug-24	15-Jan-25	35
SM.CN.1370	***** WB I64 HOV Over I564 & E. Little Crk Bridge Rehab (Segment B Stage 2A) [LOE] *****	17	21-Apr-25	08-May-25	182
SM.CN.1390	***** WB I64 HOV Over I564 & E. Little Crk Bridge Rehab (Segment B Stage 2B) [LOE] *****	18	09-May-25	27-May-25	182
SM.CN.1310	***** Segment B EB - Phase 2 MOT [LOE] *****	207	16-Jan-25	11-Aug-25	35
SM.CN.1320	***** Segment B WB - Phase 2 MOT [LOE] *****	207	16-Jan-25	11-Aug-25	35
SM.CN.1050	***** Segment B Roadways Construction [LOE] *****	727	26-Oct-23	22-Oct-25	34
===== Segment C =====		566	08-May-24	25-Nov-25	0
SM.CN.1200	***** Segment C Retaining Walls & Noise Walls Construction [LOE] *****	71	30-May-24	09-Aug-24	96
SM.CN.1190	***** Segment C EB - Phase 1A MOT [LOE] *****	134	22-May-24	03-Oct-24	47
SM.CN.1210	***** Segment C WB - Phase 1A MOT [LOE] *****	127	06-Jun-24	11-Oct-24	33
SM.CN.1280	***** EB Phase 1B Tidewater On Ramp C Loop Closure [LOE] *****	21	23-Oct-24	13-Nov-24	68
SM.CN.1300	***** WB Tidewater OFF Ramp A Loop Closure [LOE] *****	21	15-Nov-24	06-Dec-24	53
SM.CN.1270	***** Segment C EB - Phase 1B MOT [LOE] *****	53	18-Oct-24	10-Dec-24	41
SM.CN.1260	***** EB Over Tidewater Bridges Widening Construction [LOE] *****	133	09-Sep-24	20-Jan-25	0
SM.CN.1220	***** WB Over Tidewater Bridges Widening Construction [LOE] *****	186	18-Jul-24	20-Jan-25	8
SM.CN.1230	***** Traffic Restrictions NB Tidewater Dr - Reduce existing 2 lanes to 1 lane [LOE] *****	186	18-Jul-24	20-Jan-25	8
SM.CN.1240	***** Traffic Restrictions SB Tidewater Dr - Reduce existing 3 lanes to 2 lanes [LOE] *****	186	18-Jul-24	20-Jan-25	8
SM.CN.1290	***** Segment C WB - Phase 1B MOT [LOE] *****	73	12-Nov-24	24-Jan-25	4
	***** EB Phase 2A Tidewater On Ramp C Loop Closure [LOE] *****	20	24-Jan-25	13-Feb-25	69
SM.CN.1360	***** WB Phase 2A Tidewater On Ramp E Closure [LOE] *****	21	30-Jan-25	20-Feb-25	111
SM.CN.1330	***** Segment C EB - Phase 2A MOT [LOE] *****	92	21-Jan-25	23-Apr-25	0
SM.CN.1350	***** Segment C WB - Phase 2A MOT [LOE] *****	133	27-Jan-25	09-Jun-25	2
SM.CN.1410	***** WB Phase 2B Tidewater On Ramp E Closure [LOE] *****	21	16-Jun-25	07-Jul-25	86
SM.CN.1400	***** Segment C WB - Phase 2B MOT [LOE] *****	105	16-Jun-25	29-Sep-25	2
SM.CN.1380	***** Segment C EB - Phase 2B MOT [LOE] *****	175	24-Apr-25	16-Oct-25	0
SM.CN.1170	***** Segment C Roadways Construction [LOE] *****	566	08-May-24	25-Nov-25	0
##### ADMINISTRATION #####		453	26-Oct-22	07-Sep-24	116
===== SCOPE VALIDATION =====		118	21-Nov-22	10-May-23	165
AD.SV.1000	Scope Validation Field Investigation	68	21-Nov-22	28-Feb-23	165
AD.SV.1010	Scope Validation Findings General Notice Preparation	15	01-Mar-23	21-Mar-23	165
AD.SV.1020	Scope Validation Submission of Supporting Documents to CJV	15	21-Mar-23	11-Apr-23	165
AD.SV.1040	Scope Validation (FM)	0		10-May-23	165
AD.SV.1030	Scope Validation Discussions	21	12-Apr-23	10-May-23	165
===== QA/QC Construction PLAN =====		53	26-Oct-22	13-Jan-23	239
AD.CN.1000	QA/QC Constructions Plan - Development	10	26-Oct-22	08-Nov-22	249



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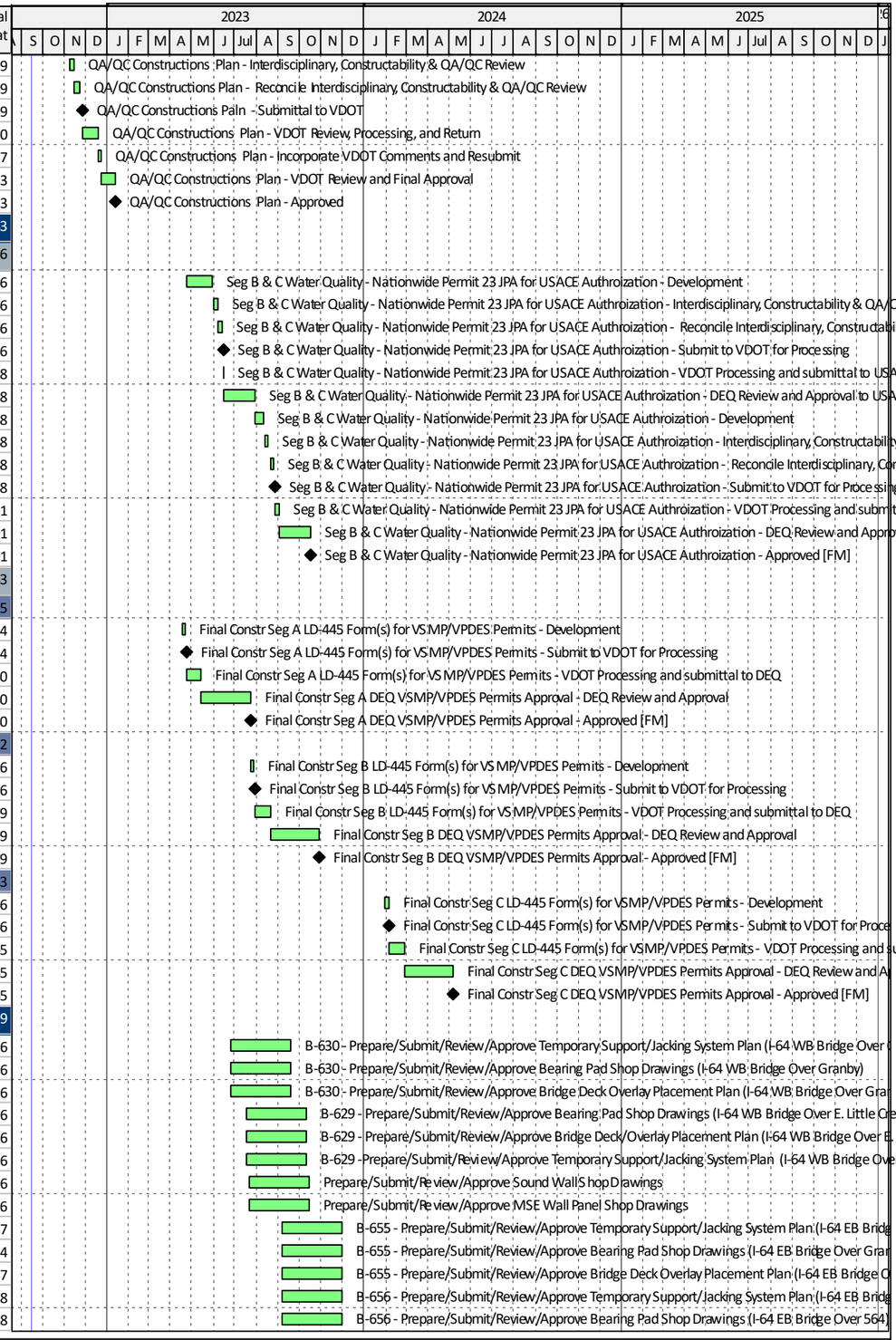
End: 15-Dec-25
Data: 15-Sep-22
Run: 16-Aug-22

Critical Remaining Work
Remaining Work
Actual Work
Changed Work
Remaining Level of Effort
Actual Level of Effort
Delay/Impact
Adverse Weather
Additional/Extra Work

VDOT I-64 HREL SEGMENT 1A BID SCHEDULE

(ACAA) INFO COLUMNS (11x17) | TASK filter: All Activities

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
AD.CN.1010	QA/QC Constructions Plan - Interdisciplinary, Constructability & QA/QC Review	5	09-Nov-22	15-Nov-22	249
AD.CN.1020	QA/QC Constructions Plan - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	16-Nov-22	22-Nov-22	249
AD.CN.1030	QA/QC Constructions Paln - Submittal to VDOT	0	28-Nov-22		249
AD.CN.1040	QA/QC Constructions Plan - VDOT Review, Processing, and Return	21	28-Nov-22	19-Dec-22	360
AD.CN.1050	QA/QC Constructions Plan - Incorporate VDOT Comments and Resubmit	5	19-Dec-22	23-Dec-22	247
AD.CN.1060	QA/QC Constructions Plan - VDOT Review and Final Approval	21	23-Dec-22	13-Jan-23	363
AD.CN.1070	QA/QC Constructions Plan - Approved	0		13-Jan-23	363
===== PERMITS =====		257	17-Apr-23	07-May-24	43
US Army Corps of Engineers (USACE)		118	25-Apr-23	17-Oct-23	66
AD.PM.1000	Seg B & C Water Quality - Nationwide Permit 23 JPA for USACE Authroization - Development	25	25-Apr-23	31-May-23	66
AD.PM.1010	Seg B & C Water Quality - Nationwide Permit 23 JPA for USACE Authroization - Interdisciplinary, Constructability & QA/QC Review	5	01-Jun-23	07-Jun-23	66
AD.PM.1020	Seg B & C Water Quality - Nationwide Permit 23 JPA for USACE Authroization - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	08-Jun-23	14-Jun-23	66
AD.PM.1030	Seg B & C Water Quality - Nationwide Permit 23 JPA for USACE Authroization - Submit to VDOT for Processing	0	15-Jun-23		66
AD.PM.1040	Seg B & C Water Quality - Nationwide Permit 23 JPA for USACE Authroization - VDOT Processing and submittal to USACE	1	15-Jun-23	16-Jun-23	98
AD.PM.1050	Seg B & C Water Quality - Nationwide Permit 23 JPA for USACE Authroization - DEQ Review and Approval to USACE	45	16-Jun-23	31-Jul-23	98
AD.PM.1060	Seg B & C Water Quality - Nationwide Permit 23 JPA for USACE Authroization - Development	10	31-Jul-23	11-Aug-23	68
AD.PM.1070	Seg B & C Water Quality - Nationwide Permit 23 JPA for USACE Authroization - Interdisciplinary, Constructability & QA/QC Review	5	14-Aug-23	18-Aug-23	68
AD.PM.1080	Seg B & C Water Quality - Nationwide Permit 23 JPA for USACE Authroization - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	21-Aug-23	25-Aug-23	68
AD.PM.1090	Seg B & C Water Quality - Nationwide Permit 23 JPA for USACE Authroization - Submit to VDOT for Processing	0	28-Aug-23		68
AD.PM.1100	Seg B & C Water Quality - Nationwide Permit 23 JPA for USACE Authroization - VDOT Processing and submittal to USACE	5	28-Aug-23	02-Sep-23	101
AD.PM.1110	Seg B & C Water Quality - Nationwide Permit 23 JPA for USACE Authroization - DEQ Review and Approval to USACE	45	02-Sep-23	17-Oct-23	101
AD.PM.1120	Seg B & C Water Quality - Nationwide Permit 23 JPA for USACE Authroization - Approved [FM]	0		17-Oct-23	101
Virginia Department of Environmental Quality (DEQ)		257	17-Apr-23	07-May-24	43
Segment A		65	17-Apr-23	24-Jul-23	55
AD.PM.1130	Final Constr Seg A LD-445 Form(s) for VS MP/VPDES Permits - Development	5	17-Apr-23	21-Apr-23	54
AD.PM.1140	Final Constr Seg A LD-445 Form(s) for VS MP/VPDES Permits - Submit to VDOT for Processing	0	24-Apr-23		54
AD.PM.1150	Final Constr Seg A LD-445 Form(s) for VS MP/VPDES Permits - VDOT Processing and submittal to DEQ	21	24-Apr-23	15-May-23	80
AD.PM.1160	Final Constr Seg A DEQ VSMP/VPDES Permits Approval - DEQ Review and Approval	70	15-May-23	24-Jul-23	80
AD.PM.1180	Final Constr Seg A DEQ VSMP/VPDES Permits Approval - Approved [FM]	0		24-Jul-23	80
Segment B		67	24-Jul-23	30-Oct-23	52
AD.PM.1170	Final Constr Seg B LD-445 Form(s) for VS MP/VPDES Permits - Development	5	24-Jul-23	28-Jul-23	56
AD.PM.1190	Final Constr Seg B LD-445 Form(s) for VS MP/VPDES Permits - Submit to VDOT for Processing	0	31-Jul-23		56
AD.PM.1200	Final Constr Seg B LD-445 Form(s) for VS MP/VPDES Permits - VDOT Processing and submittal to DEQ	21	31-Jul-23	21-Aug-23	79
AD.PM.1210	Final Constr Seg B DEQ VSMP/VPDES Permits Approval - DEQ Review and Approval	70	21-Aug-23	30-Oct-23	79
AD.PM.1220	Final Constr Seg B DEQ VSMP/VPDES Permits Approval - Approved [FM]	0		30-Oct-23	79
Segment C		66	30-Jan-24	07-May-24	43
AD.PM.1230	Final Constr Seg C LD-445 Form(s) for VSMP/VPDES Permits - Development	5	30-Jan-24	05-Feb-24	46
AD.PM.1240	Final Constr Seg C LD-445 Form(s) for VSMP/VPDES Permits - Submit to VDOT for Processing	0	06-Feb-24		46
AD.PM.1250	Final Constr Seg C LD-445 Form(s) for VSMP/VPDES Permits - VDOT Processing and submittal to DEQ	21	06-Feb-24	27-Feb-24	65
AD.PM.1260	Final Constr Seg C DEQ VSMP/VPDES Permits Approval - DEQ Review and Approval	70	27-Feb-24	07-May-24	65
AD.PM.1270	Final Constr Seg C DEQ VSMP/VPDES Permits Approval - Approved [FM]	0		07-May-24	65
===== PROJECT SUBMITTALS =====		439	26-Jun-23	07-Sep-24	179
AD.PS.1050	B-630 - Prepare/Submit/Review/Approve Temporary Support/Jacking System Plan (I-64 WB Bridge Over Granby)	85	26-Jun-23	19-Sep-23	286
AD.PS.1030	B-630 - Prepare/Submit/Review/Approve Bearing Pad Shop Drawings (I-64 WB Bridge Over Granby)	85	26-Jun-23	19-Sep-23	196
AD.PS.1040	B-630 - Prepare/Submit/Review/Approve Bridge Deck Overlay Placement Plan (I-64 WB Bridge Over Granby)	85	26-Jun-23	19-Sep-23	286
AD.PS.1000	B-629 - Prepare/Submit/Review/Approve Bearing Pad Shop Drawings (I-64 WB Bridge Over E. Little Creek)	85	17-Jul-23	10-Oct-23	176
AD.PS.1010	B-629 - Prepare/Submit/Review/Approve Bridge Deck/Overlay Placement Plan (I-64 WB Bridge Over E. Little Creek)	85	17-Jul-23	10-Oct-23	266
AD.PS.1020	B-629 -Prepare/Submit/Review/Approve Temporary Support/Jacking System Plan (I-64 WB Bridge Over E. Little Creek)	85	17-Jul-23	10-Oct-23	266
AD.PS.1600	Prepare/Submit/Review/Approve Sound Wall Shop Drawings	85	21-Jul-23	14-Oct-23	206
AD.PS.1590	Prepare/Submit/Review/Approve MSE Wall Panel Shop Drawings	85	21-Jul-23	14-Oct-23	56
AD.PS.1350	B-655 - Prepare/Submit/Review/Approve Temporary Support/Jacking System Plan (I-64 EB Bridge Over Granby)	85	06-Sep-23	30-Nov-23	267
AD.PS.1260	B-655 - Prepare/Submit/Review/Approve Bearing Pad Shop Drawings (I-64 EB Bridge Over Granby)	85	06-Sep-23	30-Nov-23	124
AD.PS.1280	B-655 - Prepare/Submit/Review/Approve Bridge Deck Overlay Placement Plan (I-64 EB Bridge Over Granby)	85	06-Sep-23	30-Nov-23	267
AD.PS.1450	B-656 - Prepare/Submit/Review/Approve Temporary Support/Jacking System Plan (I-64 EB Bridge Over 564)	85	06-Sep-23	30-Nov-23	288
AD.PS.1360	B-656 - Prepare/Submit/Review/Approve Bearing Pad Shop Drawings (I-64 EB Bridge Over 564)	85	06-Sep-23	30-Nov-23	198



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Critical Remaining Work
Remaining Work
Actual Work
Changed Work
Remaining Level of Effort
Actual Level of Effort
Delay/Impact
Adverse Weather
Additional/Extra Work

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
AD.PS.1380	B-656 - Prepare/Submit/Review/Approve Bridge Deck/Overlay Placement Plan (I-64 EB Bridge Over 564)	85	06-Sep-23	30-Nov-23	288
AD.PS.1310	B-655 - Prepare/Submit/Review/Approve Demolition Plan (I-64 EB Bridge OverGranby)	85	06-Sep-23	30-Nov-23	267
AD.PS.1270	B-655 - Prepare/Submit/Review/Approve Bridge Beam Shop Drawings (I-64 EB Bridge Over Granby)	85	06-Sep-23	30-Nov-23	182
AD.PS.1330	B-655 - Prepare/Submit/Review/Approve Overhang/Falsework Plan (I-64 EB Bridge Over Granby)	85	06-Sep-23	30-Nov-23	267
AD.PS.1460	B-657 - Prepare/Submit/Review/Approve Bearing Pad Shop Drawings (I-64 EB Bridge Over E. Little Creek)	85	06-Sep-23	30-Nov-23	47
AD.PS.1480	B-657 - Prepare/Submit/Review/Approve Bridge Deck/Overlay Placement Plan (I-64 EB Bridge Over E. Little Creek)	85	06-Sep-23	30-Nov-23	137
AD.PS.1410	B-656 - Prepare/Submit/Review/Approve Demolition Plan (I-64 EB Bridge Over564)	85	06-Sep-23	30-Nov-23	288
AD.PS.1370	B-656 - Prepare/Submit/Review/Approve Bridge Beam Shop Drawings (I-64 EB Bridge Over 564)	85	06-Sep-23	30-Nov-23	182
AD.PS.1430	B-656 - Prepare/Submit/Review/Approve Overhang/Falsework Plan (I-64 EB Bridge Over 564)	85	06-Sep-23	30-Nov-23	288
AD.PS.1540	B-657 -Prepare/Submit/Review/Approve Temporary Support/Jacking System Plan (I-64 EB Bridge Over E. Little Creek)	85	06-Sep-23	30-Nov-23	137
AD.PS.1510	B-657 - Prepare/Submit/Review/Approve Demolition Plan (I-64 EB Bridge OverE. Little Creek)	85	06-Sep-23	30-Nov-23	137
AD.PS.1470	B-657 - Prepare/Submit/Review/Approve Bridge Beam Shop Drawings (I-64 EB Bridge Over E. Little Creek)	85	06-Sep-23	30-Nov-23	36
AD.PS.1550	B-657 Prepare/Submit/Review/Approve Overhang/Falsework Plan(I-64 EB Bridge Over E. Little Creek)	85	06-Sep-23	30-Nov-23	137
AD.PS.1290	B-655 - Prepare/Submit/Review/Approve Bridge Erection Procedures (I-64 EB Bridge Over Granby)	85	06-Sep-23	30-Nov-23	267
AD.PS.1390	B-656 - Prepare/Submit/Review/Approve Bridge Erection Procedures (I-64 EB Bridge Over 564)	85	06-Sep-23	30-Nov-23	288
AD.PS.1490	B-657 - Prepare/Submit/Review/Approve Bridge Erection Procedures (I-64 EB Bridge Over E. Little Creek)	85	06-Sep-23	30-Nov-23	137
AD.PS.1300	B-655 - Prepare/Submit/Review/Approve Bridge Joint Seal Shop Drawings (I-64 EB Bridge Over Granby)	85	06-Sep-23	30-Nov-23	267
AD.PS.1400	B-656 - Prepare/Submit/Review/Approve Bridge Joint Seal Shop Drawings (I-64 EB Bridge Over 564)	85	06-Sep-23	30-Nov-23	288
AD.PS.1500	B-657 - Prepare/Submit/Review/Approve Bridge Joint Seal Shop Drawings (I-64 EB Bridge Over E. Little Creek)	85	06-Sep-23	30-Nov-23	137
AD.PS.1320	B-655 - Prepare/Submit/Review/Approve Micropile Installation Plan (I-64 EB Bridge Over Granby)	85	03-Nov-23	27-Jan-24	209
AD.PS.1420	B-656 - Prepare/Submit/Review/Approve Micropile Installation Plan (I-64 EB Bridge Over 564)	85	03-Nov-23	27-Jan-24	230
AD.PS.1520	B-657 - Prepare/Submit/Review/Approve Micropile Installation Plan (I-64 EB Bridge Over E. Little Creek)	85	03-Nov-23	27-Jan-24	79
AD.PS.1340	B-655 - Prepare/Submit/Review/Approve Reinforcing Steel Shop Drawings (I-64 EB Bridge Over Granby)	85	03-Nov-23	27-Jan-24	209
AD.PS.1440	B-656 - Prepare/Submit/Review/Approve Reinforcing Steel Shop Drawings (I-64 EB Bridge Over 564)	85	03-Nov-23	27-Jan-24	230
AD.PS.1530	B-657 - Prepare/Submit/Review/Approve Reinforcing Steel Shop Drawings (I-64 EB Bridge Over E. Little Creek)	85	03-Nov-23	27-Jan-24	79
AD.PS.1560	C-501 - Prepare/Submit/Review/Approve Bearing Pad Shop Drawings (I64 HOV Over I564 & E. Little Crk Bridge)	85	29-Nov-23	22-Feb-24	287
AD.PS.1570	C-501 - Prepare/Submit/Review/Approve Bridge Deck/Overlay Placement Plan (I64 HOV Over I564 & E. Little Crk Bridge)	85	29-Nov-23	22-Feb-24	377
AD.PS.1580	C-501 -Prepare/Submit/Review/Approve Temporary Support/Jacking System Plan (I64 HOV Over I564 & E. Little Crk Bridge)	85	29-Nov-23	22-Feb-24	377
AD.PS.1160	B-654 - Prepare/Submit/Review/Approve Bearing Pad Shop Drawings (I-64 WB Bridge Over Tidewater Dr)	85	24-Jan-24	18-Apr-24	15
AD.PS.1060	B-653 - Prepare/Submit/Review/Approve Bearing Pad Shop Drawings (I-64 EB Bridge Over Tidewater Dr)	85	24-Jan-24	18-Apr-24	127
AD.PS.1220	B-654 - Prepare/Submit/Review/Approve Micropile Installation Plan (I-64 WB Bridge Over Tidewater Dr)	85	21-Mar-24	14-Jun-24	48
AD.PS.1240	B-654 - Prepare/Submit/Review/Approve Reinforcing Steel Shop Drawings (I-64 WB Bridge Over Tidewater Dr)	85	21-Mar-24	14-Jun-24	48
AD.PS.1180	B-654 - Prepare/Submit/Review/Approve Bridge Deck/Overlay Placement Plan (I-64 WB Bridge Over Tidewater Dr)	75	18-Apr-24	02-Jul-24	30
AD.PS.1080	B-653 - Prepare/Submit/Review/Approve Bridge Deck/Overlay Placement Plan (I-64 EB Bridge Over Tidewater Dr)	75	18-Apr-24	02-Jul-24	94
AD.PS.1250	B-654 - Prepare/Submit/Review/Approve Temporary Support/Jacking System Plan (I-64 WB Bridge Over Tidewater Dr)	85	18-Apr-24	12-Jul-24	20
AD.PS.1210	B-654 - Prepare/Submit/Review/Approve Demolition Plan (I-64 WB Bridge Over Tidewater Dr)	85	18-Apr-24	12-Jul-24	84
AD.PS.1170	B-654 - Prepare/Submit/Review/Approve Bridge Beam Shop Drawings (I-64 WB Bridge Over Tidewater Dr)	85	18-Apr-24	12-Jul-24	1
AD.PS.1230	B-654 - Prepare/Submit/Review/Approve Overhang/Falsework Plan (I-64 WB Bridge Over Tidewater Dr)	85	18-Apr-24	12-Jul-24	84
AD.PS.1190	B-654 - Prepare/Submit/Review/Approve Bridge Erection Procedures (I-64 WB Bridge Over Tidewater Dr)	85	18-Apr-24	12-Jul-24	84
AD.PS.1200	B-654 - Prepare/Submit/Review/Approve Bridge Joint Seal Shop Drawings (I-64 WB Bridge Over Tidewater Dr)	85	18-Apr-24	12-Jul-24	84
AD.PS.1150	B-653 - Prepare/Submit/Review/Approve Temporary Support/Jacking System Plan (I-64 EB Bridge Over Tidewater Dr)	85	18-Apr-24	12-Jul-24	84
AD.PS.1110	B-653 - Prepare/Submit/Review/Approve Demolition Plan (I-64 EB Bridge OverTidewater Dr)	85	18-Apr-24	12-Jul-24	84
AD.PS.1070	B-653 - Prepare/Submit/Review/Approve Bridge Beam Shop Drawings (I-64 EB Bridge Over Tidewater Dr)	85	18-Apr-24	12-Jul-24	1
AD.PS.1130	B-653 - Prepare/Submit/Review/Approve Overhang/Falsework Plan (I-64 EB Bridge Over Tidewater Dr)	85	18-Apr-24	12-Jul-24	84
AD.PS.1090	B-653 - Prepare/Submit/Review/Approve Bridge Erection Procedures (I-64 EB Bridge Over Tidewater Dr)	85	18-Apr-24	12-Jul-24	84
AD.PS.1100	B-653 - Prepare/Submit/Review/Approve Bridge Joint Seal Shop Drawings (I-64 EB Bridge Over Tidewater Dr)	85	18-Apr-24	12-Jul-24	84
AD.PS.1120	B-653 - Prepare/Submit/Review/Approve Micropile Installation Plan (I-64 EB Bridge Over Tidewater Dr)	85	14-Jun-24	07-Sep-24	27
AD.PS.1140	B-653 - Prepare/Submit/Review/Approve Reinforcing Steel Shop Drawings (I-64 EB Bridge Over Tidewater Dr)	85	14-Jun-24	07-Sep-24	27
##### DESIGN SCOPE #####		438	26-Oct-22	14-Aug-24	311
===== FIELD SURVEY & MOBILE SCANNING =====		95	26-Oct-22	13-Mar-23	206
DS.1000	Mobilize Design & Field Investigations	24	26-Oct-22	01-Dec-22	0
DS.1010	Property Access Letters	20	02-Nov-22	02-Dec-22	206
DS.1020	Supplemental Field Controls. Utility Designations, & Surveys	70	05-Dec-22	13-Mar-23	206
===== QA/QC DESIGN PLAN =====		53	26-Oct-22	13-Jan-23	239
DS.1030	QA/QC Plan - Development	10	26-Oct-22	08-Nov-22	249

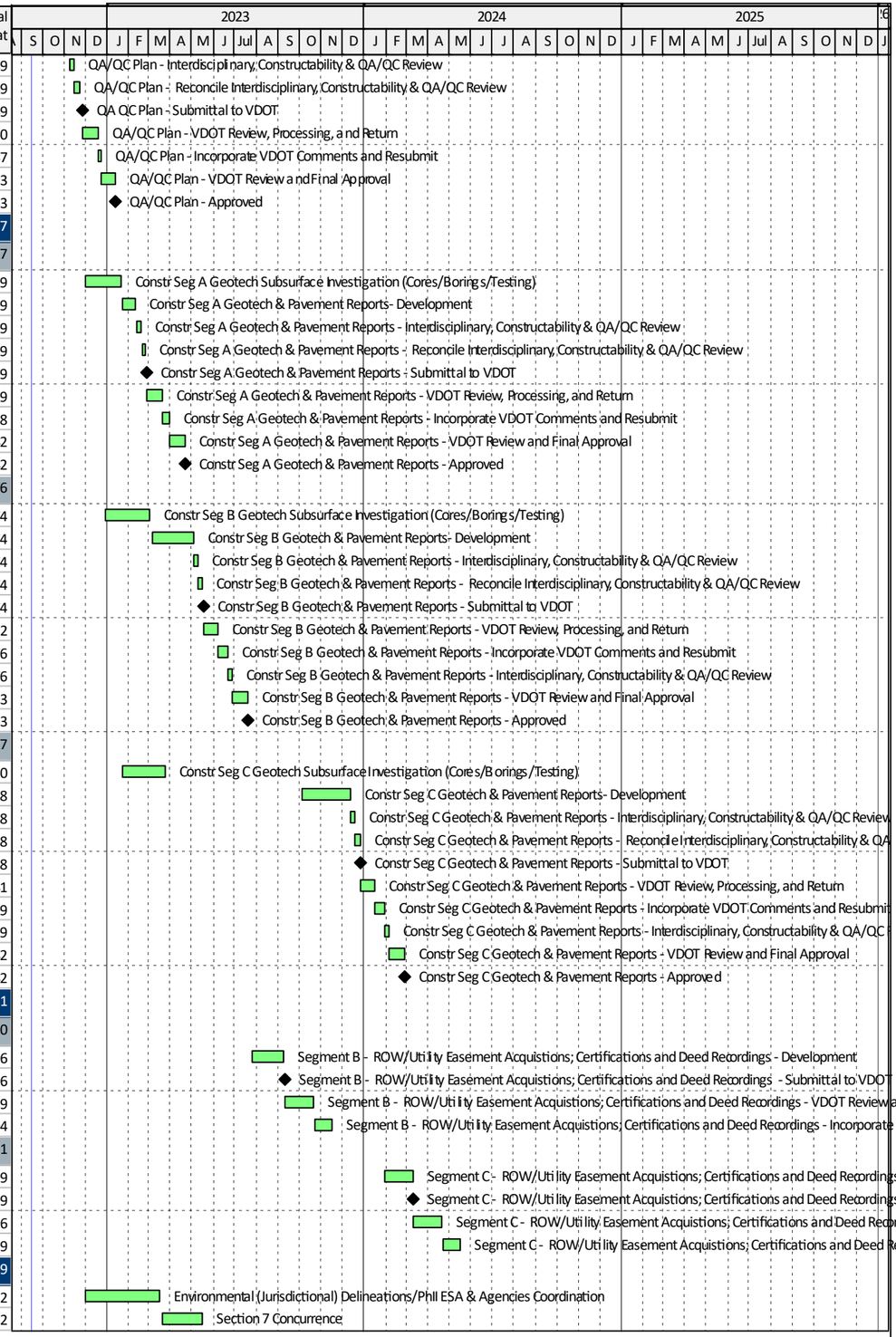
Start: 15-Sep-22
End: 15-Dec-25
Data: 15-Sep-22
Run: 16-Aug-22

Critical Remaining Work
Remaining Work
Actual Work
Changed Work
Remaining Level of Effort
Actual Level of Effort
Delay/Impact
Adverse Weather
Additional/Extra Work

VDOT I-64 HREL SEGMENT 1A BID SCHEDULE

(ACAA) INFO COLUMNS (11x17) | TASK filter: All Activities

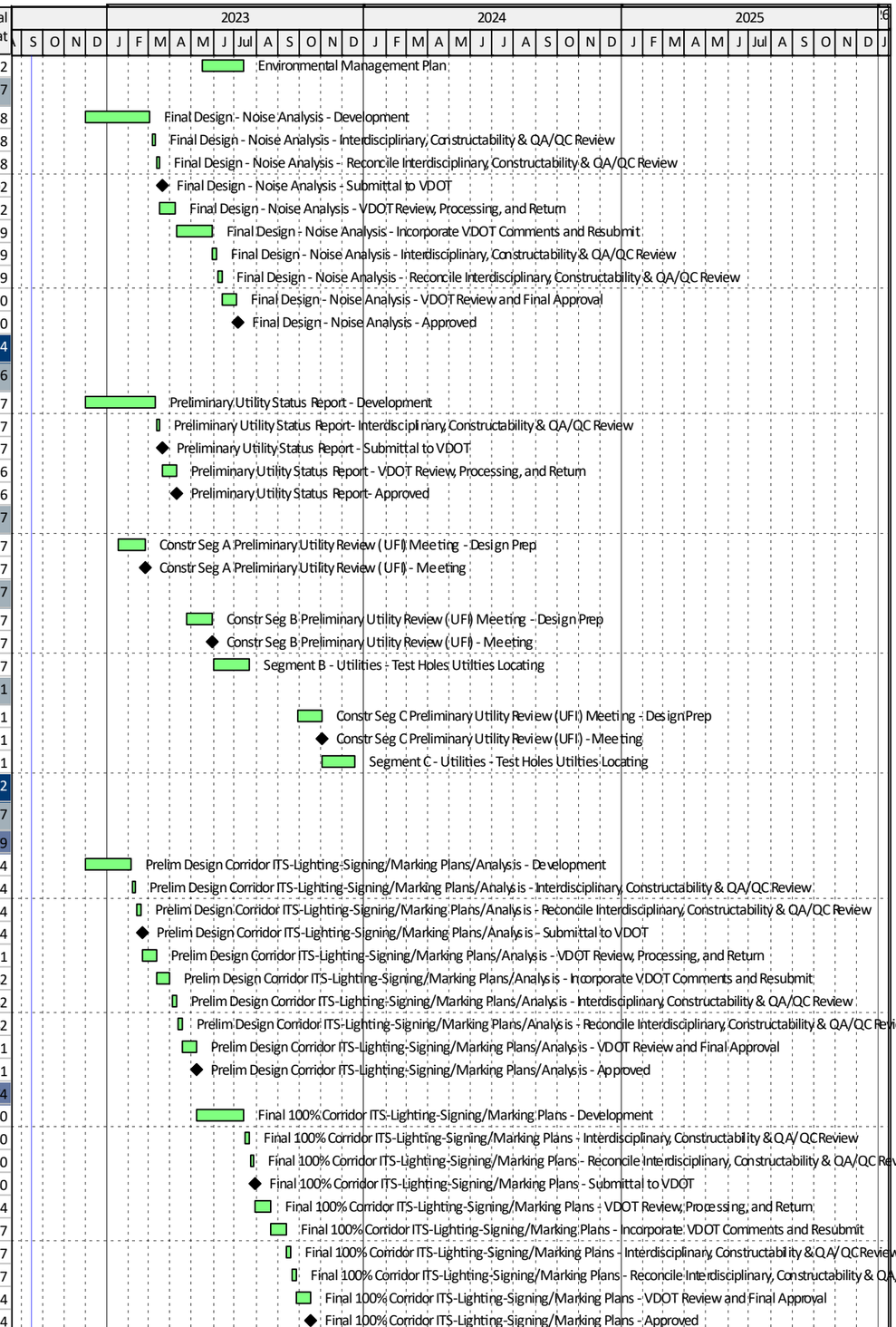
Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
DS.1040	QA/QC Plan - Interdisciplinary, Constructability & QA/QC Review	5	09-Nov-22	15-Nov-22	249
DS.1050	QA/QC Plan - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	16-Nov-22	22-Nov-22	249
DS.1060	QA QC Plan - Submittal to VDOT	0	28-Nov-22		249
DS.1070	QA/QC Plan - VDOT Review, Processing, and Return	21	28-Nov-22	19-Dec-22	360
DS.1080	QA/QC Plan - Incorporate VDOT Comments and Resubmit	5	19-Dec-22	23-Dec-22	247
DS.1090	QA/QC Plan - VDOT Review and Final Approval	21	23-Dec-22	13-Jan-23	363
DS.1100	QA/QC Plan - Approved	0		13-Jan-23	363
===== GEOTECHNICAL & SUBSURFACE ENGINEERING =====		299	02-Dec-22	27-Feb-24	27
Segment A		92	02-Dec-22	21-Apr-23	27
DS.1110	Constr Seg A Geotech Subsurface Investigation (Cores/Borings/Testing)	35	02-Dec-22	20-Jan-23	29
DS.1130	Constr Seg A Geotech & Pavement Reports- Development	15	23-Jan-23	10-Feb-23	29
DS.1150	Constr Seg A Geotech & Pavement Reports - Interdisciplinary, Constructability & QA/QC Review	5	13-Feb-23	17-Feb-23	29
DS.1160	Constr Seg A Geotech & Pavement Reports - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	20-Feb-23	24-Feb-23	29
DS.1170	Constr Seg A Geotech & Pavement Reports - Submittal to VDOT	0	27-Feb-23		29
DS.1180	Constr Seg A Geotech & Pavement Reports - VDOT Review, Processing, and Return	21	27-Feb-23	20-Mar-23	39
DS.1200	Constr Seg A Geotech & Pavement Reports - Incorporate VDOT Comments and Resubmit	10	20-Mar-23	31-Mar-23	28
DS.1210	Constr Seg A Geotech & Pavement Reports - VDOT Review and Final Approval	21	31-Mar-23	21-Apr-23	42
DS.1220	Constr Seg A Geotech & Pavement Reports - Approved	0		21-Apr-23	42
Segment B		133	30-Dec-22	19-Jul-23	76
DS.1120	Constr Seg B Geotech Subsurface Investigation (Cores/Borings/Testing)	45	30-Dec-22	03-Mar-23	74
DS.1190	Constr Seg B Geotech & Pavement Reports- Development	42	06-Mar-23	03-May-23	74
DS.1230	Constr Seg B Geotech & Pavement Reports - Interdisciplinary, Constructability & QA/QC Review	5	04-May-23	10-May-23	74
DS.1240	Constr Seg B Geotech & Pavement Reports - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	11-May-23	17-May-23	74
DS.1250	Constr Seg B Geotech & Pavement Reports - Submittal to VDOT	0	18-May-23		74
DS.1260	Constr Seg B Geotech & Pavement Reports - VDOT Review, Processing, and Return	21	18-May-23	08-Jun-23	112
DS.1270	Constr Seg B Geotech & Pavement Reports - Incorporate VDOT Comments and Resubmit	10	08-Jun-23	21-Jun-23	76
DS.1280	Constr Seg B Geotech & Pavement Reports - Interdisciplinary, Constructability & QA/QC Review	5	22-Jun-23	28-Jun-23	76
DS.1290	Constr Seg B Geotech & Pavement Reports - VDOT Review and Final Approval	21	28-Jun-23	19-Jul-23	113
DS.1300	Constr Seg B Geotech & Pavement Reports - Approved	0		19-Jul-23	113
Segment C		267	23-Jan-23	27-Feb-24	27
DS.1140	Constr Seg C Geotech Subsurface Investigation (Cores/Borings/Testing)	45	23-Jan-23	24-Mar-23	160
DS.1310	Constr Seg C Geotech & Pavement Reports- Development	45	06-Oct-23	12-Dec-23	28
DS.1320	Constr Seg C Geotech & Pavement Reports - Interdisciplinary, Constructability & QA/QC Review	5	13-Dec-23	19-Dec-23	28
DS.1330	Constr Seg C Geotech & Pavement Reports - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	20-Dec-23	26-Dec-23	28
DS.1340	Constr Seg C Geotech & Pavement Reports - Submittal to VDOT	0	27-Dec-23		28
DS.1350	Constr Seg C Geotech & Pavement Reports - VDOT Review, Processing, and Return	21	27-Dec-23	17-Jan-24	41
DS.1360	Constr Seg C Geotech & Pavement Reports - Incorporate VDOT Comments and Resubmit	10	17-Jan-24	30-Jan-24	29
DS.1370	Constr Seg C Geotech & Pavement Reports - Interdisciplinary, Constructability & QA/QC Review	5	31-Jan-24	06-Feb-24	29
DS.1380	Constr Seg C Geotech & Pavement Reports - VDOT Review and Final Approval	21	06-Feb-24	27-Feb-24	42
DS.1390	Constr Seg C Geotech & Pavement Reports - Approved	0		27-Feb-24	42
===== ROW =====		197	27-Jul-23	17-May-24	371
===== Segment B - ROW/Utility Easement Acquistions =====		78	27-Jul-23	17-Nov-23	490
DS.1400	Segment B - ROW/Utility Easement Acquistions; Certifications and Deed Recordings - Development	30	27-Jul-23	08-Sep-23	506
DS.1410	Segment B - ROW/Utility Easement Acquistions; Certifications and Deed Recordings - Submittal to VDOT	0	11-Sep-23		506
DS.1420	Segment B - ROW/Utility Easement Acquistions; Certifications and Deed Recordings - VDOT Review and Processing	40	11-Sep-23	21-Oct-23	739
DS.1430	Segment B - ROW/Utility Easement Acquistions; Certifications and Deed Recordings - Incorporate VDOT Comments	20	23-Oct-23	17-Nov-23	504
===== Segment C - ROW/Utility Easement Acquistions =====		74	30-Jan-24	17-May-24	371
DS.1440	Segment C - ROW/Utility Easement Acquistions; Certifications and Deed Recordings - Development	30	30-Jan-24	11-Mar-24	379
DS.1450	Segment C - ROW/Utility Easement Acquistions; Certifications and Deed Recordings - Submittal to VDOT	0	12-Mar-24		379
DS.1460	Segment C - ROW/Utility Easement Acquistions; Certifications and Deed Recordings - VDOT Review and Processing	40	12-Mar-24	21-Apr-24	556
DS.1470	Segment C - ROW/Utility Easement Acquistions; Certifications and Deed Recordings - Incorporate VDOT Comments	20	22-Apr-24	17-May-24	379
===== ENVIRONMENTAL =====		148	02-Dec-22	14-Jul-23	119
DS.1480	Environmental (Jurisdictional) Delineations/PhII ESA & Agencies Coordination	75	02-Dec-22	17-Mar-23	122
DS.1540	Section 7 Concurrence	40	20-Mar-23	15-May-23	122



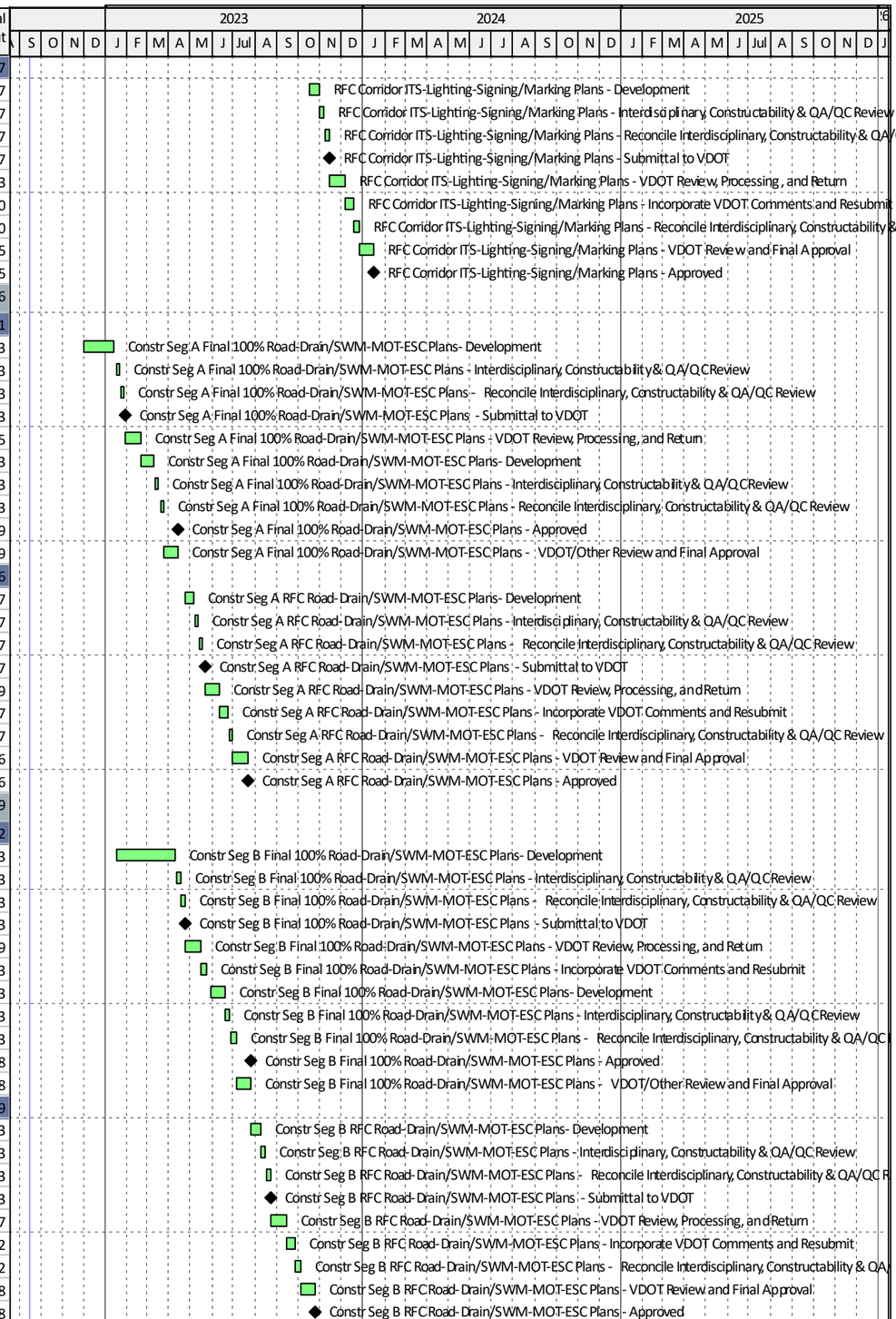
Start: 15-Sep-22
End: 15-Dec-25
Data: 15-Sep-22
Run: 16-Aug-22

Critical Remaining Work
Remaining Work
Actual Work
Changed Work
Remaining Level of Effort
Actual Level of Effort
Delay/Impact
Adverse Weather
Additional/Extra Work

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
DS.1560	Environmental Management Plan	40	16-May-23	14-Jul-23	122
Noise Abatement		140	02-Dec-22	05-Jul-23	127
DS.1490	Final Design - Noise Analysis - Development	65	02-Dec-22	03-Mar-23	128
DS.1500	Final Design - Noise Analysis - Interdisciplinary, Constructability & QA/QC Review	5	06-Mar-23	10-Mar-23	128
DS.1510	Final Design - Noise Analysis - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	13-Mar-23	17-Mar-23	128
DS.1530	Final Design - Noise Analysis - Submittal to VDOT	0	20-Mar-23		202
DS.1520	Final Design - Noise Analysis - VDOT Review, Processing, and Return	21	17-Mar-23	07-Apr-23	192
DS.1550	Final Design - Noise Analysis - Incorporate VDOT Comments and Resubmit	35	10-Apr-23	30-May-23	129
DS.1570	Final Design - Noise Analysis - Interdisciplinary, Constructability & QA/QC Review	5	31-May-23	06-Jun-23	129
DS.1580	Final Design - Noise Analysis - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	07-Jun-23	13-Jun-23	129
DS.1590	Final Design - Noise Analysis - VDOT Review and Final Approval	21	13-Jun-23	04-Jul-23	190
DS.1600	Final Design - Noise Analysis - Approved	0		05-Jul-23	130
===== UTILITIES =====		254	02-Dec-22	19-Dec-23	114
Corridor		83	02-Dec-22	10-Apr-23	126
DS.1610	Preliminary Utility Status Report - Development	70	02-Dec-22	10-Mar-23	127
DS.1640	Preliminary Utility Status Report- Interdisciplinary, Constructability & QA/QC Review	5	13-Mar-23	17-Mar-23	127
DS.1650	Preliminary Utility Status Report - Submittal to VDOT	0	20-Mar-23		127
DS.1660	Preliminary Utility Status Report - VDOT Review, Processing, and Return	21	20-Mar-23	10-Apr-23	186
DS.1670	Preliminary Utility Status Report- Approved	0		10-Apr-23	186
Segment A		30	16-Jan-23	24-Feb-23	217
DS.1620	Constr Seg A Preliminary Utility Review (UFI) Meeting - Design Prep	30	16-Jan-23	24-Feb-23	217
DS.1630	Constr Seg A Preliminary Utility Review (UFI) - Meeting	0		24-Feb-23	217
Segment B		60	25-Apr-23	21-Jul-23	117
DS.1680	Constr Seg B Preliminary Utility Review (UFI) Meeting - Design Prep	25	25-Apr-23	31-May-23	117
DS.1690	Constr Seg B Preliminary Utility Review (UFI) - Meeting	0		31-May-23	117
DS.1700	Segment B - Utilities - Test Holes Utilties Locating	35	01-Jun-23	21-Jul-23	117
Segment C		55	29-Sep-23	19-Dec-23	121
DS.1710	Constr Seg C Preliminary Utility Review (UFI) Meeting - Design Prep	25	29-Sep-23	02-Nov-23	121
DS.1720	Constr Seg C Preliminary Utility Review (UFI) - Meeting	0		02-Nov-23	121
DS.1730	Segment C - Utilities - Test Holes Utilties Locating	30	03-Nov-23	19-Dec-23	121
===== ROADWAY DESIGN =====		346	02-Dec-22	07-May-24	22
Corridor - ITS-Lighting-Signing/Marking Plans		271	02-Dec-22	16-Jan-24	77
Corridor - ITS-Lighting-Signing/Marking Plans - Preliminary Design		103	02-Dec-22	08-May-23	79
DS.1750	Prelim Design Corridor ITS-Lighting-Signing/Marking Plans/Analysis - Development	45	02-Dec-22	03-Feb-23	84
DS.1810	Prelim Design Corridor ITS-Lighting-Signing/Marking Plans/Analysis - Interdisciplinary, Constructability & QA/QC Review	5	06-Feb-23	10-Feb-23	84
DS.1820	Prelim Design Corridor ITS-Lighting-Signing/Marking Plans/Analysis - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	13-Feb-23	17-Feb-23	84
DS.1830	Prelim Design Corridor ITS-Lighting-Signing/Marking Plans/Analysis - Submittal to VDOT	0	20-Feb-23		84
DS.1840	Prelim Design Corridor ITS-Lighting-Signing/Marking Plans/Analysis - VDOT Review, Processing, and Return	21	20-Feb-23	13-Mar-23	121
DS.1860	Prelim Design Corridor ITS-Lighting-Signing/Marking Plans/Analysis - Incorporate VDOT Comments and Resubmit	15	13-Mar-23	31-Mar-23	82
DS.1900	Prelim Design Corridor ITS-Lighting-Signing/Marking Plans/Analysis - Interdisciplinary, Constructability & QA/QC Review	5	03-Apr-23	10-Apr-23	82
DS.1910	Prelim Design Corridor ITS-Lighting-Signing/Marking Plans/Analysis - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	11-Apr-23	17-Apr-23	82
DS.1940	Prelim Design Corridor ITS-Lighting-Signing/Marking Plans/Analysis - VDOT Review and Final Approval	21	17-Apr-23	08-May-23	121
DS.2000	Prelim Design Corridor ITS-Lighting-Signing/Marking Plans/Analysis - Approved	0		08-May-23	121
Corridor - ITS-Lighting-Signing/Marking Plans - Final 100% Design		109	09-May-23	17-Oct-23	74
DS.2010	Final 100% Corridor ITS-Lighting-Signing/Marking Plans - Development	45	09-May-23	14-Jul-23	80
DS.2140	Final 100% Corridor ITS-Lighting-Signing/Marking Plans - Interdisciplinary, Constructability & QA/QC Review	5	17-Jul-23	21-Jul-23	80
DS.2160	Final 100% Corridor ITS-Lighting-Signing/Marking Plans - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	24-Jul-23	28-Jul-23	80
DS.2190	Final 100% Corridor ITS-Lighting-Signing/Marking Plans - Submittal to VDOT	0	31-Jul-23		80
DS.2200	Final 100% Corridor ITS-Lighting-Signing/Marking Plans - VDOT Review, Processing, and Return	21	31-Jul-23	21-Aug-23	114
DS.2230	Final 100% Corridor ITS-Lighting-Signing/Marking Plans - Incorporate VDOT Comments and Resubmit	15	21-Aug-23	12-Sep-23	77
DS.2260	Final 100% Corridor ITS-Lighting-Signing/Marking Plans - Interdisciplinary, Constructability & QA/QC Review	5	13-Sep-23	19-Sep-23	77
DS.2280	Final 100% Corridor ITS-Lighting-Signing/Marking Plans - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	20-Sep-23	26-Sep-23	77
DS.2300	Final 100% Corridor ITS-Lighting-Signing/Marking Plans - VDOT Review and Final Approval	21	26-Sep-23	17-Oct-23	114
DS.2360	Final 100% Corridor ITS-Lighting-Signing/Marking Plans - Approved	0		17-Oct-23	114



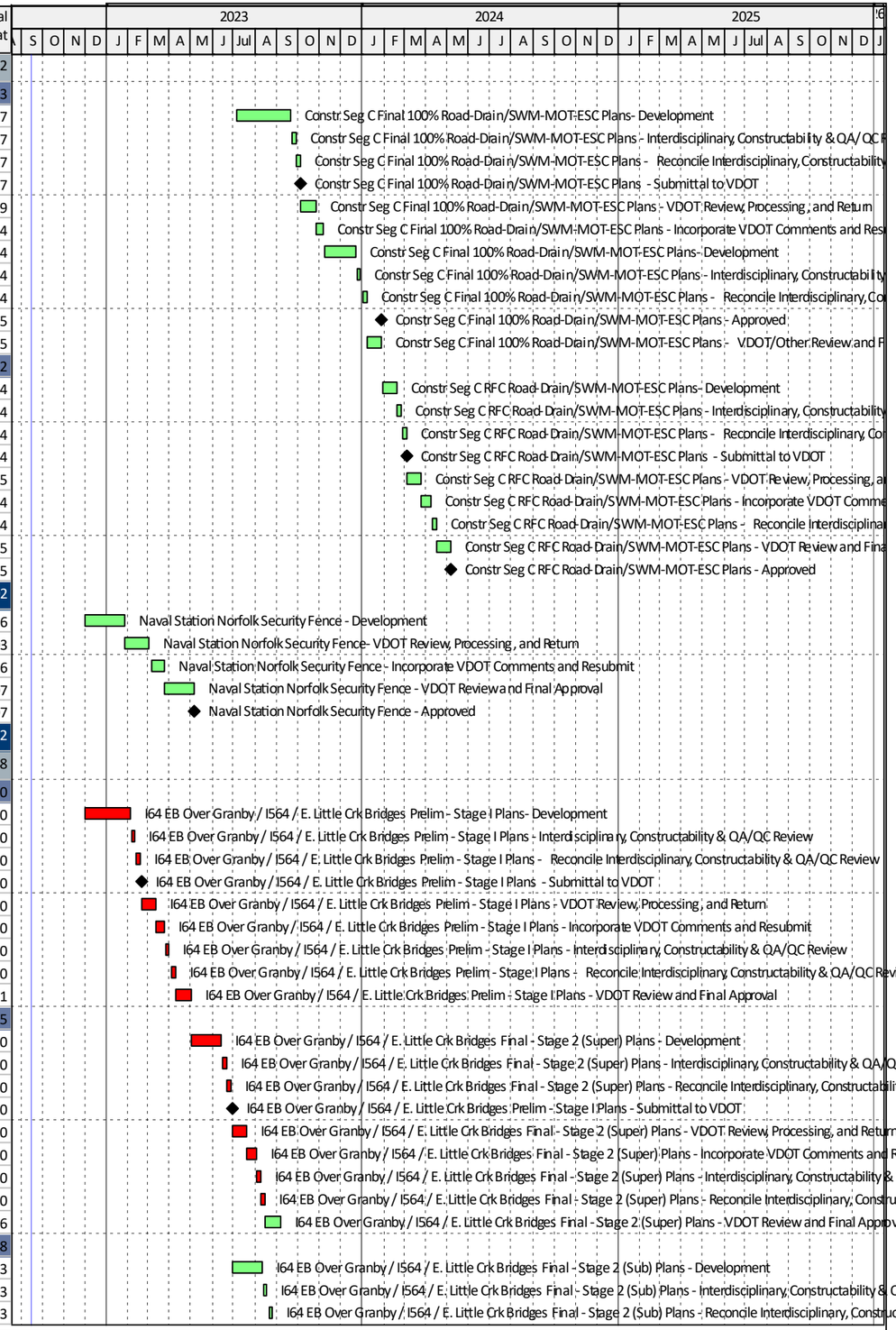
Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
Corridor - ITS-Lighting-Signing/Marking Plans - RFC Design		59	18-Oct-23	16-Jan-24	77
DS.2370	RFC Corridor ITS-Lighting-Signing/Marking Plans - Development	10	18-Oct-23	31-Oct-23	77
DS.2400	RFC Corridor ITS-Lighting-Signing/Marking Plans - Interdisciplinary, Constructability & QA/QC Review	5	01-Nov-23	07-Nov-23	77
DS.2410	RFC Corridor ITS-Lighting-Signing/Marking Plans - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	08-Nov-23	14-Nov-23	77
DS.2430	RFC Corridor ITS-Lighting-Signing/Marking Plans - Submittal to VDOT	0	15-Nov-23		77
DS.2440	RFC Corridor ITS-Lighting-Signing/Marking Plans - VDOT Review, Processing, and Return	21	15-Nov-23	06-Dec-23	113
DS.2450	RFC Corridor ITS-Lighting-Signing/Marking Plans - Incorporate VDOT Comments and Resubmit	10	06-Dec-23	19-Dec-23	80
DS.2460	RFC Corridor ITS-Lighting-Signing/Marking Plans - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	20-Dec-23	26-Dec-23	80
DS.2480	RFC Corridor ITS-Lighting-Signing/Marking Plans - VDOT Review and Final Approval	21	26-Dec-23	16-Jan-24	115
DS.2510	RFC Corridor ITS-Lighting-Signing/Marking Plans - Approved	0		16-Jan-24	115
Segment A - Roadway Design - Road-Drain/SWM-MOT-ESC Plans		153	02-Dec-22	21-Jul-23	36
100% Design		88	02-Dec-22	14-Apr-23	31
DS.1740	Constr Seg A Final 100% Road-Drain/SWM-MOT-ESC Plans- Development	30	02-Dec-22	13-Jan-23	33
DS.1760	Constr Seg A Final 100% Road-Drain/SWM-MOT-ESC Plans - Interdisciplinary, Constructability & QA/QC Review	5	16-Jan-23	20-Jan-23	33
DS.1780	Constr Seg A Final 100% Road-Drain/SWM-MOT-ESC Plans - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	23-Jan-23	27-Jan-23	33
DS.1790	Constr Seg A Final 100% Road-Drain/SWM-MOT-ESC Plans - Submittal to VDOT	0	30-Jan-23		33
DS.1800	Constr Seg A Final 100% Road-Drain/SWM-MOT-ESC Plans - VDOT Review, Processing, and Return	21	30-Jan-23	20-Feb-23	45
DS.1850	Constr Seg A Final 100% Road-Drain/SWM-MOT-ESC Plans- Development	114	20-Feb-23	10-Mar-23	33
DS.1870	Constr Seg A Final 100% Road-Drain/SWM-MOT-ESC Plans - Interdisciplinary, Constructability & QA/QC Review	5	13-Mar-23	17-Mar-23	33
DS.1880	Constr Seg A Final 100% Road-Drain/SWM-MOT-ESC Plans - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	20-Mar-23	24-Mar-23	33
DS.1930	Constr Seg A Final 100% Road-Drain/SWM-MOT-ESC Plans - Approved	0		14-Apr-23	49
DS.1890	Constr Seg A Final 100% Road-Drain/SWM-MOT-ESC Plans - VDOT/Other Review and Final Approval	21	24-Mar-23	14-Apr-23	49
Released for Construction		61	24-Apr-23	21-Jul-23	36
DS.1960	Constr Seg A RFC Road-Drain/SWM-MOT-ESC Plans- Development	10	24-Apr-23	05-May-23	27
DS.1990	Constr Seg A RFC Road-Drain/SWM-MOT-ESC Plans - Interdisciplinary, Constructability & QA/QC Review	5	08-May-23	12-May-23	27
DS.2020	Constr Seg A RFC Road-Drain/SWM-MOT-ESC Plans - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	15-May-23	19-May-23	27
DS.2040	Constr Seg A RFC Road-Drain/SWM-MOT-ESC Plans - Submittal to VDOT	0	22-May-23		27
DS.2050	Constr Seg A RFC Road-Drain/SWM-MOT-ESC Plans - VDOT Review, Processing, and Return	21	22-May-23	12-Jun-23	39
DS.2070	Constr Seg A RFC Road-Drain/SWM-MOT-ESC Plans - Incorporate VDOT Comments and Resubmit	10	12-Jun-23	23-Jun-23	27
DS.2090	Constr Seg A RFC Road-Drain/SWM-MOT-ESC Plans - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	26-Jun-23	30-Jun-23	27
DS.2110	Constr Seg A RFC Road-Drain/SWM-MOT-ESC Plans - VDOT Review and Final Approval	21	30-Jun-23	21-Jul-23	56
DS.2150	Constr Seg A RFC Road-Drain/SWM-MOT-ESC Plans - Approved	0		21-Jul-23	56
Segment B - Roadway Design - Road-Drain/SWM-MOT-ESC Plans		190	16-Jan-23	25-Oct-23	49
100% Design		128	16-Jan-23	26-Jul-23	52
DS.1770	Constr Seg B Final 100% Road-Drain/SWM-MOT-ESC Plans- Development	60	16-Jan-23	10-Apr-23	53
DS.1920	Constr Seg B Final 100% Road-Drain/SWM-MOT-ESC Plans - Interdisciplinary, Constructability & QA/QC Review	5	11-Apr-23	17-Apr-23	53
DS.1950	Constr Seg B Final 100% Road-Drain/SWM-MOT-ESC Plans - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	18-Apr-23	24-Apr-23	53
DS.1970	Constr Seg B Final 100% Road-Drain/SWM-MOT-ESC Plans - Submittal to VDOT	0	25-Apr-23		53
DS.1980	Constr Seg B Final 100% Road-Drain/SWM-MOT-ESC Plans - VDOT Review, Processing, and Return	21	25-Apr-23	16-May-23	79
DS.2030	Constr Seg B Final 100% Road-Drain/SWM-MOT-ESC Plans - Incorporate VDOT Comments and Resubmit	8	16-May-23	25-May-23	53
DS.2060	Constr Seg B Final 100% Road-Drain/SWM-MOT-ESC Plans- Development	15	30-May-23	19-Jun-23	53
DS.2080	Constr Seg B Final 100% Road-Drain/SWM-MOT-ESC Plans - Interdisciplinary, Constructability & QA/QC Review	5	20-Jun-23	26-Jun-23	53
DS.2100	Constr Seg B Final 100% Road-Drain/SWM-MOT-ESC Plans - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	27-Jun-23	05-Jul-23	53
DS.2170	Constr Seg B Final 100% Road-Drain/SWM-MOT-ESC Plans - Approved	0		26-Jul-23	78
DS.2130	Constr Seg B Final 100% Road-Drain/SWM-MOT-ESC Plans - VDOT/Other Review and Final Approval	21	05-Jul-23	26-Jul-23	78
Released for Construction		62	27-Jul-23	25-Oct-23	49
DS.2180	Constr Seg B RFC Road-Drain/SWM-MOT-ESC Plans- Development	10	27-Jul-23	09-Aug-23	53
DS.2210	Constr Seg B RFC Road-Drain/SWM-MOT-ESC Plans - Interdisciplinary, Constructability & QA/QC Review	5	10-Aug-23	16-Aug-23	53
DS.2220	Constr Seg B RFC Road-Drain/SWM-MOT-ESC Plans - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	17-Aug-23	23-Aug-23	53
DS.2240	Constr Seg B RFC Road-Drain/SWM-MOT-ESC Plans - Submittal to VDOT	0	24-Aug-23		53
DS.2250	Constr Seg B RFC Road-Drain/SWM-MOT-ESC Plans - VDOT Review, Processing, and Return	21	24-Aug-23	14-Sep-23	77
DS.2270	Constr Seg B RFC Road-Drain/SWM-MOT-ESC Plans - Incorporate VDOT Comments and Resubmit	10	14-Sep-23	27-Sep-23	52
DS.2310	Constr Seg B RFC Road-Drain/SWM-MOT-ESC Plans - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	28-Sep-23	04-Oct-23	52
DS.2330	Constr Seg B RFC Road-Drain/SWM-MOT-ESC Plans - VDOT Review and Final Approval	21	04-Oct-23	25-Oct-23	78
DS.2380	Constr Seg B RFC Road-Drain/SWM-MOT-ESC Plans - Approved	0		25-Oct-23	78



Start: 15-Sep-22
End: 15-Dec-25
Data: 15-Sep-22
Run: 16-Aug-22

Critical Remaining Work
Remaining Work
Actual Work
Changed Work
Remaining Level of Effort
Actual Level of Effort
Delay/Impact
Adverse Weather
Additional/Extra Work

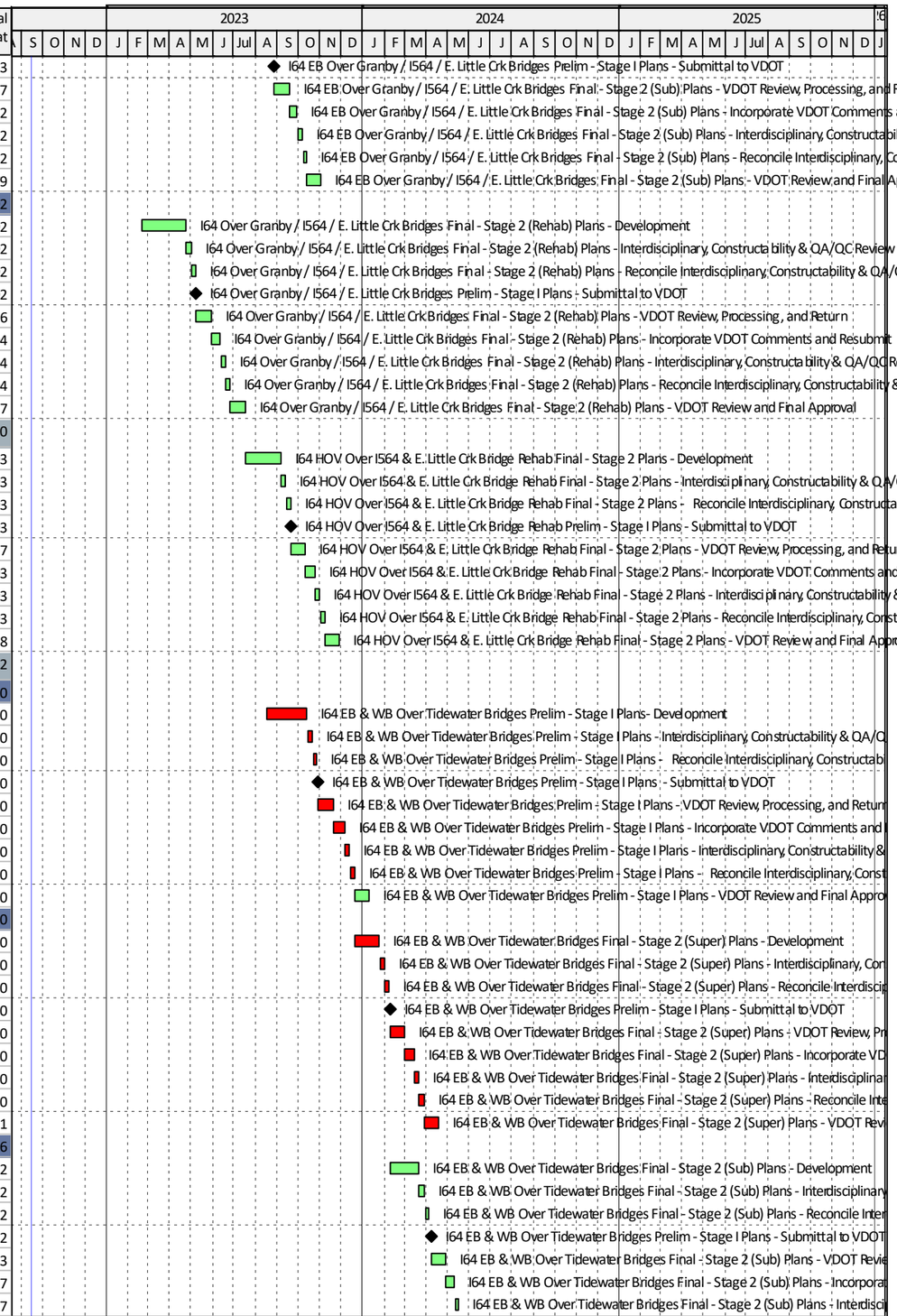
Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
Segment C - Roadway Design - Road-Drain/SWM-MOT-ESC Plans		206	05-Jul-23	07-May-24	22
100% Design		139	05-Jul-23	29-Jan-24	23
DS.2120	Constr Seg C Final 100% Road-Drain/SWM-MOT-ESC Plans- Development	55	05-Jul-23	21-Sep-23	27
DS.2290	Constr Seg C Final 100% Road-Drain/SWM-MOT-ESC Plans - Interdisciplinary, Constructability & QA/QC Review	5	22-Sep-23	28-Sep-23	27
DS.2320	Constr Seg C Final 100% Road-Drain/SWM-MOT-ESC Plans - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	29-Sep-23	05-Oct-23	27
DS.2340	Constr Seg C Final 100% Road-Drain/SWM-MOT-ESC Plans - Submittal to VDOT	0	06-Oct-23		27
DS.2350	Constr Seg C Final 100% Road-Drain/SWM-MOT-ESC Plans - VDOT Review, Processing, and Return	21	06-Oct-23	27-Oct-23	39
DS.2390	Constr Seg C Final 100% Road-Drain/SWM-MOT-ESC Plans - Incorporate VDOT Comments and Resubmit	8	27-Oct-23	07-Nov-23	24
DS.2420	Constr Seg C Final 100% Road-Drain/SWM-MOT-ESC Plans- Development	30	08-Nov-23	22-Dec-23	24
DS.2470	Constr Seg C Final 100% Road-Drain/SWM-MOT-ESC Plans - Interdisciplinary, Constructability & QA/QC Review	5	25-Dec-23	29-Dec-23	24
DS.2490	Constr Seg C Final 100% Road-Drain/SWM-MOT-ESC Plans - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	02-Jan-24	08-Jan-24	24
DS.2520	Constr Seg C Final 100% Road-Drain/SWM-MOT-ESC Plans - Approved	0		29-Jan-24	35
DS.2500	Constr Seg C Final 100% Road-Drain/SWM-MOT-ESC Plans - VDOT/Other Review and Final Approval	21	08-Jan-24	29-Jan-24	35
Released for Construction		67	30-Jan-24	07-May-24	22
DS.2530	Constr Seg C RFC Road-Drain/SWM-MOT-ESC Plans- Development	15	30-Jan-24	19-Feb-24	24
DS.2540	Constr Seg C RFC Road-Drain/SWM-MOT-ESC Plans - Interdisciplinary, Constructability & QA/QC Review	5	20-Feb-24	26-Feb-24	24
DS.2550	Constr Seg C RFC Road-Drain/SWM-MOT-ESC Plans - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	27-Feb-24	04-Mar-24	24
DS.2560	Constr Seg C RFC Road-Drain/SWM-MOT-ESC Plans - Submittal to VDOT	0	05-Mar-24		24
DS.2570	Constr Seg C RFC Road-Drain/SWM-MOT-ESC Plans - VDOT Review, Processing, and Return	21	05-Mar-24	26-Mar-24	35
DS.2580	Constr Seg C RFC Road-Drain/SWM-MOT-ESC Plans - Incorporate VDOT Comments and Resubmit	10	26-Mar-24	09-Apr-24	24
DS.2590	Constr Seg C RFC Road-Drain/SWM-MOT-ESC Plans - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	10-Apr-24	16-Apr-24	24
DS.2600	Constr Seg C RFC Road-Drain/SWM-MOT-ESC Plans - VDOT Review and Final Approval	21	16-Apr-24	07-May-24	35
DS.2610	Constr Seg C RFC Road-Drain/SWM-MOT-ESC Plans - Approved	0		07-May-24	35
===== Naval Station Norfolk Security Fence =====		102	02-Dec-22	05-May-23	602
DS.2620	Naval Station Norfolk Security Fence - Development	40	02-Dec-22	27-Jan-23	616
DS.2630	Naval Station Norfolk Security Fence- VDOT Review, Processing, and Return	35	27-Jan-23	03-Mar-23	903
DS.2640	Naval Station Norfolk Security Fence - Incorporate VDOT Comments and Resubmit	15	06-Mar-23	24-Mar-23	616
DS.2650	Naval Station Norfolk Security Fence - VDOT Review and Final Approval	42	24-Mar-23	05-May-23	907
DS.2660	Naval Station Norfolk Security Fence - Approved	0		05-May-23	907
===== STRUCTURE DESIGN =====		413	02-Dec-22	14-Aug-24	2
I64 EB Over Granby / I564 /E. Little Crk Bridges		225	02-Dec-22	03-Nov-23	48
I64 EB Over Granby / I564 / E. Little Crk Bridges Prelim - Stage I Plans		98	02-Dec-22	01-May-23	0
DS.2670	I64 EB Over Granby / I564 / E. Little Crk Bridges Prelim - Stage I Plans- Development	45	02-Dec-22	03-Feb-23	0
DS.2680	I64 EB Over Granby / I564 / E. Little Crk Bridges Prelim - Stage I Plans - Interdisciplinary, Constructability & QA/QC Review	5	06-Feb-23	10-Feb-23	0
DS.2690	I64 EB Over Granby / I564 / E. Little Crk Bridges Prelim - Stage I Plans - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	13-Feb-23	17-Feb-23	0
DS.2700	I64 EB Over Granby / I564 / E. Little Crk Bridges Prelim - Stage I Plans - Submittal to VDOT	0	20-Feb-23		0
DS.2710	I64 EB Over Granby / I564 / E. Little Crk Bridges Prelim - Stage I Plans - VDOT Review, Processing, and Return	21	20-Feb-23	13-Mar-23	0
DS.2730	I64 EB Over Granby / I564 / E. Little Crk Bridges Prelim - Stage I Plans - Incorporate VDOT Comments and Resubmit	10	13-Mar-23	24-Mar-23	0
DS.2740	I64 EB Over Granby / I564 / E. Little Crk Bridges Prelim - Stage I Plans - Interdisciplinary, Constructability & QA/QC Review	5	27-Mar-23	31-Mar-23	0
DS.2750	I64 EB Over Granby / I564 / E. Little Crk Bridges Prelim - Stage I Plans - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	03-Apr-23	10-Apr-23	0
DS.2760	I64 EB Over Granby / I564 / E. Little Crk Bridges Prelim - Stage I Plans - VDOT Review and Final Approval	21	10-Apr-23	01-May-23	1
I64 EB Over Granby / I564 / E. Little Crk Bridges Final - Stage 2 (Super) Plans		85	02-May-23	06-Sep-23	25
DS.2780	I64 EB Over Granby / I564 / E. Little Crk Bridges Final - Stage 2 (Super) Plans - Development	30	02-May-23	14-Jun-23	0
DS.2840	I64 EB Over Granby / I564 / E. Little Crk Bridges Final - Stage 2 (Super) Plans - Interdisciplinary, Constructability & QA/QC Review	5	15-Jun-23	21-Jun-23	0
DS.2860	I64 EB Over Granby / I564 / E. Little Crk Bridges Final - Stage 2 (Super) Plans - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	22-Jun-23	28-Jun-23	0
DS.2880	I64 EB Over Granby / I564 / E. Little Crk Bridges Prelim - Stage I Plans - Submittal to VDOT	0	29-Jun-23		0
DS.2890	I64 EB Over Granby / I564 / E. Little Crk Bridges Final - Stage 2 (Super) Plans - VDOT Review, Processing, and Return	21	29-Jun-23	20-Jul-23	0
DS.2920	I64 EB Over Granby / I564 / E. Little Crk Bridges Final - Stage 2 (Super) Plans - Incorporate VDOT Comments and Resubmit	10	20-Jul-23	02-Aug-23	0
DS.2930	I64 EB Over Granby / I564 / E. Little Crk Bridges Final - Stage 2 (Super) Plans - Interdisciplinary, Constructability & QA/QC Review	5	03-Aug-23	09-Aug-23	0
DS.2940	I64 EB Over Granby / I564 / E. Little Crk Bridges Final - Stage 2 (Super) Plans - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	10-Aug-23	16-Aug-23	0
DS.2960	I64 EB Over Granby / I564 / E. Little Crk Bridges Final - Stage 2 (Super) Plans - VDOT Review and Final Approval	21	16-Aug-23	06-Sep-23	36
I64 EB Over Granby / I564 / E. Little Crk Bridges Final - Stage 2 (Sub) Plans		88	29-Jun-23	03-Nov-23	48
DS.2900	I64 EB Over Granby / I564 / E. Little Crk Bridges Final - Stage 2 (Sub) Plans - Development	30	29-Jun-23	11-Aug-23	53
DS.2950	I64 EB Over Granby / I564 / E. Little Crk Bridges Final - Stage 2 (Sub) Plans - Interdisciplinary, Constructability & QA/QC Review	5	14-Aug-23	18-Aug-23	53
DS.2980	I64 EB Over Granby / I564 / E. Little Crk Bridges Final - Stage 2 (Sub) Plans - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	21-Aug-23	25-Aug-23	53



Start: 15-Sep-22
End: 15-Dec-25
Data: 15-Sep-22
Run: 16-Aug-22

Critical Remaining Work
Remaining Work
Actual Work
Changed Work
Remaining Level of Effort
Actual Level of Effort
Delay/Impact
Adverse Weather
Additional/Extra Work

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
DS.2990	I64 EB Over Granby / I564 / E. Little Crk Bridges Prelim - Stage I Plans - Submittal to VDOT	0	28-Aug-23		53
DS.3000	I64 EB Over Granby / I564 / E. Little Crk Bridges Final - Stage 2 (Sub) Plans - VDOT Review, Processing, and Return	21	28-Aug-23	18-Sep-23	77
DS.3030	I64 EB Over Granby / I564 / E. Little Crk Bridges Final - Stage 2 (Sub) Plans - Incorporate VDOT Comments and Resubmit	10	18-Sep-23	29-Sep-23	52
DS.3060	I64 EB Over Granby / I564 / E. Little Crk Bridges Final - Stage 2 (Sub) Plans - Interdisciplinary, Constructability & QA/QC Review	5	02-Oct-23	06-Oct-23	52
DS.3070	I64 EB Over Granby / I564 / E. Little Crk Bridges Final - Stage 2 (Sub) Plans - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	09-Oct-23	13-Oct-23	52
DS.3090	I64 EB Over Granby / I564 / E. Little Crk Bridges Final - Stage 2 (Sub) Plans - VDOT Review and Final Approval	21	13-Oct-23	03-Nov-23	79
I64 EB & WB Over Granby / I564 / E. Little Crk Bridges Rehab Final - Stage 2 (Rehab) Plans		**98**	**20-Feb-23**	**17-Jul-23**	**92**
DS.2720	I64 Over Granby / I564 / E. Little Crk Bridges Final - Stage 2 (Rehab) Plans - Development	45	20-Feb-23	24-Apr-23	92
DS.2770	I64 Over Granby / I564 / E. Little Crk Bridges Final - Stage 2 (Rehab) Plans - Interdisciplinary, Constructability & QA/QC Review	5	25-Apr-23	01-May-23	92
DS.2790	I64 Over Granby / I564 / E. Little Crk Bridges Final - Stage 2 (Rehab) Plans - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	02-May-23	08-May-23	92
DS.2800	I64 Over Granby / I564 / E. Little Crk Bridges Prelim - Stage I Plans - Submittal to VDOT	0	09-May-23		92
DS.2810	I64 Over Granby / I564 / E. Little Crk Bridges Final - Stage 2 (Rehab) Plans - VDOT Review, Processing, and Return	21	09-May-23	30-May-23	136
DS.2820	I64 Over Granby / I564 / E. Little Crk Bridges Final - Stage 2 (Rehab) Plans - Incorporate VDOT Comments and Resubmit	10	30-May-23	12-Jun-23	94
DS.2830	I64 Over Granby / I564 / E. Little Crk Bridges Final - Stage 2 (Rehab) Plans - Interdisciplinary, Constructability & QA/QC Review	5	13-Jun-23	19-Jun-23	94
DS.2850	I64 Over Granby / I564 / E. Little Crk Bridges Final - Stage 2 (Rehab) Plans - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	20-Jun-23	26-Jun-23	94
DS.2870	I64 Over Granby / I564 / E. Little Crk Bridges Final - Stage 2 (Rehab) Plans - VDOT Review and Final Approval	21	26-Jun-23	17-Jul-23	137
I64 HOV Over I564 & E. Little Crk Bridge Rehab Final - Stage 2 Plans		**91**	**18-Jul-23**	**29-Nov-23**	**90**
DS.2910	I64 HOV Over I564 & E. Little Crk Bridge Rehab Final - Stage 2 Plans - Development	35	18-Jul-23	06-Sep-23	93
DS.3010	I64 HOV Over I564 & E. Little Crk Bridge Rehab Final - Stage 2 Plans - Interdisciplinary, Constructability & QA/QC Review	5	07-Sep-23	13-Sep-23	93
DS.3020	I64 HOV Over I564 & E. Little Crk Bridge Rehab Final - Stage 2 Plans - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	14-Sep-23	20-Sep-23	93
DS.3040	I64 HOV Over I564 & E. Little Crk Bridge Rehab Prelim - Stage I Plans - Submittal to VDOT	0	21-Sep-23		93
DS.3050	I64 HOV Over I564 & E. Little Crk Bridge Rehab Final - Stage 2 Plans - VDOT Review, Processing, and Return	21	21-Sep-23	12-Oct-23	137
DS.3080	I64 HOV Over I564 & E. Little Crk Bridge Rehab Final - Stage 2 Plans - Incorporate VDOT Comments and Resubmit	10	12-Oct-23	25-Oct-23	93
DS.3120	I64 HOV Over I564 & E. Little Crk Bridge Rehab Final - Stage 2 Plans - Interdisciplinary, Constructability & QA/QC Review	5	26-Oct-23	01-Nov-23	93
DS.3150	I64 HOV Over I564 & E. Little Crk Bridge Rehab Final - Stage 2 Plans - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	02-Nov-23	08-Nov-23	93
DS.3160	I64 HOV Over I564 & E. Little Crk Bridge Rehab Final - Stage 2 Plans - VDOT Review and Final Approval	21	08-Nov-23	29-Nov-23	138
I64 EB & WB Over Tidewater Bridges		**242**	**17-Aug-23**	**14-Aug-24**	**2**
I64 EB & WB Over Tidewater Bridges Prelim - Stage I Plans		**96**	**17-Aug-23**	**10-Jan-24**	**20**
DS.2970	I64 EB & WB Over Tidewater Bridges Prelim - Stage I Plans- Development	40	17-Aug-23	13-Oct-23	0
DS.3100	I64 EB & WB Over Tidewater Bridges Prelim - Stage I Plans - Interdisciplinary, Constructability & QA/QC Review	5	16-Oct-23	20-Oct-23	0
DS.3110	I64 EB & WB Over Tidewater Bridges Prelim - Stage I Plans - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	23-Oct-23	27-Oct-23	0
DS.3130	I64 EB & WB Over Tidewater Bridges Prelim - Stage I Plans - Submittal to VDOT	0	30-Oct-23		0
DS.3140	I64 EB & WB Over Tidewater Bridges Prelim - Stage I Plans - VDOT Review, Processing, and Return	21	30-Oct-23	20-Nov-23	0
DS.3170	I64 EB & WB Over Tidewater Bridges Prelim - Stage I Plans - Incorporate VDOT Comments and Resubmit	10	20-Nov-23	06-Dec-23	0
DS.3180	I64 EB & WB Over Tidewater Bridges Prelim - Stage I Plans - Interdisciplinary, Constructability & QA/QC Review	5	07-Dec-23	13-Dec-23	0
DS.3190	I64 EB & WB Over Tidewater Bridges Prelim - Stage I Plans - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	14-Dec-23	20-Dec-23	0
DS.3200	I64 EB & WB Over Tidewater Bridges Prelim - Stage I Plans - VDOT Review and Final Approval	21	20-Dec-23	10-Jan-24	30
I64 EB & WB Over Tidewater Bridgesl Final - Stage 2 (Super) Plans		**79**	**21-Dec-23**	**18-Apr-24**	**0**
DS.3210	I64 EB & WB Over Tidewater Bridges Final - Stage 2 (Super) Plans - Development	25	21-Dec-23	25-Jan-24	0
DS.3220	I64 EB & WB Over Tidewater Bridges Final - Stage 2 (Super) Plans - Interdisciplinary, Constructability & QA/QC Review	5	26-Jan-24	01-Feb-24	0
DS.3230	I64 EB & WB Over Tidewater Bridges Final - Stage 2 (Super) Plans - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	02-Feb-24	08-Feb-24	0
DS.3240	I64 EB & WB Over Tidewater Bridges Prelim - Stage I Plans - Submittal to VDOT	0	09-Feb-24		0
DS.3250	I64 EB & WB Over Tidewater Bridges Final - Stage 2 (Super) Plans - VDOT Review, Processing, and Return	21	09-Feb-24	01-Mar-24	0
DS.3270	I64 EB & WB Over Tidewater Bridges Final - Stage 2 (Super) Plans - Incorporate VDOT Comments and Resubmit	10	01-Mar-24	14-Mar-24	0
DS.3280	I64 EB & WB Over Tidewater Bridges Final - Stage 2 (Super) Plans - Interdisciplinary, Constructability & QA/QC Review	5	15-Mar-24	21-Mar-24	0
DS.3290	I64 EB & WB Over Tidewater Bridges Final - Stage 2 (Super) Plans - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	22-Mar-24	28-Mar-24	0
DS.3310	I64 EB & WB Over Tidewater Bridges Final - Stage 2 (Super) Plans - VDOT Review and Final Approval	21	28-Mar-24	18-Apr-24	1
I64 EB & WB Over Tidewater Bridges Final - Stage 2 (Sub) Plans		**85**	**09-Feb-24**	**14-Jun-24**	**16**
DS.3260	I64 EB & WB Over Tidewater Bridges Final - Stage 2 (Sub) Plans - Development	30	09-Feb-24	21-Mar-24	2
DS.3300	I64 EB & WB Over Tidewater Bridges Final - Stage 2 (Sub) Plans - Interdisciplinary, Constructability & QA/QC Review	5	22-Mar-24	28-Mar-24	2
DS.3320	I64 EB & WB Over Tidewater Bridges Final - Stage 2 (Sub) Plans - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	01-Apr-24	05-Apr-24	2
DS.3330	I64 EB & WB Over Tidewater Bridges Prelim - Stage I Plans - Submittal to VDOT	0	08-Apr-24		2
DS.3340	I64 EB & WB Over Tidewater Bridges Final - Stage 2 (Sub) Plans - VDOT Review, Processing, and Return	21	08-Apr-24	29-Apr-24	23
DS.3360	I64 EB & WB Over Tidewater Bridges Final - Stage 2 (Sub) Plans - Incorporate VDOT Comments and Resubmit	10	29-Apr-24	10-May-24	17
DS.3370	I64 EB & WB Over Tidewater Bridges Final - Stage 2 (Sub) Plans - Interdisciplinary, Constructability & QA/QC Review	5	13-May-24	17-May-24	17



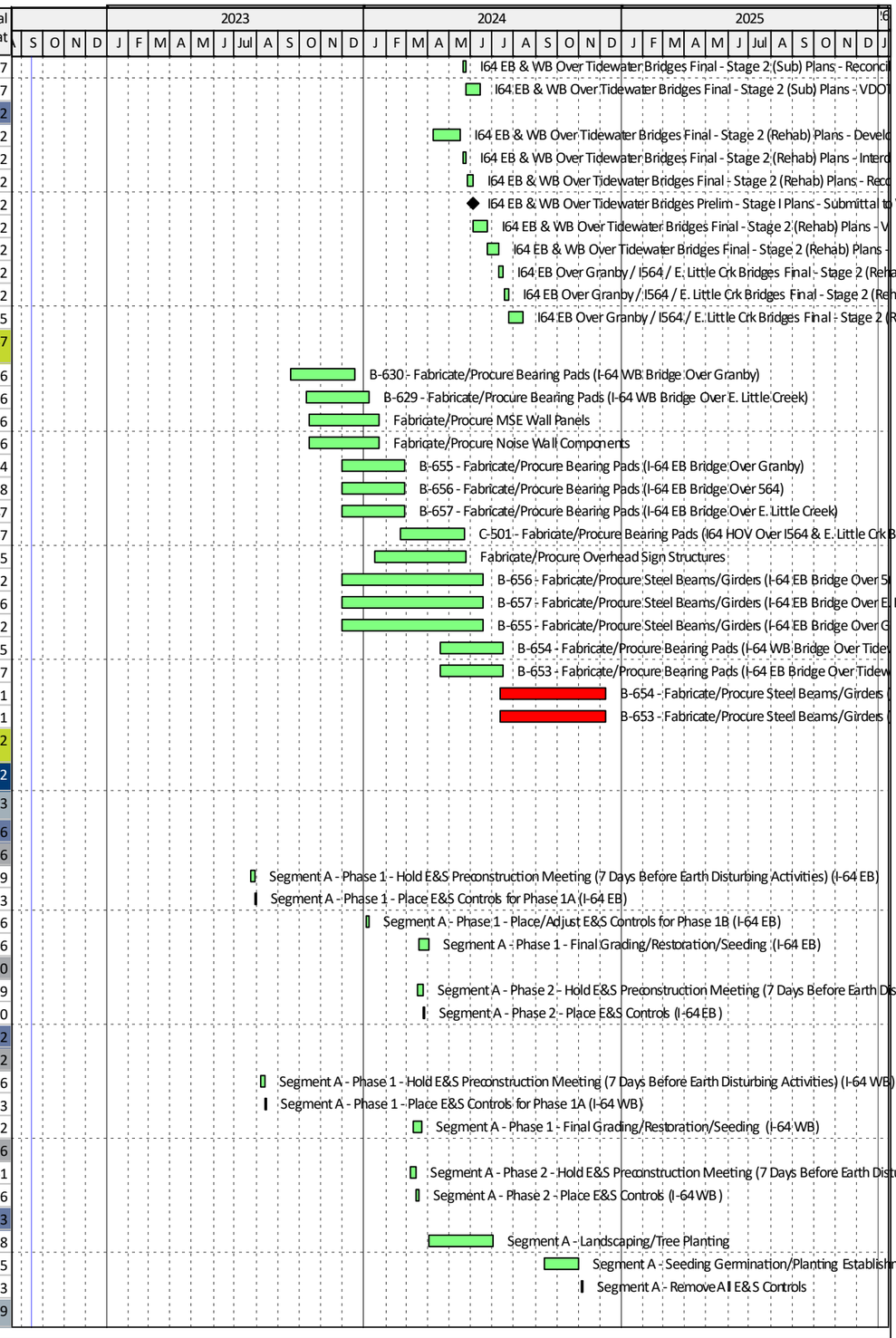
Start: 15-Sep-22
End: 15-Dec-25
Data: 15-Sep-22
Run: 16-Aug-22

Critical Remaining Work
Remaining Work
Actual Work
Changed Work
Remaining Level of Effort
Actual Level of Effort
Delay/Impact
Adverse Weather
Additional/Extra Work

VDOT I-64 HREL SEGMENT 1A BID SCHEDULE

(ACAA) INFO COLUMNS (11x17) | TASK filter: All Activities

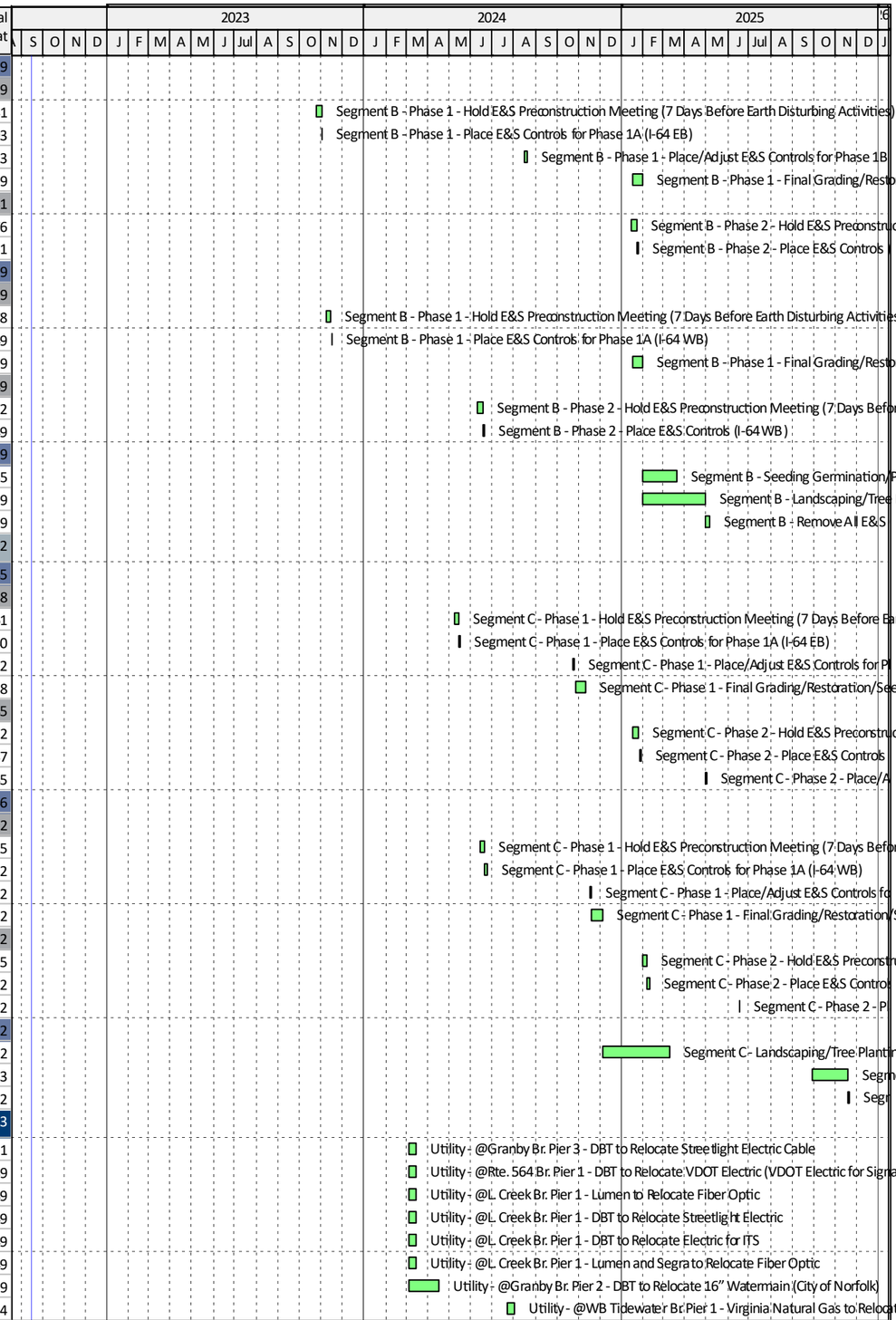
Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
DS.3380	I64 EB & WB Over Tidewater Bridges Final - Stage 2 (Sub) Plans - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	20-May-24	24-May-24	17
DS.3400	I64 EB & WB Over Tidewater Bridges Final - Stage 2 (Sub) Plans - VDOT Review and Final Approval	21	24-May-24	14-Jun-24	27
I64 EB & WB Over Tidewater Bridges Final - Stage 2 (Rehab) Plans		87	08-Apr-24	14-Aug-24	2
DS.3350	I64 EB & WB Over Tidewater Bridges Final - Stage 2 (Rehab) Plans - Development	30	08-Apr-24	17-May-24	2
DS.3390	I64 EB & WB Over Tidewater Bridges Final - Stage 2 (Rehab) Plans - Interdisciplinary, Constructability & QA/QC Review	5	20-May-24	24-May-24	2
DS.3410	I64 EB & WB Over Tidewater Bridges Final - Stage 2 (Rehab) Plans - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	28-May-24	03-Jun-24	2
DS.3420	I64 EB & WB Over Tidewater Bridges Prelim - Stage I Plans - Submittal to VDOT	0	04-Jun-24		2
DS.3430	I64 EB & WB Over Tidewater Bridges Final - Stage 2 (Rehab) Plans - VDOT Review, Processing, and Return	21	04-Jun-24	25-Jun-24	2
DS.3440	I64 EB & WB Over Tidewater Bridges Final - Stage 2 (Rehab) Plans - Incorporate VDOT Comments and Resubmit	10	25-Jun-24	10-Jul-24	2
DS.3450	I64 EB Over Granby / I564 / E. Little Crk Bridges Final - Stage 2 (Rehab) Plans - Interdisciplinary, Constructability & QA/QC Review	5	11-Jul-24	17-Jul-24	2
DS.3460	I64 EB Over Granby / I564 / E. Little Crk Bridges Final - Stage 2 (Rehab) Plans - Reconcile Interdisciplinary, Constructability & QA/QC Review	5	18-Jul-24	24-Jul-24	2
DS.3470	I64 EB Over Granby / I564 / E. Little Crk Bridges Final - Stage 2 (Rehab) Plans - VDOT Review and Final Approval	21	24-Jul-24	14-Aug-24	5
##### MATERIALS FABRICATION & PROCUREMENT #####		447	19-Sep-23	09-Dec-24	267
F&P.1000	B-630 - Fabricate/Procure Bearing Pads (I-64 WB Bridge Over Granby)	90	19-Sep-23	18-Dec-23	196
F&P.1010	B-629 - Fabricate/Procure Bearing Pads (I-64 WB Bridge Over E. Little Creek)	90	10-Oct-23	08-Jan-24	176
F&P.1020	Fabricate/Procure MSE Wall Panels	100	14-Oct-23	22-Jan-24	56
MS.1150	Fabricate/Procure Noise Wall Components	100	14-Oct-23	22-Jan-24	206
F&P.1040	B-655 - Fabricate/Procure Bearing Pads (I-64 EB Bridge Over Granby)	90	30-Nov-23	28-Feb-24	124
F&P.1050	B-656 - Fabricate/Procure Bearing Pads (I-64 EB Bridge Over 564)	90	30-Nov-23	28-Feb-24	198
F&P.1070	B-657 - Fabricate/Procure Bearing Pads (I-64 EB Bridge Over E. Little Creek)	90	30-Nov-23	28-Feb-24	47
F&P.1110	C-501 - Fabricate/Procure Bearing Pads (I64 HOV Over I564 & E. Little Crk Bridge Rehab)	90	22-Feb-24	22-May-24	287
F&P.1100	Fabricate/Procure Overhead Sign Structures	130	16-Jan-24	25-May-24	465
F&P.1060	B-656 - Fabricate/Procure Steel Beams/Girders (I-64 EB Bridge Over 564)	200	30-Nov-23	17-Jun-24	182
F&P.1080	B-657 - Fabricate/Procure Steel Beams/Girders (I-64 EB Bridge Over E. Little Creek)	200	30-Nov-23	17-Jun-24	36
F&P.1090	B-655 - Fabricate/Procure Steel Beams/Girders (I-64 EB Bridge Over Granby)	200	30-Nov-23	17-Jun-24	182
F&P.1120	B-654 - Fabricate/Procure Bearing Pads (I-64 WB Bridge Over Tidewater Dr)	90	18-Apr-24	17-Jul-24	15
F&P.1130	B-653 - Fabricate/Procure Bearing Pads (I-64 EB Bridge Over Tidewater Dr)	90	18-Apr-24	17-Jul-24	127
F&P.1140	B-654 - Fabricate/Procure Steel Beams/Girders (I-64 WB Bridge Over Tidewater Dr)	150	12-Jul-24	09-Dec-24	1
F&P.1150	B-653 - Fabricate/Procure Steel Beams/Girders (I-64 EB Bridge Over Tidewater Dr)	150	12-Jul-24	09-Dec-24	1
##### CONSTRUCTION #####		622	08-May-23	25-Nov-25	12
===== PREPARATORY/E&S CONTROLS/SITE WID E WORK =====		569	24-Jul-23	21-Nov-25	2
Segment A		318	24-Jul-23	07-Nov-24	253
Segment A - EB - STA 964+34.38 to 975+00		170	24-Jul-23	03-Apr-24	246
Phase 1		170	24-Jul-23	03-Apr-24	246
CN.E&S.1000	Segment A - Phase 1 - Hold E&S Preconstruction Meeting (7 Days Before Earth Disturbing Activities) (I-64 EB)	7	24-Jul-23	31-Jul-23	379
CN.E&S.1010	Segment A - Phase 1 - Place E&S Controls for Phase 1A (I-64 EB)	2	31-Jul-23	02-Aug-23	253
CN.E&S.1040	Segment A - Phase 1 - Place/Adjust E&S Controls for Phase 1B (I-64 EB)	2	04-Jan-24	08-Jan-24	246
CN.E&S.1090	Segment A - Phase 1 - Final Grading/Restoration/Seeding (I-64 EB)	10	19-Mar-24	03-Apr-24	246
Phase 2		7	18-Mar-24	27-Mar-24	250
CN.E&S.1080	Segment A - Phase 2 - Hold E&S Preconstruction Meeting (7 Days Before Earth Disturbing Activities) (I-64 EB)	7	18-Mar-24	25-Mar-24	379
CN.E&S.1100	Segment A - Phase 2 - Place E&S Controls (I-64 EB)	2	25-Mar-24	27-Mar-24	250
Segment A - WB - STA 2810+42.50 to 2821+00		154	07-Aug-23	22-Mar-24	232
Phase 1		154	07-Aug-23	22-Mar-24	232
CN.E&S.1020	Segment A - Phase 1 - Hold E&S Preconstruction Meeting (7 Days Before Earth Disturbing Activities) (I-64 WB)	7	07-Aug-23	14-Aug-23	466
CN.E&S.1030	Segment A - Phase 1 - Place E&S Controls for Phase 1A (I-64 WB)	2	14-Aug-23	16-Aug-23	313
CN.E&S.1060	Segment A - Phase 1 - Final Grading/Restoration/Seeding (I-64 WB)	10	11-Mar-24	22-Mar-24	232
Phase 2		7	07-Mar-24	18-Mar-24	236
CN.E&S.1050	Segment A - Phase 2 - Hold E&S Preconstruction Meeting (7 Days Before Earth Disturbing Activities) (I-64 WB)	7	07-Mar-24	14-Mar-24	361
CN.E&S.1070	Segment A - Phase 2 - Place E&S Controls (I-64 WB)	2	15-Mar-24	18-Mar-24	236
Final Work		148	03-Apr-24	07-Nov-24	253
CN.E&S.1110	Segment A - Landscaping/Tree Planting	60	03-Apr-24	02-Jul-24	338
CN.E&S.1120	Segment A - Seeding Germination/Planting Establishment Period	50	12-Sep-24	01-Nov-24	385
CN.E&S.1130	Segment A - Remove All E&S Controls	3	04-Nov-24	07-Nov-24	253
Segment B		367	26-Oct-23	05-May-25	139



Start: 15-Sep-22
End: 15-Dec-25
Data: 15-Sep-22
Run: 16-Aug-22

Critical Remaining Work
Remaining Work
Actual Work
Changed Work
Remaining Level of Effort
Actual Level of Effort
Delay/Impact
Adverse Weather
Additional/Extra Work

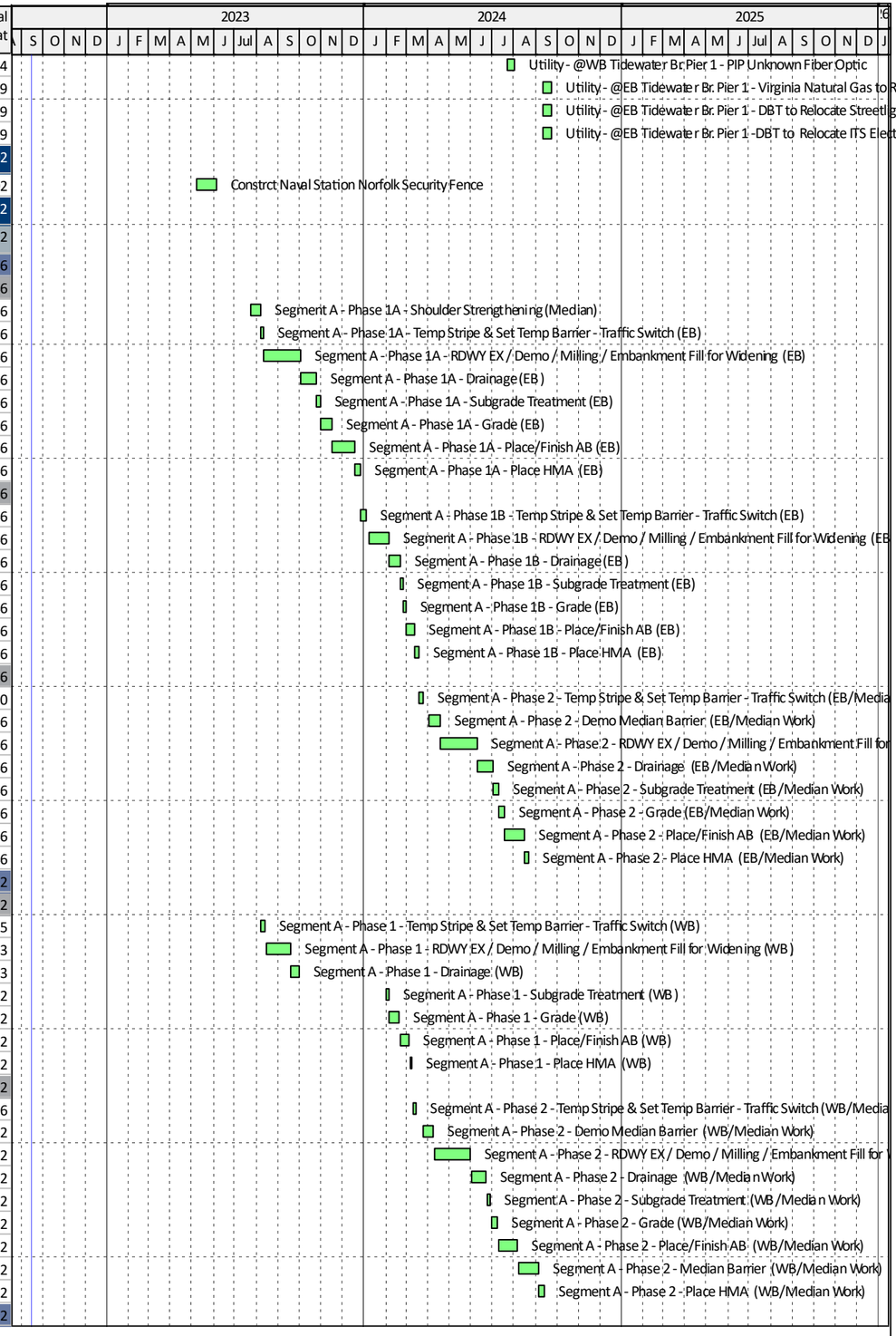
Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
Segment B - EB - STA 975+00 to 1026+87		304	26-Oct-23	30-Jan-25	139
Phase 1		304	26-Oct-23	30-Jan-25	139
CN.E&S.1140	Segment B - Phase 1 - Hold E&S Preconstruction Meeting (7 Days Before Earth Disturbing Activities) (I-64 EB)	7	26-Oct-23	02-Nov-23	141
CN.E&S.1150	Segment B - Phase 1 - Place E&S Controls for Phase 1A (I-64 EB)	2	02-Nov-23	03-Nov-23	93
CN.E&S.1200	Segment B - Phase 1 - Place/Adjust E&S Controls for Phase 1B (I-64 EB)	2	16-Aug-24	19-Aug-24	23
CN.E&S.1220	Segment B - Phase 1 - Final Grading/Restoration/Seeding (I-64 EB)	10	16-Jan-25	30-Jan-25	139
Phase 2		6	15-Jan-25	24-Jan-25	51
CN.E&S.1210	Segment B - Phase 2 - Hold E&S Preconstruction Meeting (7 Days Before Earth Disturbing Activities) (I-64 EB)	7	15-Jan-25	22-Jan-25	76
CN.E&S.1240	Segment B - Phase 2 - Place E&S Controls (I-64 EB)	2	23-Jan-25	24-Jan-25	51
Segment B - WB - STA 2821+00 to 3019+46		295	08-Nov-23	30-Jan-25	139
Phase 1		295	08-Nov-23	30-Jan-25	139
CN.E&S.1160	Segment B - Phase 1 - Hold E&S Preconstruction Meeting (7 Days Before Earth Disturbing Activities) (I-64 WB)	7	08-Nov-23	15-Nov-23	78
CN.E&S.1170	Segment B - Phase 1 - Place E&S Controls for Phase 1A (I-64 WB)	2	16-Nov-23	17-Nov-23	49
CN.E&S.1230	Segment B - Phase 1 - Final Grading/Restoration/Seeding (I-64 WB)	10	16-Jan-25	30-Jan-25	139
Phase 2		7	10-Jun-24	19-Jun-24	49
CN.E&S.1180	Segment B - Phase 2 - Hold E&S Preconstruction Meeting (7 Days Before Earth Disturbing Activities) (I-64 WB)	7	10-Jun-24	17-Jun-24	72
CN.E&S.1190	Segment B - Phase 2 - Place E&S Controls (I-64 WB)	2	18-Jun-24	19-Jun-24	49
Final Work		63	30-Jan-25	05-May-25	139
CN.E&S.1250	Segment B - Seeding Germination/Planting Establishment Period	50	30-Jan-25	21-Mar-25	245
CN.E&S.1260	Segment B - Landscaping/Tree Planting	60	31-Jan-25	30-Apr-25	139
CN.E&S.1270	Segment B - Remove All E&S Controls	3	01-May-25	05-May-25	139
Segment C		376	08-May-24	21-Nov-25	2
Segment C - EB - STA 1026+87 to 1090+90		238	08-May-24	02-May-25	85
Phase 1		127	08-May-24	11-Nov-24	188
CN.E&S.1280	Segment C - Phase 1 - Hold E&S Preconstruction Meeting (7 Days Before Earth Disturbing Activities) (I-64 EB)	7	08-May-24	15-May-24	61
CN.E&S.1290	Segment C - Phase 1 - Place E&S Controls for Phase 1A (I-64 EB)	2	15-May-24	16-May-24	40
CN.E&S.1320	Segment C - Phase 1 - Place/Adjust E&S Controls for Phase 1B (I-64 EB)	2	24-Oct-24	25-Oct-24	22
CN.E&S.1330	Segment C - Phase 1 - Final Grading/Restoration/Seeding (I-64 EB)	10	28-Oct-24	11-Nov-24	188
Phase 2		71	17-Jan-25	02-May-25	85
CN.E&S.1360	Segment C - Phase 2 - Hold E&S Preconstruction Meeting (7 Days Before Earth Disturbing Activities) (I-64 EB)	7	17-Jan-25	24-Jan-25	222
CN.E&S.1370	Segment C - Phase 2 - Place E&S Controls (I-64 EB)	2	27-Jan-25	28-Jan-25	147
CN.E&S.1400	Segment C - Phase 2 - Place/Adjust E&S Controls for Phase 2B (I-64 EB)	2	01-May-25	02-May-25	85
Segment C - WB - STA 309+46 to 3082+06.03		244	13-Jun-24	18-Jun-25	46
Phase 1		118	13-Jun-24	05-Dec-24	172
CN.E&S.1300	Segment C - Phase 1 - Hold E&S Preconstruction Meeting (7 Days Before Earth Disturbing Activities) (I-64 WB)	7	13-Jun-24	20-Jun-24	35
CN.E&S.1310	Segment C - Phase 1 - Place E&S Controls for Phase 1A (I-64 WB)	2	21-Jun-24	24-Jun-24	22
CN.E&S.1340	Segment C - Phase 1 - Place/Adjust E&S Controls for Phase 1B (I-64 WB)	2	18-Nov-24	19-Nov-24	2
CN.E&S.1350	Segment C - Phase 1 - Final Grading/Restoration/Seeding (I-64 WB)	10	20-Nov-24	05-Dec-24	172
Phase 2		93	30-Jan-25	18-Jun-25	2
CN.E&S.1380	Segment C - Phase 2 - Hold E&S Preconstruction Meeting (7 Days Before Earth Disturbing Activities) (I-64 WB)	7	30-Jan-25	06-Feb-25	5
CN.E&S.1390	Segment C - Phase 2 - Place E&S Controls (I-64 WB)	2	07-Feb-25	10-Feb-25	2
CN.E&S.1410	Segment C - Phase 2 - Place/Adjust E&S Controls for Phase 2B (I-64 WB)	2	17-Jun-25	18-Jun-25	2
Final Work		233	06-Dec-24	21-Nov-25	2
CN.E&S.1420	Segment C - Landscaping/Tree Planting	60	06-Dec-24	11-Mar-25	172
CN.E&S.1430	Segment C - Seeding Germination/Planting Establishment Period	50	29-Sep-25	18-Nov-25	3
CN.E&S.1440	Segment C - Remove All E&S Controls	3	19-Nov-25	21-Nov-25	2
===== Utilities =====		138	04-Mar-24	24-Sep-24	23
CN.UT.1010	Utility - @Granby Br. Pier 3 - DBT to Relocate Streetlight Electric Cable	10	04-Mar-24	15-Mar-24	151
CN.UT.1020	Utility - @Rte. 564 Br. Pier 1 - DBT to Relocate VDOT Electric (VDOT Electric for Signal)	10	04-Mar-24	15-Mar-24	149
CN.UT.1030	Utility - @L. Creek Br. Pier 1 - Lumen to Relocate Fiber Optic	10	04-Mar-24	15-Mar-24	49
CN.UT.1040	Utility - @L. Creek Br. Pier 1 - DBT to Relocate Streetlight Electric	10	04-Mar-24	15-Mar-24	49
CN.UT.1050	Utility - @L. Creek Br. Pier 1 - DBT to Relocate Electric for ITS	10	04-Mar-24	15-Mar-24	49
CN.UT.1060	Utility - @L. Creek Br. Pier 1 - Lumen and Segra to Relocate Fiber Optic	10	04-Mar-24	15-Mar-24	49
CN.UT.1000	Utility - @Granby Br. Pier 2 - DBT to Relocate 16" Watermain (City of Norfolk)	30	04-Mar-24	16-Apr-24	129
CN.UT.1070	Utility - @WB Tidewater Br. Pier 1 - Virginia Natural Gas to Relocate 6" Gasline (Required to Verify Depth)	10	22-Jul-24	02-Aug-24	54



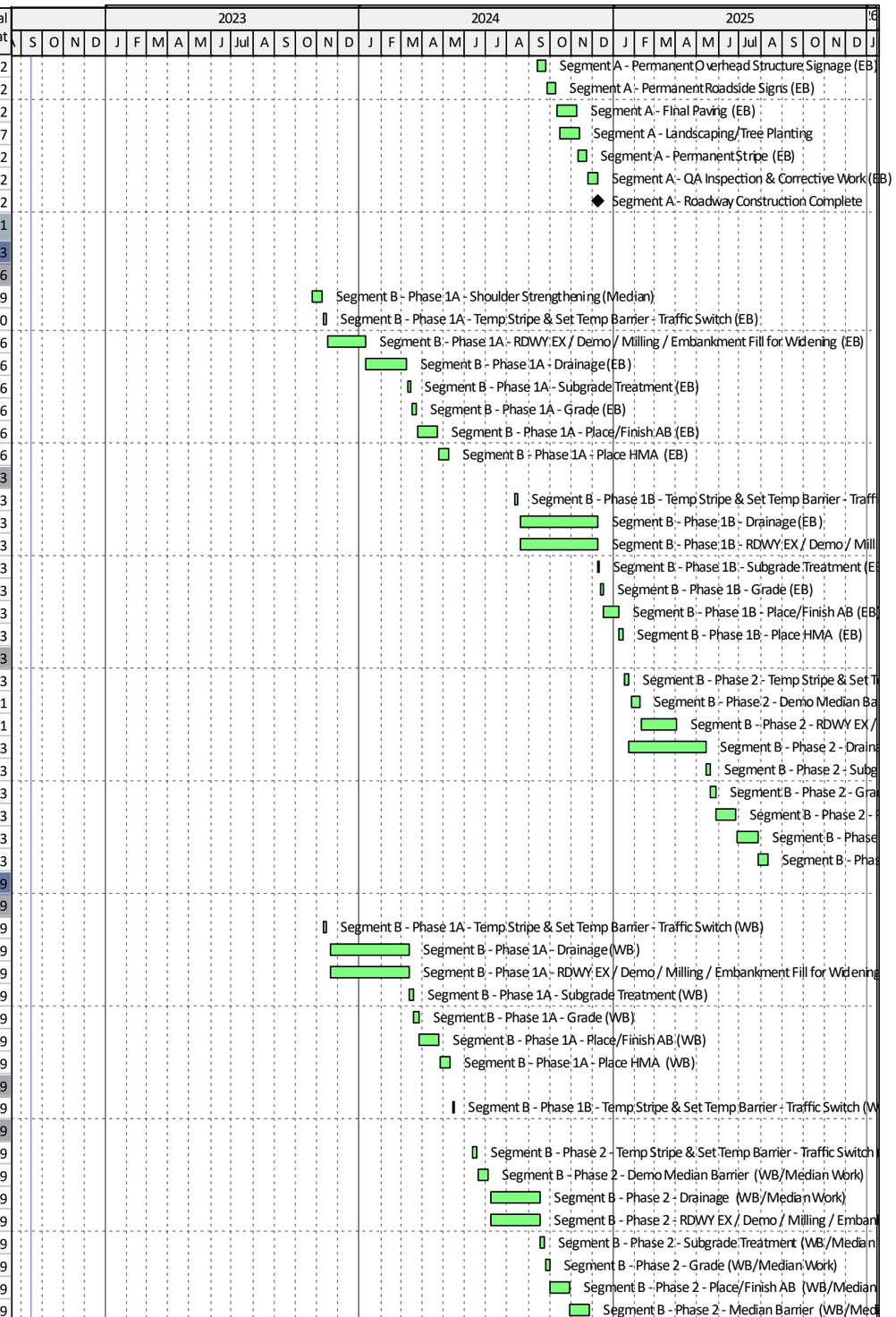
Start: 15-Sep-22
End: 15-Dec-25
Data: 15-Sep-22
Run: 16-Aug-22

Critical Remaining Work
Remaining Work
Actual Work
Changed Work
Remaining Level of Effort
Actual Level of Effort
Delay/Impact
Adverse Weather
Additional/Extra Work

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
CN.UT.1080	Utility - @WB Tidewater Br. Pier 1 - PIP Unknown Fiber Optic	10	22-Jul-24	02-Aug-24	54
CN.UT.1090	Utility - @EB Tidewater Br. Pier 1 - Virginia Natural Gas to Relocate 6" Gasline	10	11-Sep-24	24-Sep-24	19
CN.UT.1100	Utility - @EB Tidewater Br. Pier 1 - DBT to Relocate Streetlight Electric Cable	10	11-Sep-24	24-Sep-24	19
CN.UT.1110	Utility - @EB Tidewater Br. Pier 1 -DBT to Relocate ITS Electric Service	10	11-Sep-24	24-Sep-24	19
===== Naval Station Norfolk Security Fence =====		20	08-May-23	06-Jun-23	602
CN.NSF.1000	Constrct Naval Station Norfolk Security Fence	20	08-May-23	06-Jun-23	602
===== ROADWAY =====		571	24-Jul-23	25-Nov-25	12
Segment A		339	24-Jul-23	10-Dec-24	232
Segment A - EB - STA 964+34.38 to 975+00		265	24-Jul-23	22-Aug-24	246
Phase 1 A [EB]		104	24-Jul-23	27-Dec-23	246
CN.RD.1000	Segment A - Phase 1A - Shoulder Strengthening (Median)	10	24-Jul-23	07-Aug-23	246
CN.RD.1010	Segment A - Phase 1A - Temp Stripe & Set Temp Barrier - Traffic Switch (EB)	4	07-Aug-23	11-Aug-23	246
CN.RD.1020	Segment A - Phase 1A - RDWY EX / Demo / Milling / Embankment Fill for Widening (EB)	35	11-Aug-23	04-Oct-23	246
CN.RD.1030	Segment A - Phase 1A - Drainage (EB)	15	04-Oct-23	25-Oct-23	246
CN.RD.1040	Segment A - Phase 1A - Subgrade Treatment (EB)	5	25-Oct-23	01-Nov-23	246
CN.RD.1050	Segment A - Phase 1A - Grade (EB)	10	01-Nov-23	16-Nov-23	246
CN.RD.1060	Segment A - Phase 1A - Place/Finish AB (EB)	20	16-Nov-23	18-Dec-23	246
CN.RD.1070	Segment A - Phase 1A - Place HMA (EB)	5	18-Dec-23	27-Dec-23	246
Phase 1 B [EB]		56	27-Dec-23	19-Mar-24	246
CN.RD.1080	Segment A - Phase 1B - Temp Stripe & Set Temp Barrier - Traffic Switch (EB)	5	27-Dec-23	04-Jan-24	246
CN.RD.1090	Segment A - Phase 1B - RDWY EX / Demo / Milling / Embankment Fill for Widening (EB)	20	08-Jan-24	06-Feb-24	246
CN.RD.1100	Segment A - Phase 1B - Drainage (EB)	10	06-Feb-24	21-Feb-24	246
CN.RD.1110	Segment A - Phase 1B - Subgrade Treatment (EB)	3	21-Feb-24	26-Feb-24	246
CN.RD.1120	Segment A - Phase 1B - Grade (EB)	3	26-Feb-24	29-Feb-24	246
CN.RD.1130	Segment A - Phase 1B - Place/Finish AB (EB)	10	29-Feb-24	14-Mar-24	246
CN.RD.1140	Segment A - Phase 1B - Place HMA (EB)	3	14-Mar-24	19-Mar-24	246
Phase 2 [EB/Median]		105	19-Mar-24	22-Aug-24	246
CN.RD.1150	Segment A - Phase 2 - Temp Stripe & Set Temp Barrier - Traffic Switch (EB/Median Work)	4	19-Mar-24	25-Mar-24	250
CN.RD.1160	Segment A - Phase 2 - Demo Median Barrier (EB/Median Work)	10	03-Apr-24	18-Apr-24	246
CN.RD.1170	Segment A - Phase 2 - RDWY EX / Demo / Milling / Embankment Fill for Widening (EB/Median Work)	35	18-Apr-24	11-Jun-24	246
CN.RD.1180	Segment A - Phase 2 - Drainage (EB/Median Work)	15	11-Jun-24	02-Jul-24	246
CN.RD.1190	Segment A - Phase 2 - Subgrade Treatment (EB/Median Work)	5	02-Jul-24	11-Jul-24	246
CN.RD.1200	Segment A - Phase 2 - Grade (EB/Median Work)	5	11-Jul-24	18-Jul-24	246
CN.RD.1210	Segment A - Phase 2 - Place/Finish AB (EB/Median Work)	20	18-Jul-24	15-Aug-24	246
CN.RD.1220	Segment A - Phase 2 - Place HMA (EB/Median Work)	5	15-Aug-24	22-Aug-24	246
Segment A - WB - STA 2810+42.50 to 2821+00		269	07-Aug-23	12-Sep-24	232
Phase 1 [WB]		144	07-Aug-23	08-Mar-24	232
CN.RD.1230	Segment A - Phase 1 - Temp Stripe & Set Temp Barrier - Traffic Switch (WB)	5	07-Aug-23	14-Aug-23	295
CN.RD.1240	Segment A - Phase 1 - RDWY EX / Demo / Milling / Embankment Fill for Widening (WB)	20	16-Aug-23	18-Sep-23	313
CN.RD.1250	Segment A - Phase 1 - Drainage (WB)	10	18-Sep-23	02-Oct-23	313
CN.RD.1260	Segment A - Phase 1 - Subgrade Treatment (WB)	3	01-Feb-24	05-Feb-24	232
CN.RD.1270	Segment A - Phase 1 - Grade (WB)	10	06-Feb-24	20-Feb-24	232
CN.RD.1280	Segment A - Phase 1 - Place/Finish AB (WB)	10	21-Feb-24	05-Mar-24	232
CN.RD.1290	Segment A - Phase 1 - Place HMA (WB)	3	06-Mar-24	08-Mar-24	232
Phase 2 [EB/Median]		125	11-Mar-24	12-Sep-24	232
CN.RD.1300	Segment A - Phase 2 - Temp Stripe & Set Temp Barrier - Traffic Switch (WB/Median Work)	4	11-Mar-24	14-Mar-24	236
CN.RD.1310	Segment A - Phase 2 - Demo Median Barrier (WB/Median Work)	10	25-Mar-24	09-Apr-24	232
CN.RD.1320	Segment A - Phase 2 - RDWY EX / Demo / Milling / Embankment Fill for Widening (WB/Median Work)	35	10-Apr-24	31-May-24	232
CN.RD.1330	Segment A - Phase 2 - Drainage (WB/Median Work)	15	03-Jun-24	21-Jun-24	232
CN.RD.1340	Segment A - Phase 2 - Subgrade Treatment (WB/Median Work)	5	24-Jun-24	28-Jun-24	232
CN.RD.1350	Segment A - Phase 2 - Grade (WB/Median Work)	5	01-Jul-24	09-Jul-24	232
CN.RD.1360	Segment A - Phase 2 - Place/Finish AB (WB/Median Work)	20	10-Jul-24	06-Aug-24	232
CN.RD.1370	Segment A - Phase 2 - Median Barrier (WB/Median Work)	20	07-Aug-24	05-Sep-24	232
CN.RD.1380	Segment A - Phase 2 - Place HMA (WB/Median Work)	5	06-Sep-24	12-Sep-24	232
Final Work		60	13-Sep-24	10-Dec-24	232



Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
CN.RD.1390	Segment A - Permanent Overhead Structure Signage (EB)	10	13-Sep-24	26-Sep-24	232
CN.RD.1400	Segment A - Permanent Roadside Signs (EB)	10	27-Sep-24	10-Oct-24	232
CN.RD.1410	Segment A - FInal Paving (EB)	20	11-Oct-24	08-Nov-24	232
CN.RD.1420	Segment A - Landscaping/Tree Planting	20	16-Oct-24	12-Nov-24	107
CN.RD.1430	Segment A - Permanent Stripe (EB)	10	11-Nov-24	22-Nov-24	232
CN.RD.1440	Segment A - QA Inspection & Corrective Work (EB)	10	25-Nov-24	10-Dec-24	232
CN.RD.1450	Segment A - Roadway Construction Complete	0		10-Dec-24	232
Segment B		497	26-Oct-23	12-Nov-25	21
Segment B - EB - STA 975+00 to 1026+87		433	26-Oct-23	11-Aug-25	23
Phase 1 A [EB]		129	26-Oct-23	08-May-24	86
CN.RD.1460	Segment B - Phase 1A - Shoulder Strengthening (Median)	10	26-Oct-23	09-Nov-23	49
CN.RD.1470	Segment B - Phase 1A - Temp Stripe & Set Temp Barrier - Traffic Switch (EB)	4	10-Nov-23	15-Nov-23	50
CN.RD.1480	Segment B - Phase 1A - RDWY EX / Demo / Milling / Embankment Fill for Widening (EB)	35	16-Nov-23	10-Jan-24	86
CN.RD.1490	Segment B - Phase 1A - Drainage (EB)	40	11-Jan-24	08-Mar-24	86
CN.RD.1500	Segment B - Phase 1A - Subgrade Treatment (EB)	5	11-Mar-24	15-Mar-24	86
CN.RD.1510	Segment B - Phase 1A - Grade (EB)	5	18-Mar-24	22-Mar-24	86
CN.RD.1520	Segment B - Phase 1A - Place/Finish AB (EB)	20	25-Mar-24	23-Apr-24	86
CN.RD.1530	Segment B - Phase 1A - Place HMA (EB)	10	24-Apr-24	08-May-24	86
Phase 1 B [EB]		102	12-Aug-24	15-Jan-25	23
CN.RD.1540	Segment B - Phase 1B - Temp Stripe & Set Temp Barrier - Traffic Switch (EB)	4	12-Aug-24	15-Aug-24	23
CN.RD.1550	Segment B - Phase 1B - Drainage (EB)	75	20-Aug-24	09-Dec-24	23
CN.RD.1560	Segment B - Phase 1B - RDWY EX / Demo / Milling / Embankment Fill for Widening (EB)	75	20-Aug-24	09-Dec-24	23
CN.RD.1570	Segment B - Phase 1B - Subgrade Treatment (EB)	3	10-Dec-24	12-Dec-24	23
CN.RD.1580	Segment B - Phase 1B - Grade (EB)	3	13-Dec-24	17-Dec-24	23
CN.RD.1590	Segment B - Phase 1B - Place/Finish AB (EB)	10	18-Dec-24	08-Jan-25	23
CN.RD.1600	Segment B - Phase 1B - Place HMA (EB)	5	09-Jan-25	15-Jan-25	23
Phase 2 [EB/Median]		139	16-Jan-25	11-Aug-25	23
CN.RD.1610	Segment B - Phase 2 - Temp Stripe & Set Temp Barrier - Traffic Switch (EB/Median Work)	4	16-Jan-25	22-Jan-25	23
CN.RD.1630	Segment B - Phase 2 - Demo Median Barrier (EB/Median Work)	10	27-Jan-25	07-Feb-25	51
CN.RD.1640	Segment B - Phase 2 - RDWY EX / Demo / Milling / Embankment Fill for Widening (EB/Median Work)	35	10-Feb-25	01-Apr-25	51
CN.RD.1620	Segment B - Phase 2 - Drainage (EB/Median Work)	75	23-Jan-25	13-May-25	23
CN.RD.1650	Segment B - Phase 2 - Subgrade Treatment (EB/Median Work)	5	14-May-25	20-May-25	23
CN.RD.1660	Segment B - Phase 2 - Grade (EB/Median Work)	5	21-May-25	28-May-25	23
CN.RD.1670	Segment B - Phase 2 - Place/Finish AB (EB/Median Work)	20	29-May-25	26-Jun-25	23
CN.RD.1680	Segment B - Phase 2 - Median Barrier (EB/Median Work)	20	27-Jun-25	28-Jul-25	23
CN.RD.1690	Segment B - Phase 2 - Place HMA (EB/Median Work)	10	29-Jul-25	11-Aug-25	23
Segment B - WB - STA 2821+00 to 3019+46		267	10-Nov-23	13-Dec-24	49
Phase 1A [WB]		121	10-Nov-23	10-May-24	49
CN.RD.1700	Segment B - Phase 1A - Temp Stripe & Set Temp Barrier - Traffic Switch (WB)	4	10-Nov-23	15-Nov-23	49
CN.RD.1710	Segment B - Phase 1A - Drainage (WB)	75	20-Nov-23	12-Mar-24	49
CN.RD.1720	Segment B - Phase 1A - RDWY EX / Demo / Milling / Embankment Fill for Widening (WB)	75	20-Nov-23	12-Mar-24	49
CN.RD.1730	Segment B - Phase 1A - Subgrade Treatment (WB)	5	13-Mar-24	19-Mar-24	49
CN.RD.1740	Segment B - Phase 1A - Grade (WB)	5	20-Mar-24	26-Mar-24	49
CN.RD.1750	Segment B - Phase 1A - Place/Finish AB (WB)	20	27-Mar-24	25-Apr-24	49
CN.RD.1760	Segment B - Phase 1A - Place HMA (WB)	10	26-Apr-24	10-May-24	49
Phase 1B [WB]		4	14-May-24	17-May-24	49
CN.RD.1770	Segment B - Phase 1B - Temp Stripe & Set Temp Barrier - Traffic Switch (WB)	4	14-May-24	17-May-24	49
Phase 2 [WB/Median]		126	12-Jun-24	13-Dec-24	49
CN.RD.1780	Segment B - Phase 2 - Temp Stripe & Set Temp Barrier - Traffic Switch (WB/Median Work)	4	12-Jun-24	17-Jun-24	49
CN.RD.1790	Segment B - Phase 2 - Demo Median Barrier (WB/Median Work)	10	20-Jun-24	05-Jul-24	49
CN.RD.1800	Segment B - Phase 2 - Drainage (WB/Median Work)	50	08-Jul-24	17-Sep-24	49
CN.RD.1810	Segment B - Phase 2 - RDWY EX / Demo / Milling / Embankment Fill for Widening (WB/Median Work)	50	08-Jul-24	17-Sep-24	49
CN.RD.1820	Segment B - Phase 2 - Subgrade Treatment (WB/Median Work)	5	18-Sep-24	24-Sep-24	49
CN.RD.1830	Segment B - Phase 2 - Grade (WB/Median Work)	5	25-Sep-24	01-Oct-24	49
CN.RD.1840	Segment B - Phase 2 - Place/Finish AB (WB/Median Work)	20	02-Oct-24	29-Oct-24	49
CN.RD.1850	Segment B - Phase 2 - Median Barrier (WB/Median Work)	20	30-Oct-24	27-Nov-24	49



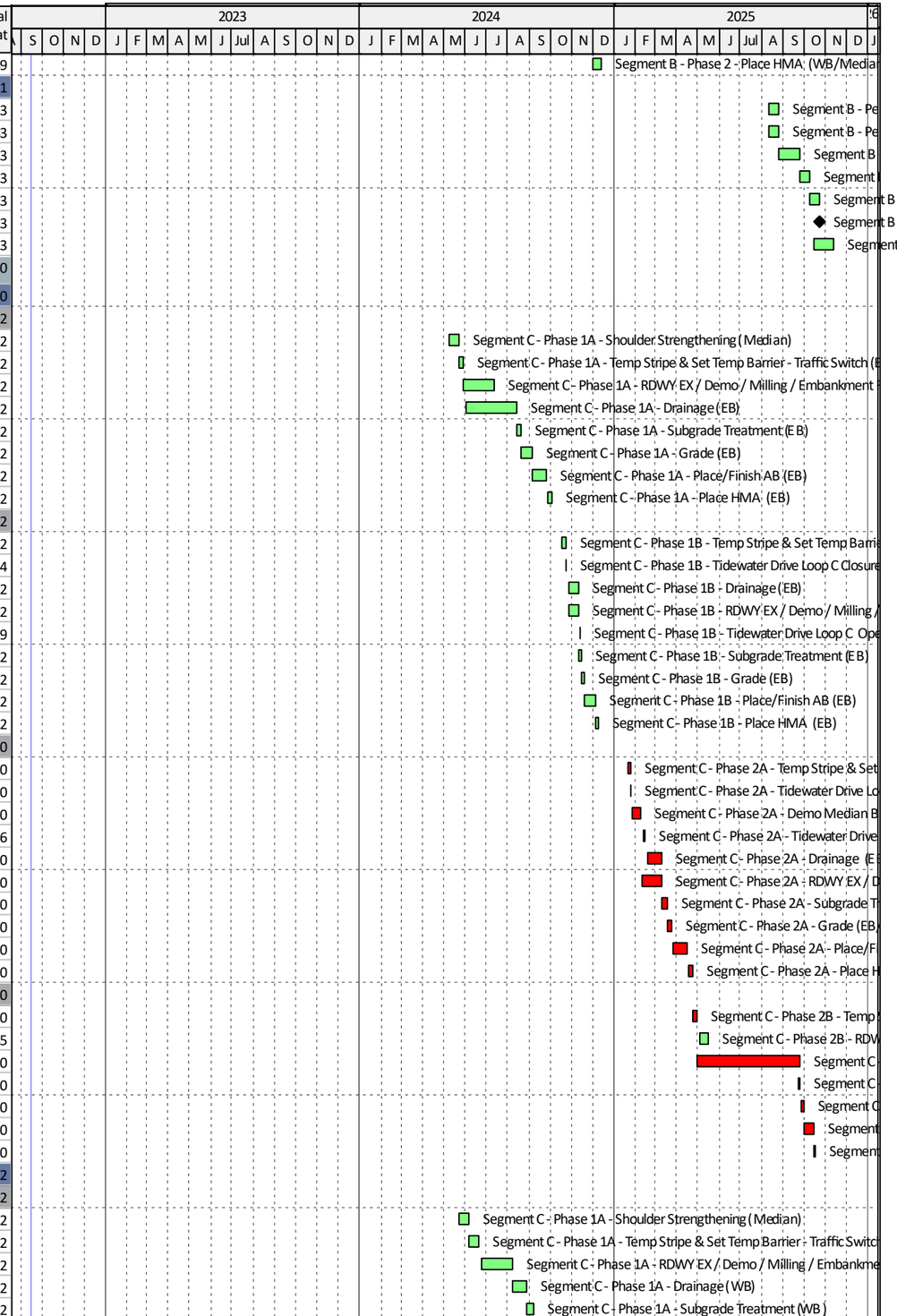
Start: 15-Sep-22
End: 15-Dec-25
Data: 15-Sep-22
Run: 16-Aug-22

Critical Remaining Work
Remaining Work
Actual Work
Changed Work
Remaining Level of Effort
Actual Level of Effort
Delay/Impact
Adverse Weather
Additional/Extra Work

VDOT I-64 HREL SEGMENT 1A BID SCHEDULE

(ACAA) INFO COLUMNS (11x17) | TASK filter: All Activities

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
CN.RD.1860	Segment B - Phase 2 - Place HMA (WB/Median Work)	10	02-Dec-24	13-Dec-24	49
Final Work		64	12-Aug-25	12-Nov-25	21
CN.RD.1870	Segment B - Permanent Overhead Structure Signage (EB)	10	12-Aug-25	25-Aug-25	23
CN.RD.1880	Segment B - Permanent Roadside Signs (EB)	10	12-Aug-25	25-Aug-25	43
CN.RD.1890	Segment B - FInal Paving (EB)	20	26-Aug-25	24-Sep-25	23
CN.RD.1900	Segment B - Permanent Stripe (EB)	10	25-Sep-25	08-Oct-25	23
CN.RD.1910	Segment B - QA Inspection & Corrective Work (EB)	10	09-Oct-25	22-Oct-25	23
CN.RD.1930	Segment B - Roadway Construction Complete	0		22-Oct-25	23
CN.RD.1920	Segment B - Landscaping/Tree Planting	20	16-Oct-25	12-Nov-25	23
Segment C		378	08-May-24	25-Nov-25	0
Segment C - EB - STA 1026+87 to 1090+90		351	08-May-24	16-Oct-25	0
Phase 1 A [EB]		101	08-May-24	03-Oct-24	32
CN.RD.1940	Segment C - Phase 1A - Shoulder Strengthening (Median)	10	08-May-24	22-May-24	22
CN.RD.1950	Segment C - Phase 1A - Temp Stripe & Set Temp Barrier - Traffic Switch (EB)	4	23-May-24	29-May-24	32
CN.RD.1960	Segment C - Phase 1A - RDWY EX / Demo / Milling / Embankment Fill for Widening (EB)	30	30-May-24	12-Jul-24	32
CN.RD.1970	Segment C - Phase 1A - Drainage (EB)	50	03-Jun-24	13-Aug-24	32
CN.RD.1980	Segment C - Phase 1A - Subgrade Treatment (EB)	5	14-Aug-24	20-Aug-24	32
CN.RD.1990	Segment C - Phase 1A - Grade (EB)	10	21-Aug-24	05-Sep-24	32
CN.RD.2000	Segment C - Phase 1A - Place/Finish AB (EB)	15	06-Sep-24	26-Sep-24	32
CN.RD.2010	Segment C - Phase 1A - Place HMA (EB)	5	27-Sep-24	03-Oct-24	32
Phase 1 B [EB]		35	18-Oct-24	10-Dec-24	22
CN.RD.2020	Segment C - Phase 1B - Temp Stripe & Set Temp Barrier - Traffic Switch (EB)	4	18-Oct-24	23-Oct-24	22
CN.RD.2030	Segment C - Phase 1B - Tidewater Drive Loop C Closure- Traffic Switch (EB)	1	23-Oct-24	23-Oct-24	24
CN.RD.2040	Segment C - Phase 1B - Drainage (EB)	10	28-Oct-24	11-Nov-24	22
CN.RD.2050	Segment C - Phase 1B - RDWY EX / Demo / Milling / Embankment Fill for Widening (EB)	10	28-Oct-24	11-Nov-24	22
CN.RD.2070	Segment C - Phase 1B - Tidewater Drive Loop C Open to Traffic - Traffic Switch (EB)	1	13-Nov-24	13-Nov-24	39
CN.RD.2060	Segment C - Phase 1B - Subgrade Treatment (EB)	3	12-Nov-24	14-Nov-24	22
CN.RD.2080	Segment C - Phase 1B - Grade (EB)	3	15-Nov-24	19-Nov-24	22
CN.RD.2090	Segment C - Phase 1B - Place/Finish AB (EB)	10	20-Nov-24	05-Dec-24	22
CN.RD.2100	Segment C - Phase 1B - Place HMA (EB)	3	06-Dec-24	10-Dec-24	22
Phase 2 A [EB/Median]		64	21-Jan-25	23-Apr-25	0
CN.RD.2110	Segment C - Phase 2A - Temp Stripe & Set Temp Barrier - Traffic Switch (EB/Median Work)	4	21-Jan-25	24-Jan-25	0
CN.RD.2120	Segment C - Phase 2A - Tidewater Drive Loop C Closure- Traffic Switch (EB)	1	24-Jan-25	24-Jan-25	0
CN.RD.2130	Segment C - Phase 2A - Demo Median Barrier (EB/Median Work)	10	27-Jan-25	07-Feb-25	0
CN.RD.2150	Segment C - Phase 2A - Tidewater Drive Loop C Open to Traffic - Traffic Switch (EB)	1	13-Feb-25	13-Feb-25	46
CN.RD.2160	Segment C - Phase 2A - Drainage (EB/Median Work)	15	18-Feb-25	10-Mar-25	0
CN.RD.2140	Segment C - Phase 2A - RDWY EX / Demo / Milling / Embankment Fill for Widening (EB/Median Work)	20	10-Feb-25	10-Mar-25	0
CN.RD.2170	Segment C - Phase 2A - Subgrade Treatment (EB/Median Work)	5	11-Mar-25	18-Mar-25	0
CN.RD.2180	Segment C - Phase 2A - Grade (EB/Median Work)	5	19-Mar-25	25-Mar-25	0
CN.RD.2190	Segment C - Phase 2A - Place/Finish AB (EB/Median Work)	15	26-Mar-25	16-Apr-25	0
CN.RD.2200	Segment C - Phase 2A - Place HMA (EB/Median Work)	5	17-Apr-25	23-Apr-25	0
Phase 2 B [EB/Median]		119	24-Apr-25	16-Oct-25	0
CN.RD.2210	Segment C - Phase 2B - Temp Stripe & Set Temp Barrier - Traffic Switch (EB/Median Work)	4	24-Apr-25	30-Apr-25	0
CN.RD.2230	Segment C - Phase 2B - RDWY EX / Demo / Milling / Embankment Fill for Widening (EB/Median Work)	10	05-May-25	16-May-25	85
CN.RD.2220	Segment C - Phase 2B - Drainage (EB/Median Work)	100	01-May-25	25-Sep-25	0
CN.RD.2240	Segment C - Phase 2B - Subgrade Treatment (EB/Median Work)	3	23-Sep-25	25-Sep-25	0
CN.RD.2250	Segment C - Phase 2B - Grade (EB/Median Work)	3	26-Sep-25	30-Sep-25	0
CN.RD.2260	Segment C - Phase 2B - Place/Finish AB (EB/Median Work)	10	01-Oct-25	14-Oct-25	0
CN.RD.2270	Segment C - Phase 2B - Place HMA (EB/Median Work)	2	15-Oct-25	16-Oct-25	0
Segment C - WB - STA 309+46 to 3082+06.03		328	23-May-24	29-Sep-25	2
Phase 1 A [WB]		97	23-May-24	11-Oct-24	22
CN.RD.2280	Segment C - Phase 1A - Shoulder Strengthening (Median)	10	23-May-24	06-Jun-24	22
CN.RD.2290	Segment C - Phase 1A - Temp Stripe & Set Temp Barrier - Traffic Switch (WB)	10	07-Jun-24	20-Jun-24	22
CN.RD.2300	Segment C - Phase 1A - RDWY EX / Demo / Milling / Embankment Fill for Widening (WB)	30	25-Jun-24	07-Aug-24	22
CN.RD.2310	Segment C - Phase 1A - Drainage (WB)	15	08-Aug-24	28-Aug-24	22
CN.RD.2320	Segment C - Phase 1A - Subgrade Treatment (WB)	5	29-Aug-24	06-Sep-24	22



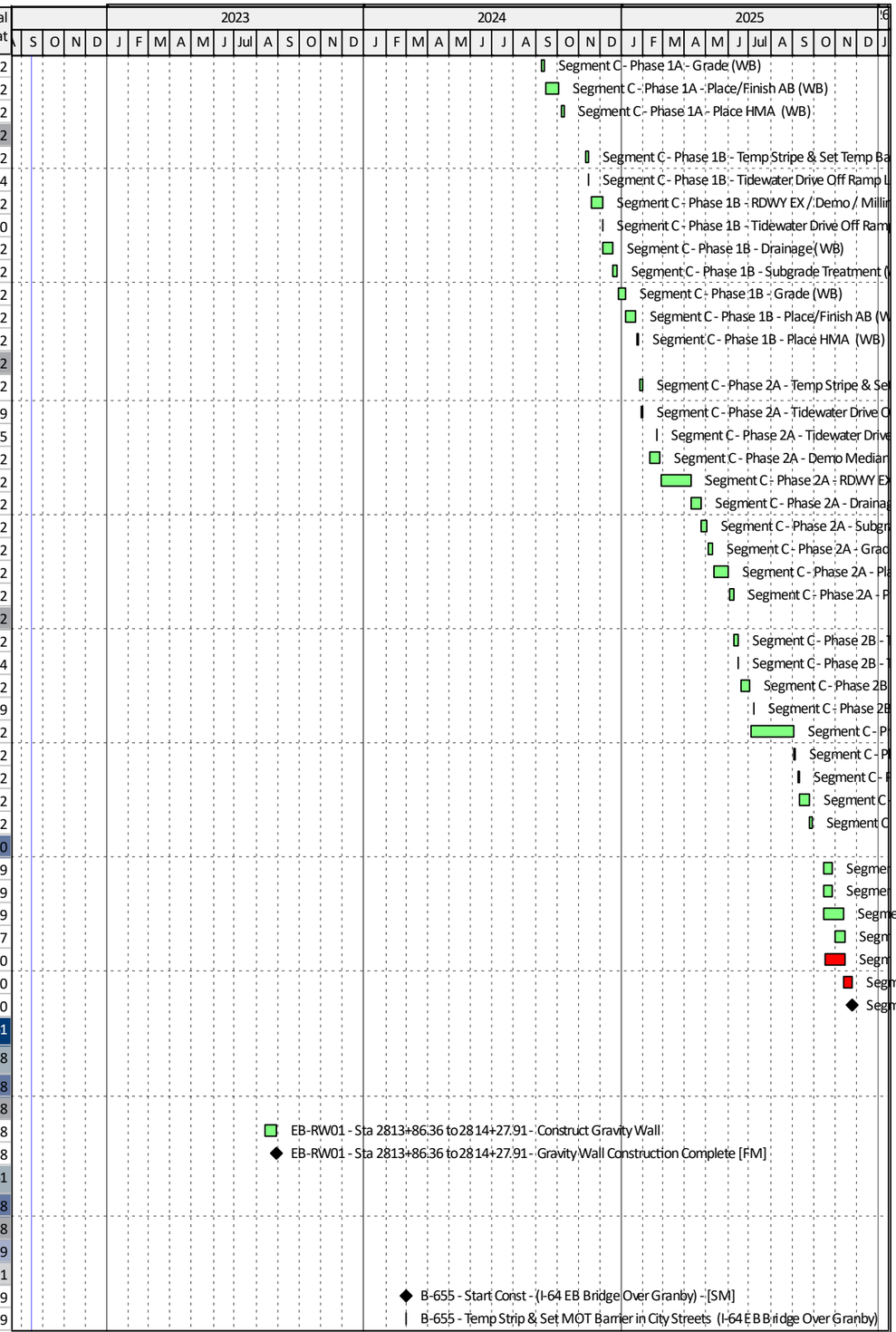
Start: 15-Sep-22
End: 15-Dec-25
Data: 15-Sep-22
Run: 16-Aug-22

Critical Remaining Work
Remaining Work
Actual Work
Changed Work
Remaining Level of Effort
Actual Level of Effort
Delay/Impact
Adverse Weather
Additional/Extra Work

VDOT I-64 HREL SEGMENT 1A BID SCHEDULE

(ACAA) INFO COLUMNS (11x17) | TASK filter: All Activities

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
CN.RD.2330	Segment C - Phase 1A - Grade (WB)	5	09-Sep-24	13-Sep-24	22
CN.RD.2340	Segment C - Phase 1A - Place/Finish AB (WB)	15	16-Sep-24	04-Oct-24	22
CN.RD.2350	Segment C - Phase 1A - Place HMA (WB)	5	07-Oct-24	11-Oct-24	22
Phase 1 B [WB]		45	12-Nov-24	24-Jan-25	2
CN.RD.2360	Segment C - Phase 1B - Temp Stripe & Set Temp Barrier - Traffic Switch (WB)	4	12-Nov-24	15-Nov-24	2
CN.RD.2370	Segment C - Phase 1B - Tidewater Drive Off Ramp Loop A Closure- Traffic Switch (WB)	1	15-Nov-24	15-Nov-24	14
CN.RD.2380	Segment C - Phase 1B - RDWY EX / Demo / Milling / Embankment Fill for Widening (WB)	10	20-Nov-24	05-Dec-24	2
CN.RD.2400	Segment C - Phase 1B - Tidewater Drive Off Ramp Loop A Open to Traffic - Traffic Switch (WB)	1	06-Dec-24	06-Dec-24	30
CN.RD.2390	Segment C - Phase 1B - Drainage (WB)	10	06-Dec-24	19-Dec-24	2
CN.RD.2410	Segment C - Phase 1B - Subgrade Treatment (WB)	3	20-Dec-24	26-Dec-24	2
CN.RD.2420	Segment C - Phase 1B - Grade (WB)	3	27-Dec-24	06-Jan-25	2
CN.RD.2430	Segment C - Phase 1B - Place/Finish AB (WB)	10	07-Jan-25	21-Jan-25	2
CN.RD.2440	Segment C - Phase 1B - Place HMA (WB)	3	22-Jan-25	24-Jan-25	2
Phase 2 A [WB/Median]		91	27-Jan-25	09-Jun-25	2
CN.RD.2450	Segment C - Phase 2A - Temp Stripe & Set Temp Barrier - Traffic Switch (WB/Median Work)	4	27-Jan-25	30-Jan-25	2
CN.RD.2460	Segment C - Phase 2A - Tidewater Drive On Ramp E Closure- Traffic Switch (WB)	1	30-Jan-25	30-Jan-25	9
CN.RD.2480	Segment C - Phase 2A - Tidewater Drive On Ramp E Open to Traffic - Traffic Switch (WB)	1	20-Feb-25	20-Feb-25	75
CN.RD.2470	Segment C - Phase 2A - Demo Median Barrier (WB/Median Work)	10	11-Feb-25	25-Feb-25	2
CN.RD.2490	Segment C - Phase 2A - RDWY EX / Demo / Milling / Embankment Fill for Widening (WB/Median Work)	30	26-Feb-25	09-Apr-25	2
CN.RD.2500	Segment C - Phase 2A - Drainage (WB /Median Work)	10	10-Apr-25	24-Apr-25	2
CN.RD.2510	Segment C - Phase 2A - Subgrade Treatment (WB /Median Work)	5	25-Apr-25	02-May-25	2
CN.RD.2520	Segment C - Phase 2A - Grade (WB/Median Work)	5	05-May-25	09-May-25	2
CN.RD.2530	Segment C - Phase 2A - Place/Finish AB (WB/Median Work)	15	12-May-25	02-Jun-25	2
CN.RD.2540	Segment C - Phase 2A - Place HMA (WB/Median Work)	5	03-Jun-25	09-Jun-25	2
Phase 2 B [WB/Median]		75	10-Jun-25	29-Sep-25	2
CN.RD.2550	Segment C - Phase 2B - Temp Stripe & Set Temp Barrier - Traffic Switch (WB/Median Work)	4	10-Jun-25	16-Jun-25	2
CN.RD.2560	Segment C - Phase 2B - Tidewater Drive On Ramp E Closure - Traffic Switch (WB)	1	16-Jun-25	16-Jun-25	4
CN.RD.2570	Segment C - Phase 2B - RDWY EX / Demo / Milling / Embankment Fill for Widening (WB/Median Work)	10	19-Jun-25	02-Jul-25	2
CN.RD.2590	Segment C - Phase 2B - Tidewater Drive On Ramp E Open to Traffic - Traffic Switch (WB)	1	07-Jul-25	07-Jul-25	59
CN.RD.2580	Segment C - Phase 2B - Drainage (WB /Median Work)	40	03-Jul-25	02-Sep-25	2
CN.RD.2600	Segment C - Phase 2B - Subgrade Treatment (WB /Median Work)	3	03-Sep-25	05-Sep-25	2
CN.RD.2610	Segment C - Phase 2B - Grade (WB/Median Work)	3	08-Sep-25	10-Sep-25	2
CN.RD.2620	Segment C - Phase 2B - Place/Finish AB (WB/Median Work)	10	11-Sep-25	24-Sep-25	2
CN.RD.2630	Segment C - Phase 2B - Place HMA (WB/Median Work)	3	25-Sep-25	29-Sep-25	2
Final Work		29	15-Oct-25	25-Nov-25	0
CN.RD.2640	Segment C - Permanent Overhead Structure Signage	10	15-Oct-25	28-Oct-25	9
CN.RD.2650	Segment C - Permanent Roadside Signs	10	15-Oct-25	28-Oct-25	9
CN.RD.2660	Segment C - Landscaping/Tree Planting	20	16-Oct-25	12-Nov-25	9
CN.RD.2680	Segment C - Permanent Stripe	10	31-Oct-25	14-Nov-25	7
CN.RD.2670	Segment C - FInal Paving	20	17-Oct-25	14-Nov-25	0
CN.RD.2690	Segment C - QA Inspection & Corrective Work	10	12-Nov-25	25-Nov-25	0
CN.RD.2700	Segment C - Roadway Construction Complete	0		25-Nov-25	0
===== STRUCTURES =====		507	14-Aug-23	16-Sep-25	61
Segment A		10	14-Aug-23	29-Aug-23	358
Segment A - WB - STA 2810+42.50 to 2821+00		10	14-Aug-23	29-Aug-23	358
WB-RW01 - Gravity Retaining Wall Sta 2813+86.36 to 2814+27.91 (42LF)		10	14-Aug-23	29-Aug-23	358
CN.RW.1000	EB-RW01 - Sta 2813+86.36 to 2814+27.91 - Construct Gravity Wall	10	14-Aug-23	29-Aug-23	358
CN.RW.1010	EB-RW01 - Sta 2813+86.36 to 2814+27.91 - Gravity Wall Construction Complete [FM]	0		29-Aug-23	358
Segment B		443	16-Nov-23	16-Sep-25	61
Segment B - EB - STA 975+00 to 1026+87		316	16-Nov-23	10-Mar-25	188
B-655 - I-64 Bridge Over Granby [EB]		246	29-Feb-24	06-Mar-25	128
Phase 1 (Bridge Widening & Existing Bridge Rehabilitation [EB])		116	29-Feb-24	19-Aug-24	119
Initial Work		7	29-Feb-24	08-Mar-24	151
CN.BR-655.1010	B-655 - Start Const - (I-64 EB Bridge Over Granby) - [SM]	0	29-Feb-24		119
CN.BR-655.1000	B-655 - Temp Strip & Set MOT Barrier in City Streets (I-64 E B Bridge Over Granby)	2	29-Feb-24	01-Mar-24	119

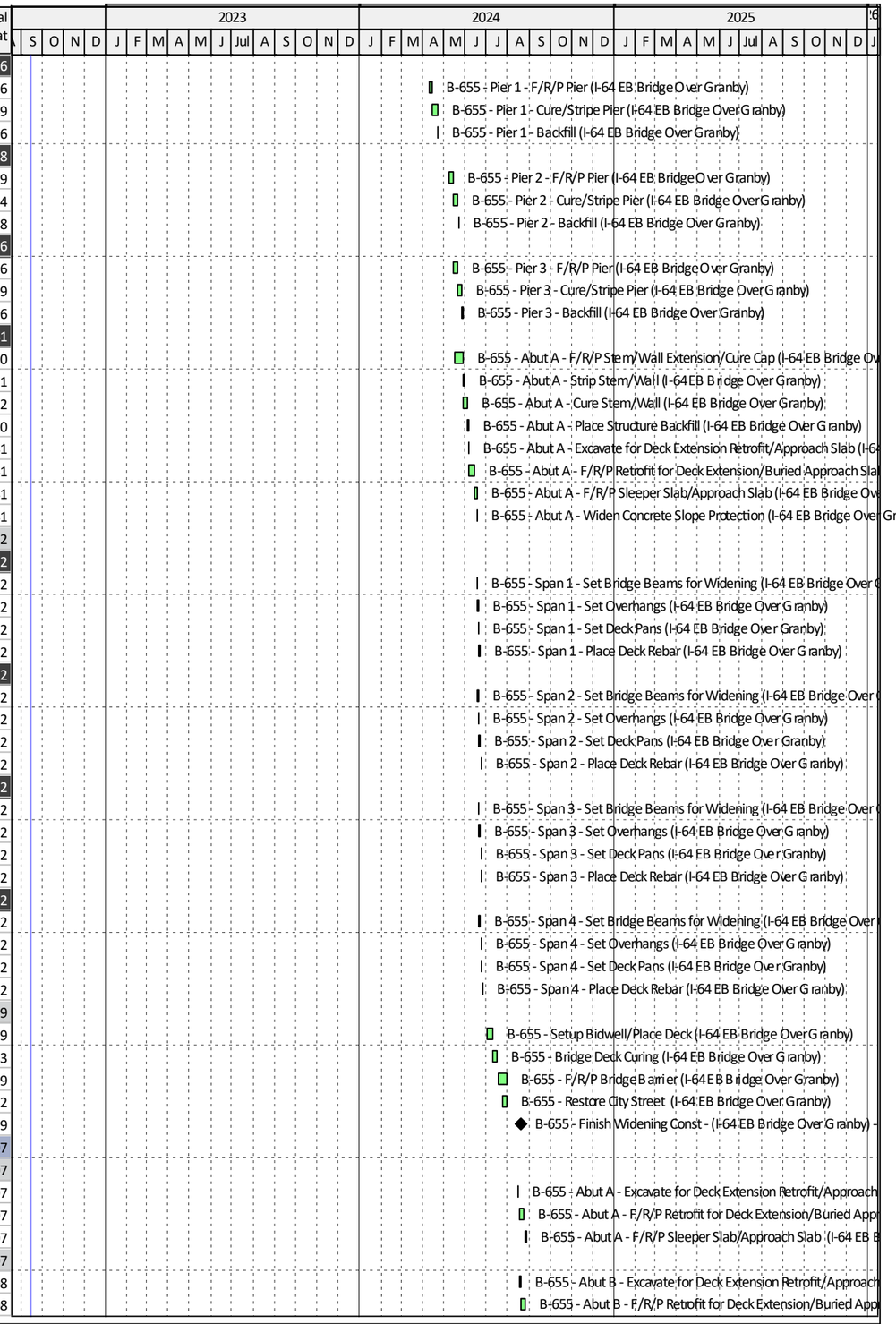


Start: 15-Sep-22
End: 15-Dec-25
Data: 15-Sep-22
Run: 16-Aug-22

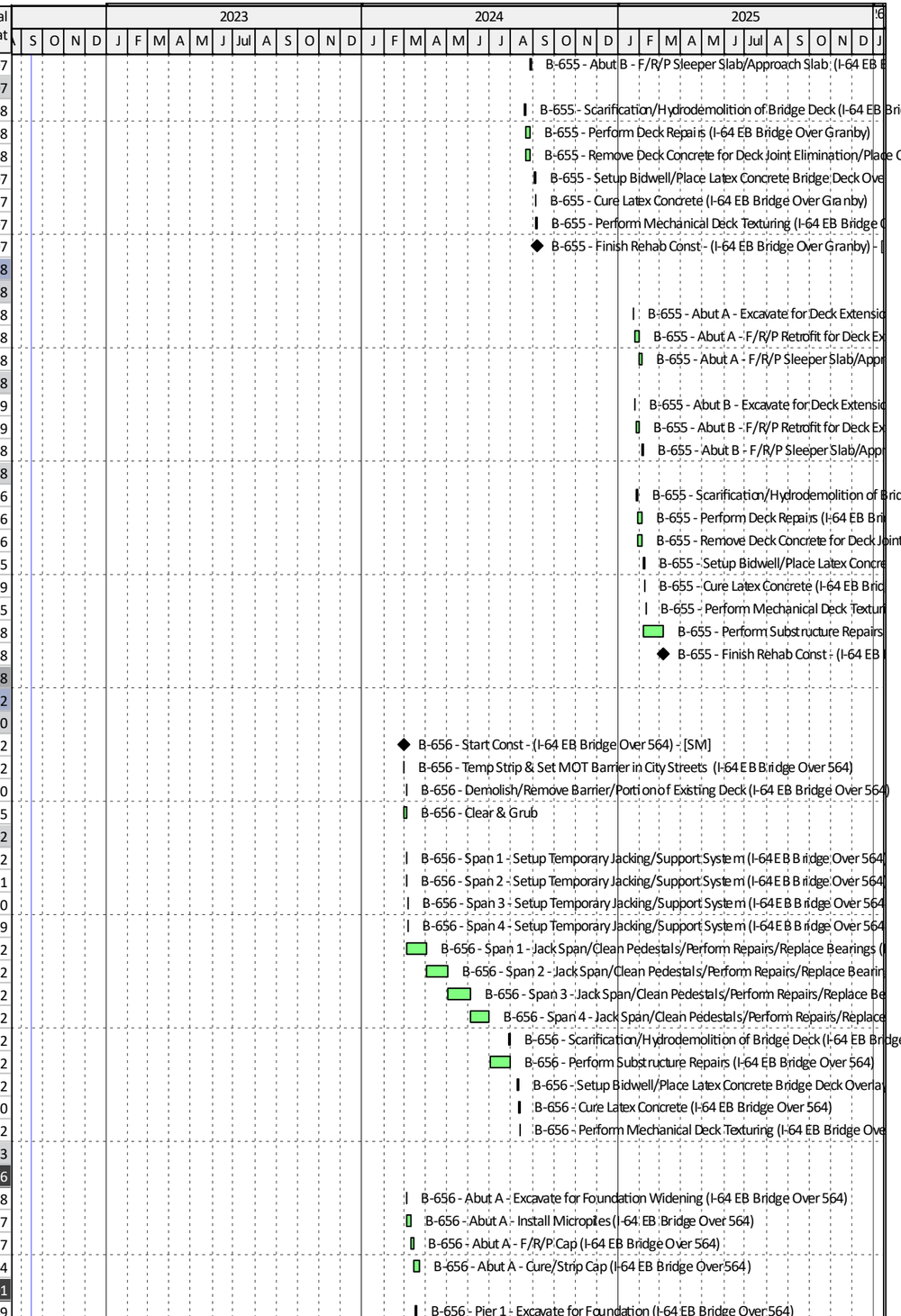
Critical Remaining Work
Remaining Work
Actual Work
Changed Work
Remaining Level of Effort
Actual Level of Effort
Delay/Impact
Adverse Weather
Additional/Extra Work

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
CN.BR-655.102C	B-655 - Clear & Grub	2	01-Mar-24	05-Mar-24	149
CN.BR-655.103C	B-655 - Demolish/Remove Barrier/Portion of Existing Deck (I-64 EB Bridge Over Granby)	5	04-Mar-24	08-Mar-24	151
Bridge Rehabilitation		114	04-Mar-24	19-Aug-24	119
CN.BR-655.104C	B-655 - Span 1 - Setup Temporary Jacking/Support System (I-64 EB Bridge Over Granby)	1	04-Mar-24	04-Mar-24	119
CN.BR-655.106C	B-655 - Span 2 - Setup Temporary Jacking/Support System (I-64 EB Bridge Over Granby)	1	05-Mar-24	05-Mar-24	138
CN.BR-655.107C	B-655 - Span 3 - Setup Temporary Jacking/Support System (I-64 EB Bridge Over Granby)	1	06-Mar-24	06-Mar-24	157
CN.BR-655.108C	B-655 - Span 4 - Setup Temporary Jacking/Support System (I-64 EB Bridge Over Granby)	1	07-Mar-24	07-Mar-24	176
CN.BR-655.105C	B-655 - Span 1 - Jack Span/Clean Pedestals/Perform Repairs/Replace Bearings (I-64 EB Bridge Over Granby)	20	05-Mar-24	02-Apr-24	119
CN.BR-655.114C	B-655 - Span 2 - Jack Span/Clean Pedestals/Perform Repairs/Replace Bearings (I-64 EB Bridge Over Granby)	20	03-Apr-24	02-May-24	119
CN.BR-655.130C	B-655 - Span 3 - Jack Span/Clean Pedestals/Perform Repairs/Replace Bearings (I-64 EB Bridge Over Granby)	20	03-May-24	03-Jun-24	119
CN.BR-655.153C	B-655 - Span 4 - Jack Span/Clean Pedestals/Perform Repairs/Replace Bearings (I-64 EB Bridge Over Granby)	20	04-Jun-24	01-Jul-24	119
CN.BR-655.176C	B-655 - Perform Substructure Repairs (I-64 EB Bridge Over Granby)	20	02-Jul-24	31-Jul-24	132
CN.BR-655.181C	B-655 - Scarification/Hydrodemolition of Bridge Deck (I-64 EB Bridge Over Granby)	3	01-Aug-24	05-Aug-24	119
CN.BR-655.182C	B-655 - Perform Deck Repairs (I-64 EB Bridge Over Granby)	6	06-Aug-24	13-Aug-24	119
CN.BR-655.183C	B-655 - Setup Bidwell/Place Latex Concrete Bridge Deck Overlay (I-64 EB Bridge Over Granby)	2	14-Aug-24	15-Aug-24	119
CN.BR-655.184C	B-655 - Cure Latex Concrete (I-64 EB Bridge Over Granby)	1	15-Aug-24	16-Aug-24	187
CN.BR-655.186C	B-655 - Perform Mechanical Deck Texturing (I-64 EB Bridge Over Granby)	1	19-Aug-24	19-Aug-24	119
Foundations		45	11-Mar-24	16-May-24	154
ABUTMENT A		16	11-Mar-24	02-Apr-24	171
CN.BR-655.109	B-655 - Abut A - Excavate for Foundation Widening (I-64 EB Bridge Over Granby)	1	11-Mar-24	11-Mar-24	151
CN.BR-655.110	B-655 - Abut A - Install Micropiles (I-64 EB Bridge Over Granby)	7	12-Mar-24	20-Mar-24	170
CN.BR-655.111	B-655 - Abut A - F/R/P Cap (I-64 EB Bridge Over Granby)	4	21-Mar-24	26-Mar-24	170
CN.BR-655.112	B-655 - Abut A - Cure/Strip Cap (I-64 EB Bridge Over Granby)	7	26-Mar-24	02-Apr-24	255
PIER 1		19	12-Mar-24	09-Apr-24	176
CN.BR-655.117	B-655 - Pier 1 - Excavate for Foundation (I-64 EB Bridge Over Granby)	2	12-Mar-24	13-Mar-24	151
CN.BR-655.118	B-655 - Pier 1 - Install Micropiles (I-64 EB Bridge Over Granby)	5	21-Mar-24	27-Mar-24	171
CN.BR-655.125	B-655 - Pier 1 - F/R/P Cap (I-64 EB Bridge Over Granby)	3	28-Mar-24	02-Apr-24	177
CN.BR-655.128	B-655 - Pier 1 - Cure Cap (I-64 EB Bridge Over Granby)	5	02-Apr-24	07-Apr-24	264
CN.BR-655.133	B-655 - Pier 1 - Strip Cap (I-64 EB Bridge Over Granby)	1	09-Apr-24	09-Apr-24	176
PIER 2		14	17-Apr-24	07-May-24	159
CN.BR-655.119	B-655 - Pier 2 - Excavate for Foundation (I-64 EB Bridge Over Granby)	2	17-Apr-24	18-Apr-24	129
CN.BR-655.126	B-655 - Pier 2 - Install Micropiles (I-64 EB Bridge Over Granby)	5	19-Apr-24	25-Apr-24	157
CN.BR-655.131	B-655 - Pier 2 - F/R/P Cap (I-64 EB Bridge Over Granby)	3	26-Apr-24	01-May-24	162
CN.BR-655.137	B-655 - Pier 2 - Cure Cap (I-64 EB Bridge Over Granby)	5	01-May-24	06-May-24	245
CN.BR-655.138	B-655 - Pier 2 - Strip Cap (I-64 EB Bridge Over Granby)	1	07-May-24	07-May-24	159
PIER 3		16	19-Apr-24	14-May-24	156
CN.BR-655.121	B-655 - Pier 3 - Excavate for Foundation (I-64 EB Bridge Over Granby)	2	19-Apr-24	22-Apr-24	129
CN.BR-655.132	B-655 - Pier 3 - Install Micropiles (I-64 EB Bridge Over Granby)	5	26-Apr-24	03-May-24	157
CN.BR-655.139	B-655 - Pier 3 - F/R/P Cap (I-64 EB Bridge Over Granby)	3	06-May-24	08-May-24	157
CN.BR-655.143	B-655 - Pier 3 - Cure Cap (I-64 EB Bridge Over Granby)	5	08-May-24	13-May-24	239
CN.BR-655.146	B-655 - Pier 3 - Strip Cap (I-64 EB Bridge Over Granby)	1	14-May-24	14-May-24	156
ABUTMENT B		16	23-Apr-24	16-May-24	130
CN.BR-655.124	B-655 - Abut A - Excavate for Foundation Widening (I-64 EB Bridge Over Granby)	1	23-Apr-24	23-Apr-24	129
CN.BR-655.127	B-655 - Abut A - Install Micropiles (I-64 EB Bridge Over Granby)	7	24-Apr-24	03-May-24	129
CN.BR-655.136	B-655 - Abut A - F/R/P Cap (I-64 EB Bridge Over Granby)	4	06-May-24	09-May-24	129
CN.BR-655.141	B-655 - Abut A - Cure/Strip Cap (I-64 EB Bridge Over Granby)	7	09-May-24	16-May-24	193
Substructure		51	03-Apr-24	18-Jun-24	141
ABUTMENT A		23	03-Apr-24	07-May-24	169
CN.BR-655.113	B-655 - Abut A - F/R/P Stem/Wall Extension/Cure Cap (I-64 EB Bridge Over Granby)	8	03-Apr-24	15-Apr-24	171
CN.BR-655.116	B-655 - Abut A - Strip Stem/Wall (I-64 EB Bridge Over Granby)	2	16-Apr-24	17-Apr-24	171
CN.BR-655.115	B-655 - Abut A - Cure Stem/Wall (I-64 EB Bridge Over Granby)	5	15-Apr-24	20-Apr-24	261
CN.BR-655.120	B-655 - Abut A - Place Structure Backfill (I-64 EB Bridge Over Granby)	2	22-Apr-24	23-Apr-24	169
CN.BR-655.122	B-655 - Abut A - Excavate for Deck Extension Retrofit/Approach Slab (I-64 EB Bridge Over Granby)	1	24-Apr-24	24-Apr-24	169
CN.BR-655.123	B-655 - Abut A - F/R/P Retrofit for Deck Extension/Buried Approach Slabs (I-64 EB Bridge Over Granby)	5	25-Apr-24	02-May-24	169
CN.BR-655.129	B-655 - Abut A - F/R/P Sleeper Slab/Approach Slab (I-64 EB Bridge Over Granby)	2	03-May-24	06-May-24	169
CN.BR-655.134	B-655 - Abut A - Widen Concrete Slope Protection (I-64 EB Bridge Over Granby)	1	07-May-24	07-May-24	169

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
PIER 1		10	10-Apr-24	23-Apr-24	176
CN.BR-655.135	B-655 - Pier 1 - F/R/P Pier (I-64 EB Bridge Over Granby)	4	10-Apr-24	15-Apr-24	176
CN.BR-655.140	B-655 - Pier 1 - Cure/Stripe Pier (I-64 EB Bridge Over Granby)	7	15-Apr-24	22-Apr-24	269
CN.BR-655.145	B-655 - Pier 1 - Backfill (I-64 EB Bridge Over Granby)	1	23-Apr-24	23-Apr-24	176
PIER 2		10	08-May-24	22-May-24	158
CN.BR-655.142	B-655 - Pier 2 - F/R/P Pier (I-64 EB Bridge Over Granby)	4	08-May-24	14-May-24	159
CN.BR-655.144	B-655 - Pier 2 - Cure/Stripe Pier (I-64 EB Bridge Over Granby)	7	14-May-24	21-May-24	244
CN.BR-655.149	B-655 - Pier 2 - Backfill (I-64 EB Bridge Over Granby)	1	22-May-24	22-May-24	158
PIER 3		9	15-May-24	28-May-24	156
CN.BR-655.148	B-655 - Pier 3 - F/R/P Pier (I-64 EB Bridge Over Granby)	4	15-May-24	20-May-24	156
CN.BR-655.150	B-655 - Pier 3 - Cure/Stripe Pier (I-64 EB Bridge Over Granby)	7	20-May-24	27-May-24	239
CN.BR-655.154	B-655 - Pier 3 - Backfill (I-64 EB Bridge Over Granby)	1	28-May-24	28-May-24	156
ABUTMENT B		22	17-May-24	18-Jun-24	141
CN.BR-655.147	B-655 - Abut A - F/R/P Stem/Wall Extension/Cure Cap (I-64 EB Bridge Over Granby)	8	17-May-24	29-May-24	130
CN.BR-655.152	B-655 - Abut A - Strip Stem/Wall (I-64 EB Bridge Over Granby)	2	30-May-24	31-May-24	131
CN.BR-655.151	B-655 - Abut A - Cure Stem/Wall (I-64 EB Bridge Over Granby)	5	29-May-24	03-Jun-24	192
CN.BR-655.155	B-655 - Abut A - Place Structure Backfill (I-64 EB Bridge Over Granby)	2	04-Jun-24	05-Jun-24	130
CN.BR-655.156	B-655 - Abut A - Excavate for Deck Extension Retrofit/Approach Slab (I-64 EB Bridge Over Granby)	1	06-Jun-24	06-Jun-24	141
CN.BR-655.157	B-655 - Abut A - F/R/P Retrofit for Deck Extension/Buried Approach Slabs (I-64 EB Bridge Over Granby)	5	07-Jun-24	13-Jun-24	141
CN.BR-655.161	B-655 - Abut A - F/R/P Sleeper Slab/Approach Slab (I-64 EB Bridge Over Granby)	2	14-Jun-24	17-Jun-24	141
CN.BR-655.169	B-655 - Abut A - Widen Concrete Slope Protection (I-64 EB Bridge Over Granby)	1	18-Jun-24	18-Jun-24	141
Superstructure		7	18-Jun-24	26-Jun-24	122
SPAN 1		4	18-Jun-24	21-Jun-24	122
CN.BR-655.158	B-655 - Span 1 - Set Bridge Beams for Widening (I-64 EB Bridge Over Granby)	1	18-Jun-24	18-Jun-24	122
CN.BR-655.159	B-655 - Span 1 - Set Overhangs (I-64 EB Bridge Over Granby)	1	19-Jun-24	19-Jun-24	122
CN.BR-655.162	B-655 - Span 1 - Set Deck Pans (I-64 EB Bridge Over Granby)	1	20-Jun-24	20-Jun-24	122
CN.BR-655.165	B-655 - Span 1 - Place Deck Rebar (I-64 EB Bridge Over Granby)	1	21-Jun-24	21-Jun-24	122
SPAN 2		4	19-Jun-24	24-Jun-24	122
CN.BR-655.160	B-655 - Span 2 - Set Bridge Beams for Widening (I-64 EB Bridge Over Granby)	1	19-Jun-24	19-Jun-24	122
CN.BR-655.163	B-655 - Span 2 - Set Overhangs (I-64 EB Bridge Over Granby)	1	20-Jun-24	20-Jun-24	122
CN.BR-655.166	B-655 - Span 2 - Set Deck Pans (I-64 EB Bridge Over Granby)	1	21-Jun-24	21-Jun-24	122
CN.BR-655.170	B-655 - Span 2 - Place Deck Rebar (I-64 EB Bridge Over Granby)	1	24-Jun-24	24-Jun-24	122
SPAN 3		4	20-Jun-24	25-Jun-24	122
CN.BR-655.164	B-655 - Span 3 - Set Bridge Beams for Widening (I-64 EB Bridge Over Granby)	1	20-Jun-24	20-Jun-24	122
CN.BR-655.167	B-655 - Span 3 - Set Overhangs (I-64 EB Bridge Over Granby)	1	21-Jun-24	21-Jun-24	122
CN.BR-655.171	B-655 - Span 3 - Set Deck Pans (I-64 EB Bridge Over Granby)	1	24-Jun-24	24-Jun-24	122
CN.BR-655.173	B-655 - Span 3 - Place Deck Rebar (I-64 EB Bridge Over Granby)	1	25-Jun-24	25-Jun-24	122
SPAN 4		4	21-Jun-24	26-Jun-24	122
CN.BR-655.168	B-655 - Span 4 - Set Bridge Beams for Widening (I-64 EB Bridge Over Granby)	1	21-Jun-24	21-Jun-24	122
CN.BR-655.172	B-655 - Span 4 - Set Overhangs (I-64 EB Bridge Over Granby)	1	24-Jun-24	24-Jun-24	122
CN.BR-655.174	B-655 - Span 4 - Set Deck Pans (I-64 EB Bridge Over Granby)	1	25-Jun-24	25-Jun-24	122
CN.BR-655.175	B-655 - Span 4 - Place Deck Rebar (I-64 EB Bridge Over Granby)	1	26-Jun-24	26-Jun-24	122
Final Work		33	02-Jul-24	19-Aug-24	119
CN.BR-655.177C	B-655 - Setup Bidwell/Place Deck (I-64 EB Bridge Over Granby)	5	02-Jul-24	10-Jul-24	119
CN.BR-655.178C	B-655 - Bridge Deck Curing (I-64 EB Bridge Over Granby)	7	10-Jul-24	17-Jul-24	183
CN.BR-655.179C	B-655 - F/R/P Bridge Barrier (I-64 EB Bridge Over Granby)	10	18-Jul-24	31-Jul-24	119
CN.BR-655.180C	B-655 - Restore City Street (I-64 EB Bridge Over Granby)	5	25-Jul-24	31-Jul-24	132
CN.BR-655.189C	B-655 - Finish Widening Const - (I-64 EB Bridge Over Granby) - [FM]	0		19-Aug-24	119
Phase 1B [EB] (Existing Bridge Rehabilitation [EB])		14	16-Aug-24	06-Sep-24	107
ABUTMENT A		8	16-Aug-24	27-Aug-24	107
CN.BR-655.185C	B-655 - Abut A - Excavate for Deck Extension Retrofit/Approach Slab (I-64 EB Bridge Over Granby)	1	16-Aug-24	16-Aug-24	107
CN.BR-655.187C	B-655 - Abut A - F/R/P Retrofit for Deck Extension/Buried Approach Slabs (I-64 EB Bridge Over Granby)	5	19-Aug-24	23-Aug-24	107
CN.BR-655.194C	B-655 - Abut A - F/R/P Sleeper Slab/Approach Slab (I-64 EB Bridge Over Granby)	2	26-Aug-24	27-Aug-24	107
ABUTMENT B		9	19-Aug-24	29-Aug-24	107
CN.BR-655.188C	B-655 - Abut B - Excavate for Deck Extension Retrofit/Approach Slab (I-64 EB Bridge Over Granby)	1	19-Aug-24	19-Aug-24	108
CN.BR-655.190C	B-655 - Abut B - F/R/P Retrofit for Deck Extension/Buried Approach Slabs (I-64 EB Bridge Over Granby)	5	20-Aug-24	26-Aug-24	108



Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
CN.BR-655.195C	B-655 - Abut B - F/R/P Sleeper Slab/Approach Slab (I-64 EB Bridge Over Granby)	2	28-Aug-24	29-Aug-24	107
Final Work'		12	20-Aug-24	06-Sep-24	107
CN.BR-655.191C	B-655 - Scarification/Hydrodemolition of Bridge Deck (I-64 EB Bridge Over Granby)	3	20-Aug-24	22-Aug-24	108
CN.BR-655.192C	B-655 - Perform Deck Repairs (I-64 EB Bridge Over Granby)	4	23-Aug-24	28-Aug-24	108
CN.BR-655.193C	B-655 - Remove Deck Concrete for Deck Joint Elimination/Place Closure Concrete (I-64 EB Bridge Over Granby)	4	23-Aug-24	28-Aug-24	108
CN.BR-655.196C	B-655 - Setup Bidwell/Place Latex Concrete Bridge Deck Overlay (I-64 E B Bridge Over Granby)	2	03-Sep-24	04-Sep-24	107
CN.BR-655.197C	B-655 - Cure Latex Concrete (I-64 EB Bridge Over Granby)	1	04-Sep-24	05-Sep-24	167
CN.BR-655.198C	B-655 - Perform Mechanical Deck Texturing (I-64 EB Bridge Over Granby)	1	06-Sep-24	06-Sep-24	107
CN.BR-655.199C	B-655 - Finish Rehab Const - (I-64 EB Bridge Over Granby) - [FM]	0		06-Sep-24	107
Phase 2 [EB] (Existing Bridge Rehabilitation [EB])		30	23-Jan-25	06-Mar-25	128
ABUTMENT A		8	23-Jan-25	03-Feb-25	128
CN.BR-655.200C	B-655 - Abut A - Excavate for Deck Extension Retrofit/Approach Slab (I-64 EB Bridge Over Granby)	1	23-Jan-25	23-Jan-25	128
CN.BR-655.201C	B-655 - Abut A - F/R/P Retrofit for Deck Extension/Buried Approach Slabs (I-64 EB Bridge Over Granby)	5	24-Jan-25	30-Jan-25	128
CN.BR-655.207C	B-655 - Abut A - F/R/P Sleeper Slab/Approach Slab (I-64 EB Bridge Over Granby)	2	31-Jan-25	03-Feb-25	128
ABUTMENT B		9	24-Jan-25	05-Feb-25	128
CN.BR-655.202C	B-655 - Abut B - Excavate for Deck Extension Retrofit/Approach Slab (I-64 EB Bridge Over Granby)	1	24-Jan-25	24-Jan-25	129
CN.BR-655.203C	B-655 - Abut B - F/R/P Retrofit for Deck Extension/Buried Approach Slabs (I-64 EB Bridge Over Granby)	5	27-Jan-25	31-Jan-25	129
CN.BR-655.208C	B-655 - Abut B - F/R/P Sleeper Slab/Approach Slab (I-64 EB Bridge Over Granby)	2	04-Feb-25	05-Feb-25	128
Final Work'		28	27-Jan-25	06-Mar-25	128
CN.BR-655.204C	B-655 - Scarification/Hydrodemolition of Bridge Deck (I-64 EB Bridge Over Granby)	3	27-Jan-25	29-Jan-25	146
CN.BR-655.205C	B-655 - Perform Deck Repairs (I-64 EB Bridge Over Granby)	4	30-Jan-25	04-Feb-25	146
CN.BR-655.206C	B-655 - Remove Deck Concrete for Deck Joint Elimination/Place Closure Concrete (I-64 EB Bridge Over Granby)	4	30-Jan-25	04-Feb-25	146
CN.BR-655.209C	B-655 - Setup Bidwell/Place Latex Concrete Bridge Deck Overlay (I-64 E B Bridge Over Granby)	2	06-Feb-25	07-Feb-25	145
CN.BR-655.211C	B-655 - Cure Latex Concrete (I-64 EB Bridge Over Granby)	1	07-Feb-25	08-Feb-25	219
CN.BR-655.212C	B-655 - Perform Mechanical Deck Texturing (I-64 EB Bridge Over Granby)	1	10-Feb-25	10-Feb-25	145
CN.BR-655.210C	B-655 - Perform Substructure Repairs (I-64 EB Bridge Over Granby)	20	06-Feb-25	06-Mar-25	128
CN.BR-655.213C	B-655 - Finish Rehab Const - (I-64 EB Bridge Over Granby) - [FM]	0		06-Mar-25	128
B-656 - I-64 Bridge Over 564 [EB]		246	29-Feb-24	06-Mar-25	128
Phase 1 (Bridge Widening & Existing Bridge Rehabilitation [EB])		113	29-Feb-24	14-Aug-24	122
Initial Work		4	29-Feb-24	05-Mar-24	230
CN.BR-656.101C	B-656 - Start Const - (I-64 EB Bridge Over 564) - [SM]	0	29-Feb-24		132
CN.BR-656.100C	B-656 - Temp Strip & Set MOT Barrier in City Streets (I-64 E B Bridge Over 564)	2	29-Feb-24	01-Mar-24	132
CN.BR-656.104C	B-656 - Demolish/Remove Barrier/Portion of Existing Deck (I-64 EB Bridge Over 564)	2	04-Mar-24	05-Mar-24	230
CN.BR-656.102C	B-656 - Clear & Grub	2	01-Mar-24	05-Mar-24	155
Bridge Rehabilitation		111	04-Mar-24	14-Aug-24	122
CN.BR-656.105C	B-656 - Span 1 - Setup Temporary Jacking/Support System (I-64 E B Bridge Over 564)	1	04-Mar-24	04-Mar-24	132
CN.BR-656.108C	B-656 - Span 2 - Setup Temporary Jacking/Support System (I-64 E B Bridge Over 564)	1	05-Mar-24	05-Mar-24	151
CN.BR-656.109C	B-656 - Span 3 - Setup Temporary Jacking/Support System (I-64 E B Bridge Over 564)	1	06-Mar-24	06-Mar-24	170
CN.BR-656.110C	B-656 - Span 4 - Setup Temporary Jacking/Support System (I-64 E B Bridge Over 564)	1	07-Mar-24	07-Mar-24	189
CN.BR-656.107C	B-656 - Span 1 - Jack Span/Clean Pedestals/Perform Repairs/Replace Bearings (I-64 EB Bridge Over 564)	20	05-Mar-24	02-Apr-24	132
CN.BR-656.129C	B-656 - Span 2 - Jack Span/Clean Pedestals/Perform Repairs/Replace Bearings (I-64 EB Bridge Over 564)	20	03-Apr-24	02-May-24	132
CN.BR-656.153C	B-656 - Span 3 - Jack Span/Clean Pedestals/Perform Repairs/Replace Bearings (I-64 EB Bridge Over 564)	20	03-May-24	03-Jun-24	132
CN.BR-656.159C	B-656 - Span 4 - Jack Span/Clean Pedestals/Perform Repairs/Replace Bearings (I-64 EB Bridge Over 564)	20	04-Jun-24	01-Jul-24	132
CN.BR-656.180C	B-656 - Scarification/Hydrodemolition of Bridge Deck (I-64 EB Bridge Over 564)	3	29-Jul-24	31-Jul-24	122
CN.BR-656.177C	B-656 - Perform Substructure Repairs (I-64 EB Bridge Over 564)	20	02-Jul-24	31-Jul-24	132
CN.BR-656.182C	B-656 - Setup Bidwell/Place Latex Concrete Bridge Deck Overlay (I-64 E B Bridge Over 564)	2	09-Aug-24	12-Aug-24	122
CN.BR-656.183C	B-656 - Cure Latex Concrete (I-64 EB Bridge Over 564)	1	12-Aug-24	13-Aug-24	190
CN.BR-656.184C	B-656 - Perform Mechanical Deck Texturing (I-64 EB Bridge Over 564)	1	14-Aug-24	14-Aug-24	122
Foundations		31	04-Mar-24	17-Apr-24	193
ABUTMENT A		15	04-Mar-24	22-Mar-24	196
CN.BR-656.103	B-656 - Abut A - Excavate for Foundation Widening (I-64 EB Bridge Over 564)	1	04-Mar-24	04-Mar-24	158
CN.BR-656.106	B-656 - Abut A - Install Micropiles (I-64 EB Bridge Over 564)	5	05-Mar-24	11-Mar-24	197
CN.BR-656.111	B-656 - Abut A - F/R/P Cap (I-64 EB Bridge Over 564)	4	12-Mar-24	15-Mar-24	197
CN.BR-656.112	B-656 - Abut A - Cure/Strip Cap (I-64 EB Bridge Over 564)	7	15-Mar-24	22-Mar-24	304
PIER 1		11	18-Mar-24	02-Apr-24	201
CN.BR-656.113	B-656 - Pier 1 - Excavate for Foundation (I-64 EB Bridge Over 564)	2	18-Mar-24	19-Mar-24	149



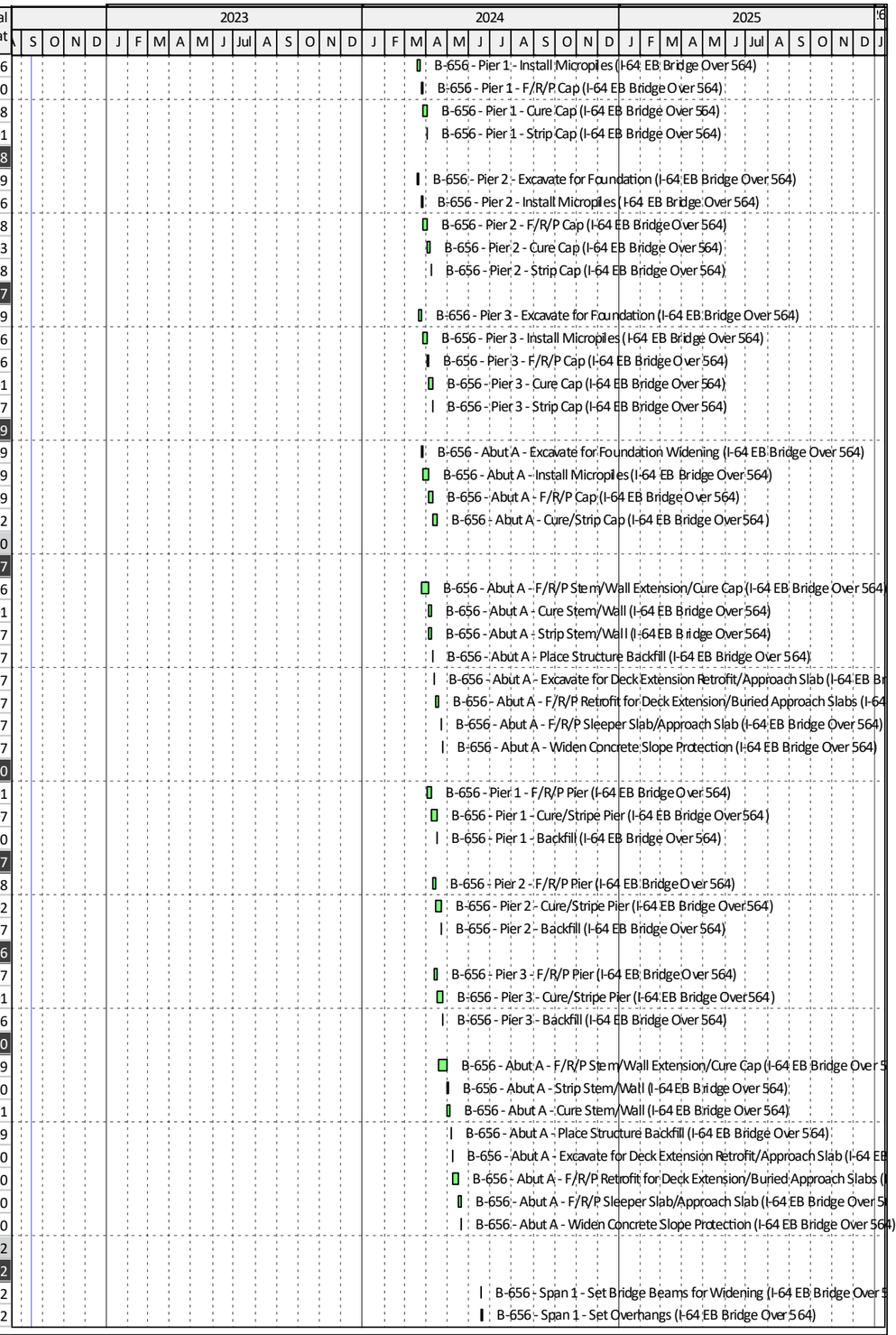
Start: 15-Sep-22
End: 15-Dec-25
Data: 15-Sep-22
Run: 16-Aug-22

Critical Remaining Work
Remaining Work
Actual Work
Changed Work
Remaining Level of Effort
Actual Level of Effort
Delay/Impact
Adverse Weather
Additional/Extra Work

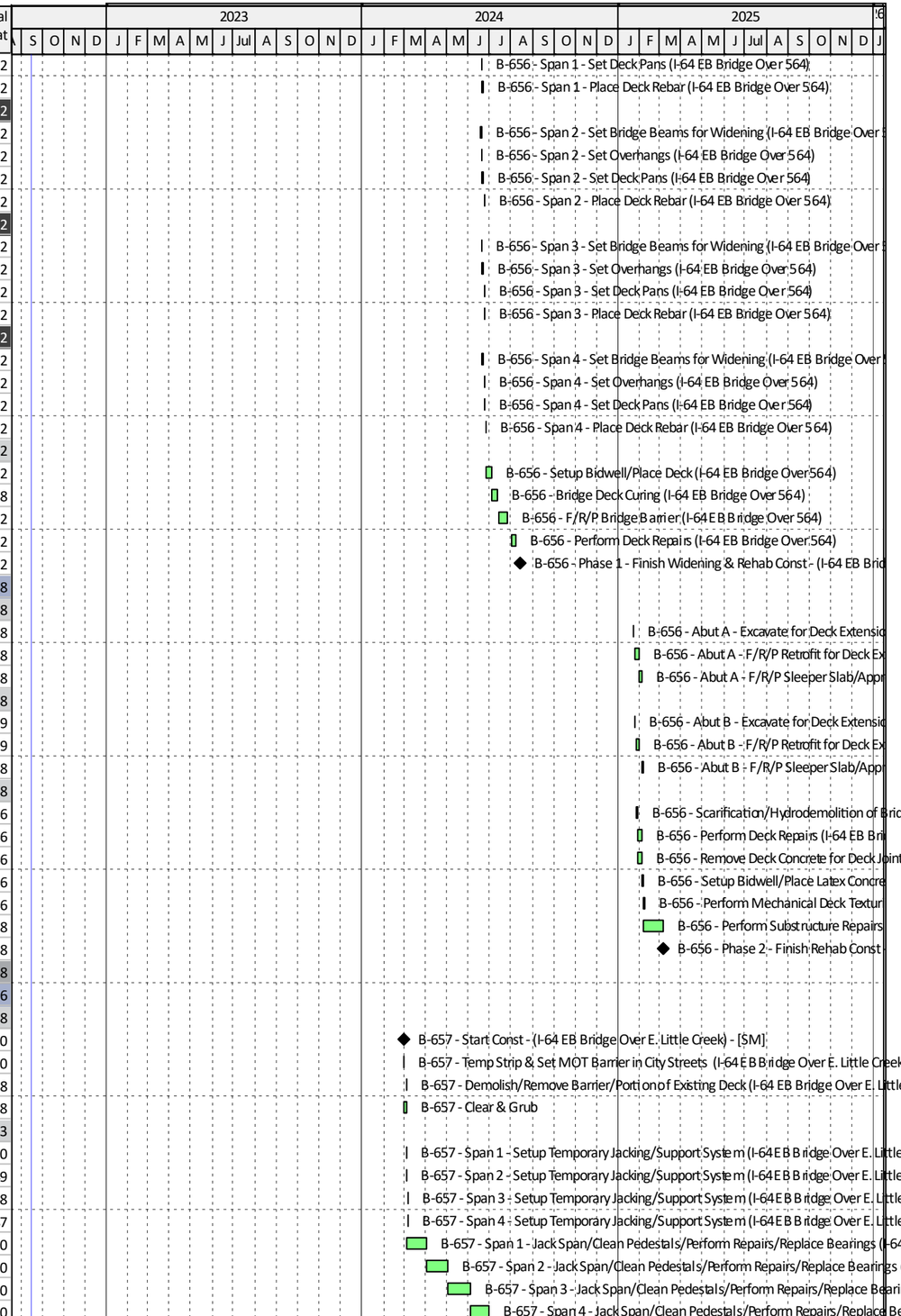
VDOT I-64 HREL SEGMENT 1A BID SCHEDULE

(ACAA) INFO COLUMNS (11x17) | TASK filter: All Activities

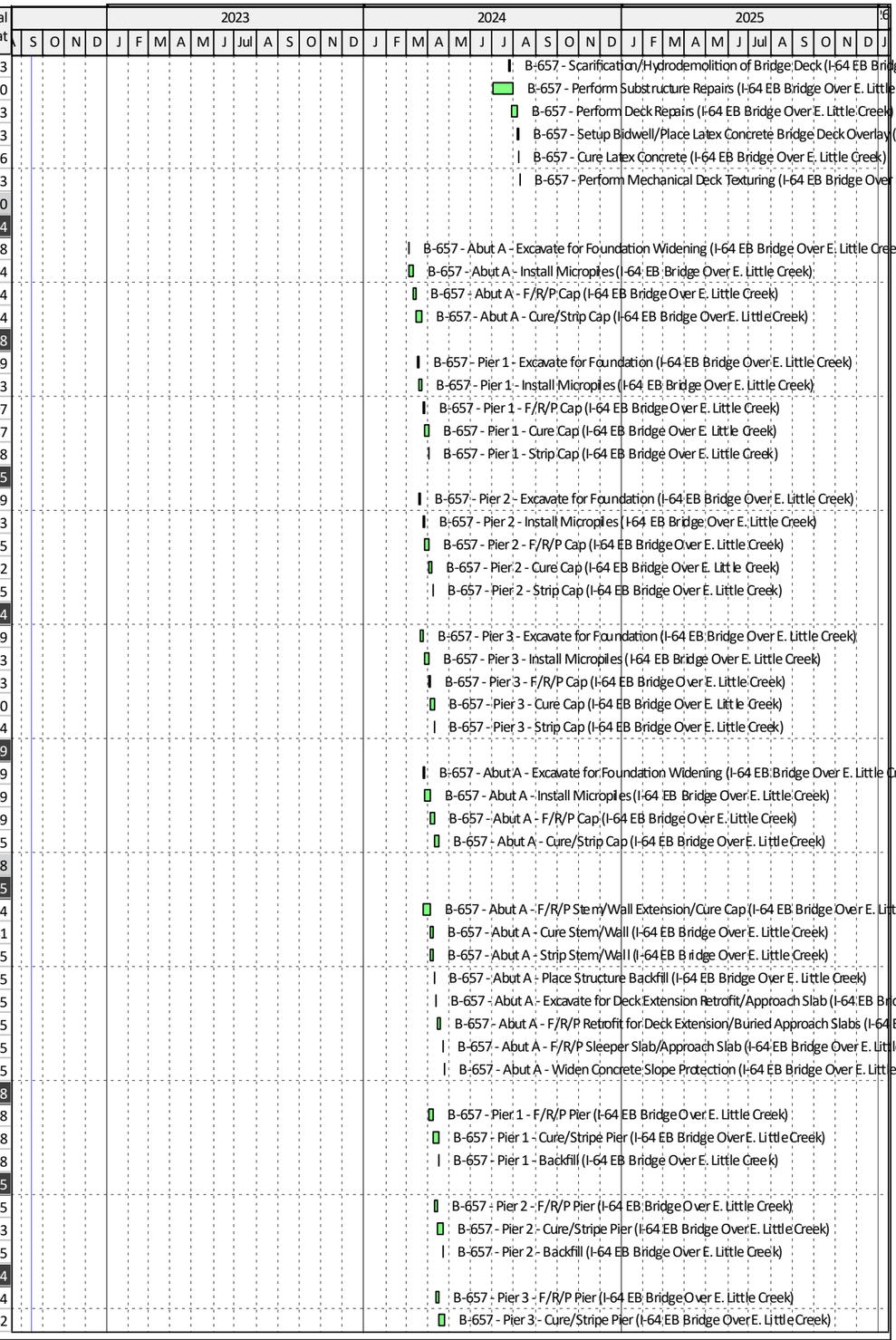
Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
CN.BR-656.114	B-656 - Pier 1 - Install Micropiles (I-64 EB Bridge Over 564)	3	20-Mar-24	22-Mar-24	196
CN.BR-656.117	B-656 - Pier 1 - F/R/P Cap (I-64 EB Bridge Over 564)	3	25-Mar-24	27-Mar-24	200
CN.BR-656.122	B-656 - Pier 1 - Cure Cap (I-64 EB Bridge Over 564)	5	27-Mar-24	01-Apr-24	308
CN.BR-656.125	B-656 - Pier 1 - Strip Cap (I-64 EB Bridge Over 564)	1	02-Apr-24	02-Apr-24	201
PIER 2		13	20-Mar-24	09-Apr-24	198
CN.BR-656.115	B-656 - Pier 2 - Excavate for Foundation (I-64 EB Bridge Over 564)	2	20-Mar-24	21-Mar-24	149
CN.BR-656.119	B-656 - Pier 2 - Install Micropiles (I-64 EB Bridge Over 564)	3	25-Mar-24	27-Mar-24	196
CN.BR-656.123	B-656 - Pier 2 - F/R/P Cap (I-64 EB Bridge Over 564)	3	28-Mar-24	02-Apr-24	198
CN.BR-656.126	B-656 - Pier 2 - Cure Cap (I-64 EB Bridge Over 564)	5	02-Apr-24	07-Apr-24	303
CN.BR-656.134	B-656 - Pier 2 - Strip Cap (I-64 EB Bridge Over 564)	1	09-Apr-24	09-Apr-24	198
PIER 3		13	22-Mar-24	11-Apr-24	197
CN.BR-656.116	B-656 - Pier 3 - Excavate for Foundation (I-64 EB Bridge Over 564)	2	22-Mar-24	25-Mar-24	149
CN.BR-656.124	B-656 - Pier 3 - Install Micropiles (I-64 EB Bridge Over 564)	3	28-Mar-24	02-Apr-24	196
CN.BR-656.128	B-656 - Pier 3 - F/R/P Cap (I-64 EB Bridge Over 564)	3	03-Apr-24	05-Apr-24	196
CN.BR-656.133	B-656 - Pier 3 - Cure Cap (I-64 EB Bridge Over 564)	5	05-Apr-24	10-Apr-24	301
CN.BR-656.139	B-656 - Pier 3 - Strip Cap (I-64 EB Bridge Over 564)	1	11-Apr-24	11-Apr-24	197
ABUTMENT B		15	26-Mar-24	17-Apr-24	149
CN.BR-656.120	B-656 - Abut A - Excavate for Foundation Widening (I-64 EB Bridge Over 564)	1	26-Mar-24	26-Mar-24	149
CN.BR-656.121	B-656 - Abut A - Install Micropiles (I-64 EB Bridge Over 564)	5	27-Mar-24	03-Apr-24	149
CN.BR-656.130	B-656 - Abut A - F/R/P Cap (I-64 EB Bridge Over 564)	4	04-Apr-24	10-Apr-24	149
CN.BR-656.138	B-656 - Abut A - Cure/Strip Cap (I-64 EB Bridge Over 564)	7	10-Apr-24	17-Apr-24	222
Substructure		38	25-Mar-24	21-May-24	180
ABUTMENT A		21	25-Mar-24	24-Apr-24	197
CN.BR-656.118	B-656 - Abut A - F/R/P Stem/Wall Extension/Cure Cap (I-64 EB Bridge Over 564)	8	25-Mar-24	04-Apr-24	196
CN.BR-656.131	B-656 - Abut A - Cure Stem/Wall (I-64 EB Bridge Over 564)	5	04-Apr-24	09-Apr-24	301
CN.BR-656.132	B-656 - Abut A - Strip Stem/Wall (I-64 EB Bridge Over 564)	2	05-Apr-24	09-Apr-24	197
CN.BR-656.136	B-656 - Abut A - Place Structure Backfill (I-64 EB Bridge Over 564)	2	10-Apr-24	11-Apr-24	197
CN.BR-656.140	B-656 - Abut A - Excavate for Deck Extension Retrofit/Approach Slab (I-64 EB Bridge Over 564)	1	12-Apr-24	12-Apr-24	197
CN.BR-656.142	B-656 - Abut A - F/R/P Retrofit for Deck Extension/Buried Approach Slabs (I-64 EB Bridge Over 564)	5	15-Apr-24	19-Apr-24	197
CN.BR-656.147	B-656 - Abut A - F/R/P Sleeper Slab/Approach Slab (I-64 EB Bridge Over 564)	2	22-Apr-24	23-Apr-24	197
CN.BR-656.149	B-656 - Abut A - Widen Concrete Slope Protection (I-64 EB Bridge Over 564)	1	24-Apr-24	24-Apr-24	197
PIER 1		10	03-Apr-24	17-Apr-24	200
CN.BR-656.127	B-656 - Pier 1 - F/R/P Pier (I-64 EB Bridge Over 564)	4	03-Apr-24	09-Apr-24	201
CN.BR-656.135	B-656 - Pier 1 - Cure/Stripe Pier (I-64 EB Bridge Over 564)	7	09-Apr-24	16-Apr-24	307
CN.BR-656.144	B-656 - Pier 1 - Backfill (I-64 EB Bridge Over 564)	1	17-Apr-24	17-Apr-24	200
PIER 2		10	10-Apr-24	23-Apr-24	197
CN.BR-656.137	B-656 - Pier 2 - F/R/P Pier (I-64 EB Bridge Over 564)	4	10-Apr-24	15-Apr-24	198
CN.BR-656.143	B-656 - Pier 2 - Cure/Stripe Pier (I-64 EB Bridge Over 564)	7	15-Apr-24	22-Apr-24	302
CN.BR-656.148	B-656 - Pier 2 - Backfill (I-64 EB Bridge Over 564)	1	23-Apr-24	23-Apr-24	197
PIER 3		10	12-Apr-24	25-Apr-24	196
CN.BR-656.141	B-656 - Pier 3 - F/R/P Pier (I-64 EB Bridge Over 564)	4	12-Apr-24	17-Apr-24	197
CN.BR-656.145	B-656 - Pier 3 - Cure/Stripe Pier (I-64 EB Bridge Over 564)	7	17-Apr-24	24-Apr-24	301
CN.BR-656.150	B-656 - Pier 3 - Backfill (I-64 EB Bridge Over 564)	1	25-Apr-24	25-Apr-24	196
ABUTMENT B		22	18-Apr-24	21-May-24	180
CN.BR-656.146	B-656 - Abut A - F/R/P Stem/Wall Extension/Cure Cap (I-64 EB Bridge Over 564)	8	18-Apr-24	30-Apr-24	149
CN.BR-656.152	B-656 - Abut A - Strip Stem/Wall (I-64 EB Bridge Over 564)	2	01-May-24	02-May-24	150
CN.BR-656.151	B-656 - Abut A - Cure Stem/Wall (I-64 EB Bridge Over 564)	5	30-Apr-24	05-May-24	221
CN.BR-656.154	B-656 - Abut A - Place Structure Backfill (I-64 EB Bridge Over 564)	2	06-May-24	07-May-24	149
CN.BR-656.155	B-656 - Abut A - Excavate for Deck Extension Retrofit/Approach Slab (I-64 EB Bridge Over 564)	1	08-May-24	08-May-24	180
CN.BR-656.156	B-656 - Abut A - F/R/P Retrofit for Deck Extension/Buried Approach Slabs (I-64 EB Bridge Over 564)	5	09-May-24	16-May-24	180
CN.BR-656.157	B-656 - Abut A - F/R/P Sleeper Slab/Approach Slab (I-64 EB Bridge Over 564)	2	17-May-24	20-May-24	180
CN.BR-656.158	B-656 - Abut A - Widen Concrete Slope Protection (I-64 EB Bridge Over 564)	1	21-May-24	21-May-24	180
Superstructure		7	18-Jun-24	26-Jun-24	122
SPAN 1		4	18-Jun-24	21-Jun-24	122
CN.BR-656.160	B-656 - Span 1 - Set Bridge Beams for Widening (I-64 EB Bridge Over 564)	1	18-Jun-24	18-Jun-24	122
CN.BR-656.161	B-656 - Span 1 - Set Overhangs (I-64 EB Bridge Over 564)	1	19-Jun-24	19-Jun-24	122



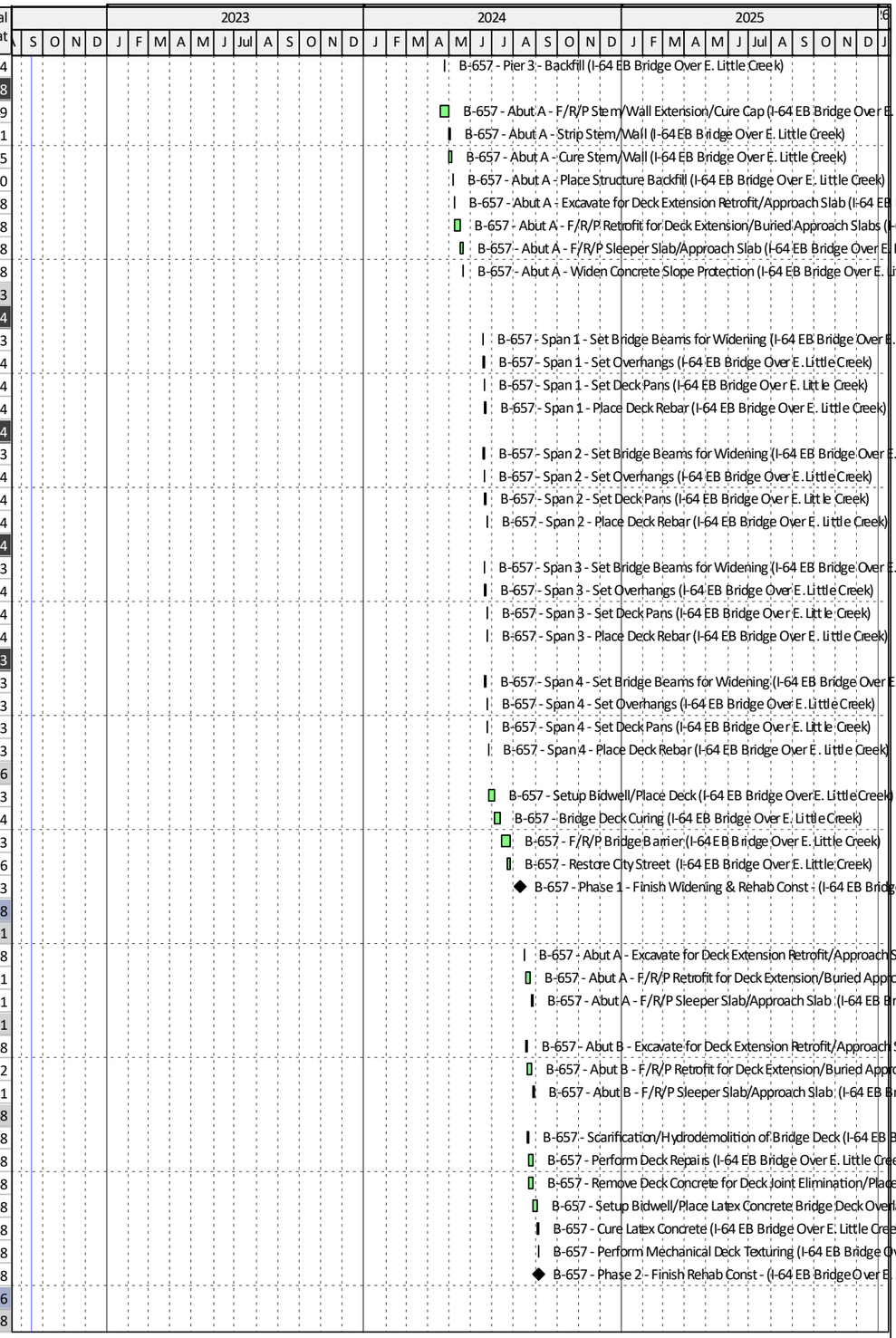
Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
CN.BR-656.163	B-656 - Span 1 - Set Deck Pans (I-64 EB Bridge Over 564)	1	20-Jun-24	20-Jun-24	122
CN.BR-656.166	B-656 - Span 1 - Place Deck Rebar (I-64 EB Bridge Over 564)	1	21-Jun-24	21-Jun-24	122
SPAN 2		4	19-Jun-24	24-Jun-24	122
CN.BR-656.162	B-656 - Span 2 - Set Bridge Beams for Widening (I-64 EB Bridge Over 564)	1	19-Jun-24	19-Jun-24	122
CN.BR-656.164	B-656 - Span 2 - Set Overhangs (I-64 EB Bridge Over 564)	1	20-Jun-24	20-Jun-24	122
CN.BR-656.167	B-656 - Span 2 - Set Deck Pans (I-64 EB Bridge Over 564)	1	21-Jun-24	21-Jun-24	122
CN.BR-656.170	B-656 - Span 2 - Place Deck Rebar (I-64 EB Bridge Over 564)	1	24-Jun-24	24-Jun-24	122
SPAN 3		4	20-Jun-24	25-Jun-24	122
CN.BR-656.165	B-656 - Span 3 - Set Bridge Beams for Widening (I-64 EB Bridge Over 564)	1	20-Jun-24	20-Jun-24	122
CN.BR-656.168	B-656 - Span 3 - Set Overhangs (I-64 EB Bridge Over 564)	1	21-Jun-24	21-Jun-24	122
CN.BR-656.171	B-656 - Span 3 - Set Deck Pans (I-64 EB Bridge Over 564)	1	24-Jun-24	24-Jun-24	122
CN.BR-656.173	B-656 - Span 3 - Place Deck Rebar (I-64 EB Bridge Over 564)	1	25-Jun-24	25-Jun-24	122
SPAN 4		4	21-Jun-24	26-Jun-24	122
CN.BR-656.169	B-656 - Span 4 - Set Bridge Beams for Widening (I-64 EB Bridge Over 564)	1	21-Jun-24	21-Jun-24	122
CN.BR-656.172	B-656 - Span 4 - Set Overhangs (I-64 EB Bridge Over 564)	1	24-Jun-24	24-Jun-24	122
CN.BR-656.174	B-656 - Span 4 - Set Deck Pans (I-64 EB Bridge Over 564)	1	25-Jun-24	25-Jun-24	122
CN.BR-656.175	B-656 - Span 4 - Place Deck Rebar (I-64 EB Bridge Over 564)	1	26-Jun-24	26-Jun-24	122
Final Work		33	27-Jun-24	14-Aug-24	122
CN.BR-656.176C	B-656 - Setup Bidwell/Place Deck (I-64 EB Bridge Over 564)	5	27-Jun-24	05-Jul-24	122
CN.BR-656.178C	B-656 - Bridge Deck Curing (I-64 EB Bridge Over 564)	7	05-Jul-24	12-Jul-24	188
CN.BR-656.179C	B-656 - F/R/P Bridge Barrier (I-64 EB Bridge Over 564)	10	15-Jul-24	26-Jul-24	122
CN.BR-656.181C	B-656 - Perform Deck Repairs (I-64 EB Bridge Over 564)	6	01-Aug-24	08-Aug-24	122
CN.BR-656.185C	B-656 - Phase 1 - Finish Widening & Rehab Const - (I-64 EB Bridge Over 564) - [FM]	0		14-Aug-24	122
Phase 2 (Existing Bridge Rehabilitation [EB])		30	23-Jan-25	06-Mar-25	128
ABUTMENT A		8	23-Jan-25	03-Feb-25	128
CN.BR-656.186C	B-656 - Abut A - Excavate for Deck Extension Retrofit/Approach Slab (I-64 EB Bridge Over 564)	1	23-Jan-25	23-Jan-25	128
CN.BR-656.187C	B-656 - Abut A - F/R/P Retrofit for Deck Extension/Buried Approach Slabs (I-64 EB Bridge Over 564)	5	24-Jan-25	30-Jan-25	128
CN.BR-656.193C	B-656 - Abut A - F/R/P Sleeper Slab/Approach Slab (I-64 EB Bridge Over 564)	2	31-Jan-25	03-Feb-25	128
ABUTMENT B		9	24-Jan-25	05-Feb-25	128
CN.BR-656.188C	B-656 - Abut B - Excavate for Deck Extension Retrofit/Approach Slab (I-64 EB Bridge Over 564)	1	24-Jan-25	24-Jan-25	129
CN.BR-656.189C	B-656 - Abut B - F/R/P Retrofit for Deck Extension/Buried Approach Slabs (I-64 EB Bridge Over 564)	5	27-Jan-25	31-Jan-25	129
CN.BR-656.194C	B-656 - Abut B - F/R/P Sleeper Slab/Approach Slab (I-64 EB Bridge Over 564)	2	04-Feb-25	05-Feb-25	128
Final Work'		28	27-Jan-25	06-Mar-25	128
CN.BR-656.190C	B-656 - Scarification/Hydrodemolition of Bridge Deck (I-64 EB Bridge Over 564)	3	27-Jan-25	29-Jan-25	146
CN.BR-656.191C	B-656 - Perform Deck Repairs (I-64 EB Bridge Over 564)	4	30-Jan-25	04-Feb-25	146
CN.BR-656.192C	B-656 - Remove Deck Concrete for Deck Joint Elimination/Place Closure Concrete (I-64 EB Bridge Over 564)	4	30-Jan-25	04-Feb-25	146
CN.BR-656.195C	B-656 - Setup Bidwell/Place Latex Concrete Bridge Deck Overlay (I-64 EB Bridge Over 564)	2	05-Feb-25	06-Feb-25	146
CN.BR-656.197C	B-656 - Perform Mechanical Deck Texturing (I-64 EB Bridge Over 564)	1	07-Feb-25	07-Feb-25	146
CN.BR-656.196C	B-656 - Perform Substructure Repairs (I-64 EB Bridge Over 564)	20	06-Feb-25	06-Mar-25	128
CN.BR-656.198C	B-656 - Phase 2 - Finish Rehab Const - (I-64 EB Bridge Over 564) - [FM]	0		06-Mar-25	128
B-657 - I-64 Bridge Over E. Little Creek [EB]		248	29-Feb-24	10-Mar-25	188
Phase 1A (Bridge Widening & Existing Bridge Rehabilitation [EB])		110	29-Feb-24	09-Aug-24	326
Initial Work		4	29-Feb-24	05-Mar-24	128
CN.BR-657.101C	B-657 - Start Const - (I-64 EB Bridge Over E. Little Creek) - [SM]	0	29-Feb-24		30
CN.BR-657.100C	B-657 - Temp Strip & Set MOT Barrier in City Streets (I-64 EB Bridge Over E. Little Creek)	2	29-Feb-24	01-Mar-24	30
CN.BR-657.104C	B-657 - Demolish/Remove Barrier/Portion of Existing Deck (I-64 EB Bridge Over E. Little Creek)	2	04-Mar-24	05-Mar-24	128
CN.BR-657.102C	B-657 - Clear & Grub	2	01-Mar-24	05-Mar-24	58
Bridge Rehabilitation		108	04-Mar-24	09-Aug-24	23
CN.BR-657.105C	B-657 - Span 1 - Setup Temporary Jacking/Support System (I-64 EB Bridge Over E. Little Creek)	1	04-Mar-24	04-Mar-24	30
CN.BR-657.108C	B-657 - Span 2 - Setup Temporary Jacking/Support System (I-64 EB Bridge Over E. Little Creek)	1	05-Mar-24	05-Mar-24	49
CN.BR-657.109C	B-657 - Span 3 - Setup Temporary Jacking/Support System (I-64 EB Bridge Over E. Little Creek)	1	06-Mar-24	06-Mar-24	68
CN.BR-657.110C	B-657 - Span 4 - Setup Temporary Jacking/Support System (I-64 EB Bridge Over E. Little Creek)	1	07-Mar-24	07-Mar-24	87
CN.BR-657.107C	B-657 - Span 1 - Jack Span/Clean Pedestals/Perform Repairs/Replace Bearings (I-64 EB Bridge Over E. Little Creek)	20	05-Mar-24	02-Apr-24	30
CN.BR-657.129C	B-657 - Span 2 - Jack Span/Clean Pedestals/Perform Repairs/Replace Bearings (I-64 EB Bridge Over E. Little Creek)	20	03-Apr-24	02-May-24	30
CN.BR-657.153C	B-657 - Span 3 - Jack Span/Clean Pedestals/Perform Repairs/Replace Bearings (I-64 EB Bridge Over E. Little Creek)	20	03-May-24	03-Jun-24	30
CN.BR-657.159C	B-657 - Span 4 - Jack Span/Clean Pedestals/Perform Repairs/Replace Bearings (I-64 EB Bridge Over E. Little Creek)	20	04-Jun-24	01-Jul-24	30



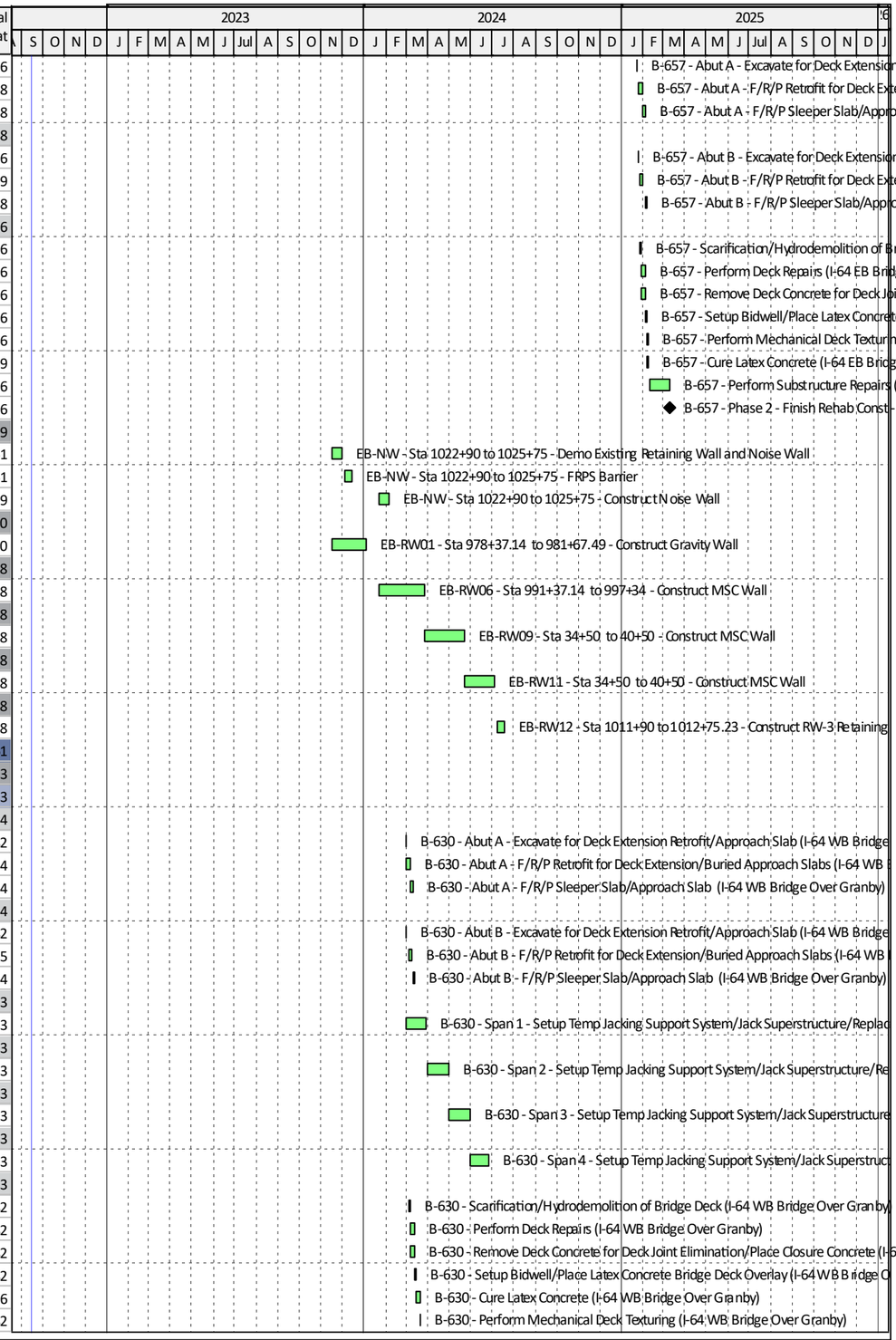
Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
CN.BR-657.1810	B-657 - Scarification/Hydrodemolition of Bridge Deck (I-64 EB Bridge Over E. Little Creek)	3	24-Jul-24	26-Jul-24	23
CN.BR-657.1770	B-657 - Perform Substructure Repairs (I-64 EB Bridge Over E. Little Creek)	20	02-Jul-24	31-Jul-24	30
CN.BR-657.1820	B-657 - Perform Deck Repairs (I-64 EB Bridge Over E. Little Creek)	6	29-Jul-24	05-Aug-24	23
CN.BR-657.1830	B-657 - Setup Bidwell/Place Latex Concrete Bridge Deck Overlay (I-64 EB Bridge Over E. Little Creek)	2	06-Aug-24	07-Aug-24	23
CN.BR-657.1840	B-657 - Cure Latex Concrete (I-64 EB Bridge Over E. Little Creek)	1	07-Aug-24	08-Aug-24	36
CN.BR-657.1850	B-657 - Perform Mechanical Deck Texturing (I-64 EB Bridge Over E. Little Creek)	1	09-Aug-24	09-Aug-24	23
Foundations		31	04-Mar-24	17-Apr-24	90
ABUTMENT A		15	04-Mar-24	22-Mar-24	94
CN.BR-657.1030	B-657 - Abut A - Excavate for Foundation Widening (I-64 EB Bridge Over E. Little Creek)	1	04-Mar-24	04-Mar-24	58
CN.BR-657.1060	B-657 - Abut A - Install Micropiles (I-64 EB Bridge Over E. Little Creek)	5	05-Mar-24	11-Mar-24	94
CN.BR-657.1110	B-657 - Abut A - F/R/P Cap (I-64 EB Bridge Over E. Little Creek)	4	12-Mar-24	15-Mar-24	94
CN.BR-657.1120	B-657 - Abut A - Cure/Strip Cap (I-64 EB Bridge Over E. Little Creek)	7	15-Mar-24	22-Mar-24	144
PIER 1		11	18-Mar-24	02-Apr-24	98
CN.BR-657.1130	B-657 - Pier 1 - Excavate for Foundation (I-64 EB Bridge Over E. Little Creek)	2	18-Mar-24	19-Mar-24	49
CN.BR-657.1140	B-657 - Pier 1 - Install Micropiles (I-64 EB Bridge Over E. Little Creek)	3	20-Mar-24	22-Mar-24	93
CN.BR-657.1170	B-657 - Pier 1 - F/R/P Cap (I-64 EB Bridge Over E. Little Creek)	3	25-Mar-24	27-Mar-24	97
CN.BR-657.1220	B-657 - Pier 1 - Cure Cap (I-64 EB Bridge Over E. Little Creek)	5	27-Mar-24	01-Apr-24	147
CN.BR-657.1250	B-657 - Pier 1 - Strip Cap (I-64 EB Bridge Over E. Little Creek)	1	02-Apr-24	02-Apr-24	98
PIER 2		13	20-Mar-24	09-Apr-24	95
CN.BR-657.1150	B-657 - Pier 2 - Excavate for Foundation (I-64 EB Bridge Over E. Little Creek)	2	20-Mar-24	21-Mar-24	49
CN.BR-657.1190	B-657 - Pier 2 - Install Micropiles (I-64 EB Bridge Over E. Little Creek)	3	25-Mar-24	27-Mar-24	93
CN.BR-657.1230	B-657 - Pier 2 - F/R/P Cap (I-64 EB Bridge Over E. Little Creek)	3	28-Mar-24	02-Apr-24	95
CN.BR-657.1260	B-657 - Pier 2 - Cure Cap (I-64 EB Bridge Over E. Little Creek)	5	02-Apr-24	07-Apr-24	142
CN.BR-657.1340	B-657 - Pier 2 - Strip Cap (I-64 EB Bridge Over E. Little Creek)	1	09-Apr-24	09-Apr-24	95
PIER 3		13	22-Mar-24	11-Apr-24	94
CN.BR-657.1160	B-657 - Pier 3 - Excavate for Foundation (I-64 EB Bridge Over E. Little Creek)	2	22-Mar-24	25-Mar-24	49
CN.BR-657.1240	B-657 - Pier 3 - Install Micropiles (I-64 EB Bridge Over E. Little Creek)	3	28-Mar-24	02-Apr-24	93
CN.BR-657.1280	B-657 - Pier 3 - F/R/P Cap (I-64 EB Bridge Over E. Little Creek)	3	03-Apr-24	05-Apr-24	93
CN.BR-657.1330	B-657 - Pier 3 - Cure Cap (I-64 EB Bridge Over E. Little Creek)	5	05-Apr-24	10-Apr-24	140
CN.BR-657.1390	B-657 - Pier 3 - Strip Cap (I-64 EB Bridge Over E. Little Creek)	1	11-Apr-24	11-Apr-24	94
ABUTMENT B		15	26-Mar-24	17-Apr-24	49
CN.BR-657.1200	B-657 - Abut A - Excavate for Foundation Widening (I-64 EB Bridge Over E. Little Creek)	1	26-Mar-24	26-Mar-24	49
CN.BR-657.1210	B-657 - Abut A - Install Micropiles (I-64 EB Bridge Over E. Little Creek)	5	27-Mar-24	03-Apr-24	49
CN.BR-657.1300	B-657 - Abut A - F/R/P Cap (I-64 EB Bridge Over E. Little Creek)	4	04-Apr-24	10-Apr-24	49
CN.BR-657.1380	B-657 - Abut A - Cure/Strip Cap (I-64 EB Bridge Over E. Little Creek)	7	10-Apr-24	17-Apr-24	75
Substructure		38	25-Mar-24	21-May-24	78
ABUTMENT A		21	25-Mar-24	24-Apr-24	95
CN.BR-657.1180	B-657 - Abut A - F/R/P Stem/Wall Extension/Cure Cap (I-64 EB Bridge Over E. Little Creek)	8	25-Mar-24	04-Apr-24	94
CN.BR-657.1310	B-657 - Abut A - Cure Stem/Wall (I-64 EB Bridge Over E. Little Creek)	5	04-Apr-24	09-Apr-24	141
CN.BR-657.1320	B-657 - Abut A - Strip Stem/Wall (I-64 EB Bridge Over E. Little Creek)	2	05-Apr-24	09-Apr-24	95
CN.BR-657.1360	B-657 - Abut A - Place Structure Backfill (I-64 EB Bridge Over E. Little Creek)	2	10-Apr-24	11-Apr-24	95
CN.BR-657.1400	B-657 - Abut A - Excavate for Deck Extension Retrofit/Approach Slab (I-64 EB Bridge Over E. Little Creek)	1	12-Apr-24	12-Apr-24	95
CN.BR-657.1420	B-657 - Abut A - F/R/P Retrofit for Deck Extension/Buried Approach Slabs (I-64 EB Bridge Over E. Little Creek)	5	15-Apr-24	19-Apr-24	95
CN.BR-657.1470	B-657 - Abut A - F/R/P Sleeper Slab/Approach Slab (I-64 EB Bridge Over E. Little Creek)	2	22-Apr-24	23-Apr-24	95
CN.BR-657.1490	B-657 - Abut A - Widen Concrete Slope Protection (I-64 EB Bridge Over E. Little Creek)	1	24-Apr-24	24-Apr-24	95
PIER 1		10	03-Apr-24	17-Apr-24	98
CN.BR-657.1270	B-657 - Pier 1 - F/R/P Pier (I-64 EB Bridge Over E. Little Creek)	4	03-Apr-24	09-Apr-24	98
CN.BR-657.1350	B-657 - Pier 1 - Cure/Stripe Pier (I-64 EB Bridge Over E. Little Creek)	7	09-Apr-24	16-Apr-24	148
CN.BR-657.1440	B-657 - Pier 1 - Backfill (I-64 EB Bridge Over E. Little Creek)	1	17-Apr-24	17-Apr-24	98
PIER 2		10	10-Apr-24	23-Apr-24	95
CN.BR-657.1370	B-657 - Pier 2 - F/R/P Pier (I-64 EB Bridge Over E. Little Creek)	4	10-Apr-24	15-Apr-24	95
CN.BR-657.1430	B-657 - Pier 2 - Cure/Stripe Pier (I-64 EB Bridge Over E. Little Creek)	7	15-Apr-24	22-Apr-24	143
CN.BR-657.1480	B-657 - Pier 2 - Backfill (I-64 EB Bridge Over E. Little Creek)	1	23-Apr-24	23-Apr-24	95
PIER 3		10	12-Apr-24	25-Apr-24	94
CN.BR-657.1410	B-657 - Pier 3 - F/R/P Pier (I-64 EB Bridge Over E. Little Creek)	4	12-Apr-24	17-Apr-24	94
CN.BR-657.1450	B-657 - Pier 3 - Cure/Stripe Pier (I-64 EB Bridge Over E. Little Creek)	7	17-Apr-24	24-Apr-24	142



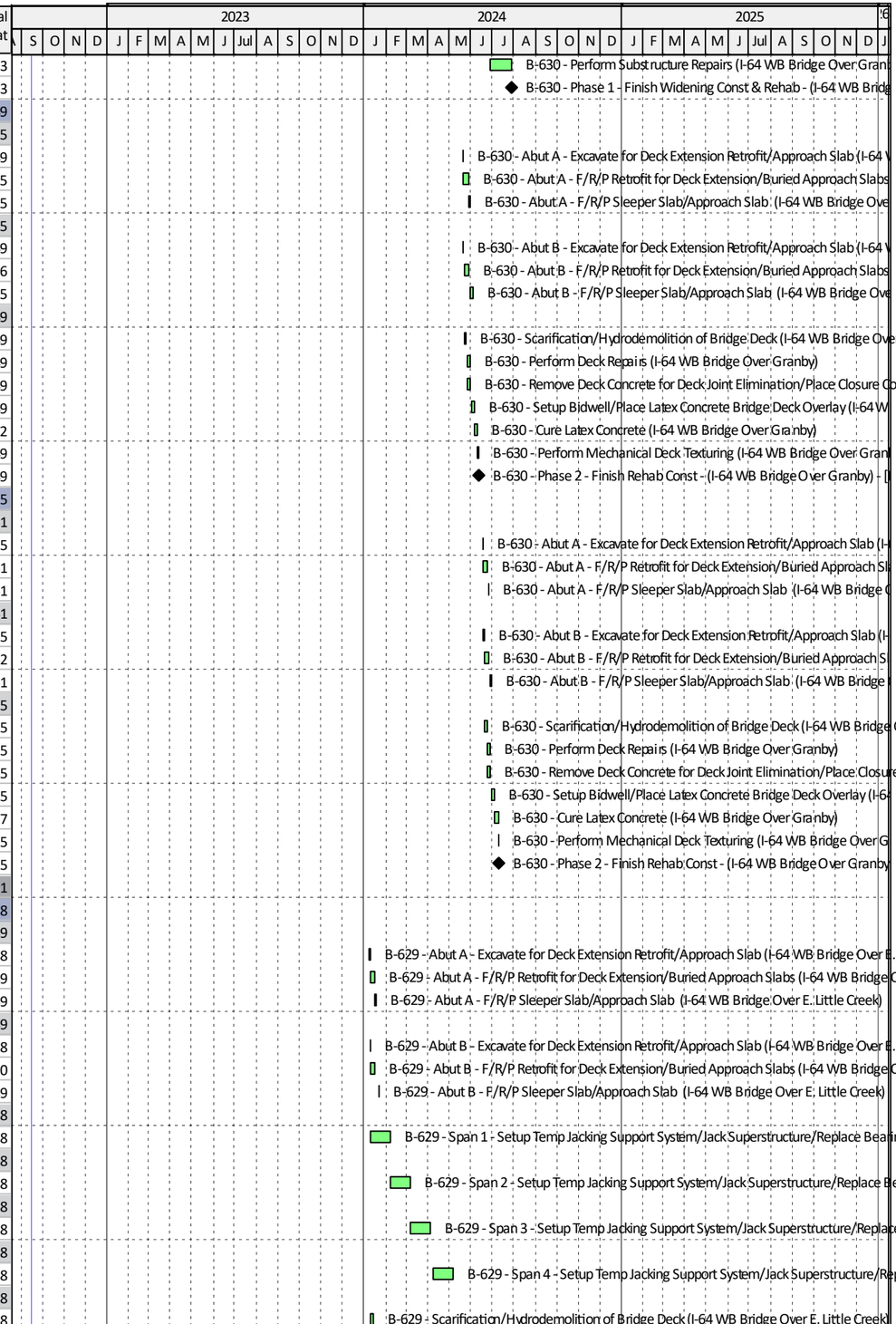
Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
CN.BR-657.150	B-657 - Pier 3 - Backfill (I-64 EB Bridge Over E. Little Creek)	1	25-Apr-24	25-Apr-24	94
ABUTMENT B		22	18-Apr-24	21-May-24	78
CN.BR-657.146	B-657 - Abut A - F/R/P Stem/Wall Extension/Cure Cap (I-64 EB Bridge Over E. Little Creek)	8	18-Apr-24	30-Apr-24	49
CN.BR-657.152	B-657 - Abut A - Strip Stem/Wall (I-64 EB Bridge Over E. Little Creek)	2	01-May-24	02-May-24	51
CN.BR-657.151	B-657 - Abut A - Cure Stem/Wall (I-64 EB Bridge Over E. Little Creek)	5	30-Apr-24	05-May-24	75
CN.BR-657.154	B-657 - Abut A - Place Structure Backfill (I-64 EB Bridge Over E. Little Creek)	2	06-May-24	07-May-24	50
CN.BR-657.155	B-657 - Abut A - Excavate for Deck Extension Retrofit/Approach Slab (I-64 EB Bridge Over E. Little Creek)	1	08-May-24	08-May-24	78
CN.BR-657.156	B-657 - Abut A - F/R/P Retrofit for Deck Extension/Buried Approach Slabs (I-64 EB Bridge Over E. Little Creek)	5	09-May-24	16-May-24	78
CN.BR-657.157	B-657 - Abut A - F/R/P Sleeper Slab/Approach Slab (I-64 EB Bridge Over E. Little Creek)	2	17-May-24	20-May-24	78
CN.BR-657.158	B-657 - Abut A - Widen Concrete Slope Protection (I-64 EB Bridge Over E. Little Creek)	1	21-May-24	21-May-24	78
Superstructure		7	18-Jun-24	26-Jun-24	23
SPAN 1		4	18-Jun-24	21-Jun-24	24
CN.BR-657.160	B-657 - Span 1 - Set Bridge Beams for Widening (I-64 EB Bridge Over E. Little Creek)	1	18-Jun-24	18-Jun-24	23
CN.BR-657.161	B-657 - Span 1 - Set Overhangs (I-64 EB Bridge Over E. Little Creek)	1	19-Jun-24	19-Jun-24	24
CN.BR-657.163	B-657 - Span 1 - Set Deck Pans (I-64 EB Bridge Over E. Little Creek)	1	20-Jun-24	20-Jun-24	24
CN.BR-657.166	B-657 - Span 1 - Place Deck Rebar (I-64 EB Bridge Over E. Little Creek)	1	21-Jun-24	21-Jun-24	24
SPAN 2		4	19-Jun-24	24-Jun-24	24
CN.BR-657.162	B-657 - Span 2 - Set Bridge Beams for Widening (I-64 EB Bridge Over E. Little Creek)	1	19-Jun-24	19-Jun-24	23
CN.BR-657.164	B-657 - Span 2 - Set Overhangs (I-64 EB Bridge Over E. Little Creek)	1	20-Jun-24	20-Jun-24	24
CN.BR-657.167	B-657 - Span 2 - Set Deck Pans (I-64 EB Bridge Over E. Little Creek)	1	21-Jun-24	21-Jun-24	24
CN.BR-657.170	B-657 - Span 2 - Place Deck Rebar (I-64 EB Bridge Over E. Little Creek)	1	24-Jun-24	24-Jun-24	24
SPAN 3		4	20-Jun-24	25-Jun-24	24
CN.BR-657.165	B-657 - Span 3 - Set Bridge Beams for Widening (I-64 EB Bridge Over E. Little Creek)	1	20-Jun-24	20-Jun-24	23
CN.BR-657.168	B-657 - Span 3 - Set Overhangs (I-64 EB Bridge Over E. Little Creek)	1	21-Jun-24	21-Jun-24	24
CN.BR-657.171	B-657 - Span 3 - Set Deck Pans (I-64 EB Bridge Over E. Little Creek)	1	24-Jun-24	24-Jun-24	24
CN.BR-657.173	B-657 - Span 3 - Place Deck Rebar (I-64 EB Bridge Over E. Little Creek)	1	25-Jun-24	25-Jun-24	24
SPAN 4		4	21-Jun-24	26-Jun-24	23
CN.BR-657.169	B-657 - Span 4 - Set Bridge Beams for Widening (I-64 EB Bridge Over E. Little Creek)	1	21-Jun-24	21-Jun-24	23
CN.BR-657.172	B-657 - Span 4 - Set Overhangs (I-64 EB Bridge Over E. Little Creek)	1	24-Jun-24	24-Jun-24	23
CN.BR-657.174	B-657 - Span 4 - Set Deck Pans (I-64 EB Bridge Over E. Little Creek)	1	25-Jun-24	25-Jun-24	23
CN.BR-657.175	B-657 - Span 4 - Place Deck Rebar (I-64 EB Bridge Over E. Little Creek)	1	26-Jun-24	26-Jun-24	23
Final Work		30	27-Jun-24	09-Aug-24	326
CN.BR-657.176	B-657 - Setup Bidwell/Place Deck (I-64 EB Bridge Over E. Little Creek)	5	27-Jun-24	05-Jul-24	23
CN.BR-657.178	B-657 - Bridge Deck Curing (I-64 EB Bridge Over E. Little Creek)	7	05-Jul-24	12-Jul-24	34
CN.BR-657.179	B-657 - F/R/P Bridge Barrier (I-64 EB Bridge Over E. Little Creek)	10	15-Jul-24	26-Jul-24	23
CN.BR-657.180	B-657 - Restore City Street (I-64 EB Bridge Over E. Little Creek)	5	22-Jul-24	26-Jul-24	336
CN.BR-657.186	B-657 - Phase 1 - Finish Widening & Rehab Const - (I-64 EB Bridge Over E. Little Creek) - [FM]	0		09-Aug-24	23
Phase 1B (Existing Bridge Rehabilitation [EB])		13	16-Aug-24	05-Sep-24	108
ABUTMENT A		8	16-Aug-24	27-Aug-24	111
CN.BR-657.187	B-657 - Abut A - Excavate for Deck Extension Retrofit/Approach Slab (I-64 EB Bridge Over E. Little Creek)	1	16-Aug-24	16-Aug-24	108
CN.BR-657.188	B-657 - Abut A - F/R/P Retrofit for Deck Extension/Buried Approach Slabs (I-64 EB Bridge Over E. Little Creek)	5	19-Aug-24	23-Aug-24	111
CN.BR-657.194	B-657 - Abut A - F/R/P Sleeper Slab/Approach Slab (I-64 EB Bridge Over E. Little Creek)	2	26-Aug-24	27-Aug-24	111
ABUTMENT B		9	19-Aug-24	29-Aug-24	111
CN.BR-657.189	B-657 - Abut B - Excavate for Deck Extension Retrofit/Approach Slab (I-64 EB Bridge Over E. Little Creek)	1	19-Aug-24	19-Aug-24	108
CN.BR-657.190	B-657 - Abut B - F/R/P Retrofit for Deck Extension/Buried Approach Slabs (I-64 EB Bridge Over E. Little Creek)	5	20-Aug-24	26-Aug-24	112
CN.BR-657.195	B-657 - Abut B - F/R/P Sleeper Slab/Approach Slab (I-64 EB Bridge Over E. Little Creek)	2	28-Aug-24	29-Aug-24	111
Final Work'		11	20-Aug-24	05-Sep-24	108
CN.BR-657.191	B-657 - Scarification/Hydrodemolition of Bridge Deck (I-64 EB Bridge Over E. Little Creek)	3	20-Aug-24	22-Aug-24	108
CN.BR-657.192	B-657 - Perform Deck Repairs (I-64 EB Bridge Over E. Little Creek)	4	23-Aug-24	28-Aug-24	108
CN.BR-657.193	B-657 - Remove Deck Concrete for Deck Joint Elimination/Place Closure Concrete (I-64 EB Bridge Over E. Little Creek)	4	23-Aug-24	28-Aug-24	108
CN.BR-657.196	B-657 - Setup Bidwell/Place Latex Concrete Bridge Deck Overlay (I-64 EB Bridge Over E. Little Creek)	2	29-Aug-24	03-Sep-24	108
CN.BR-657.197	B-657 - Cure Latex Concrete (I-64 EB Bridge Over E. Little Creek)	1	03-Sep-24	04-Sep-24	168
CN.BR-657.198	B-657 - Perform Mechanical Deck Texturing (I-64 EB Bridge Over E. Little Creek)	1	05-Sep-24	05-Sep-24	108
CN.BR-657.199	B-657 - Phase 2 - Finish Rehab Const - (I-64 EB Bridge Over E. Little Creek) - [FM]	0		05-Sep-24	108
Phase 2 (Existing Bridge Rehabilitation [EB])		32	23-Jan-25	10-Mar-25	126
ABUTMENT A		8	23-Jan-25	03-Feb-25	128



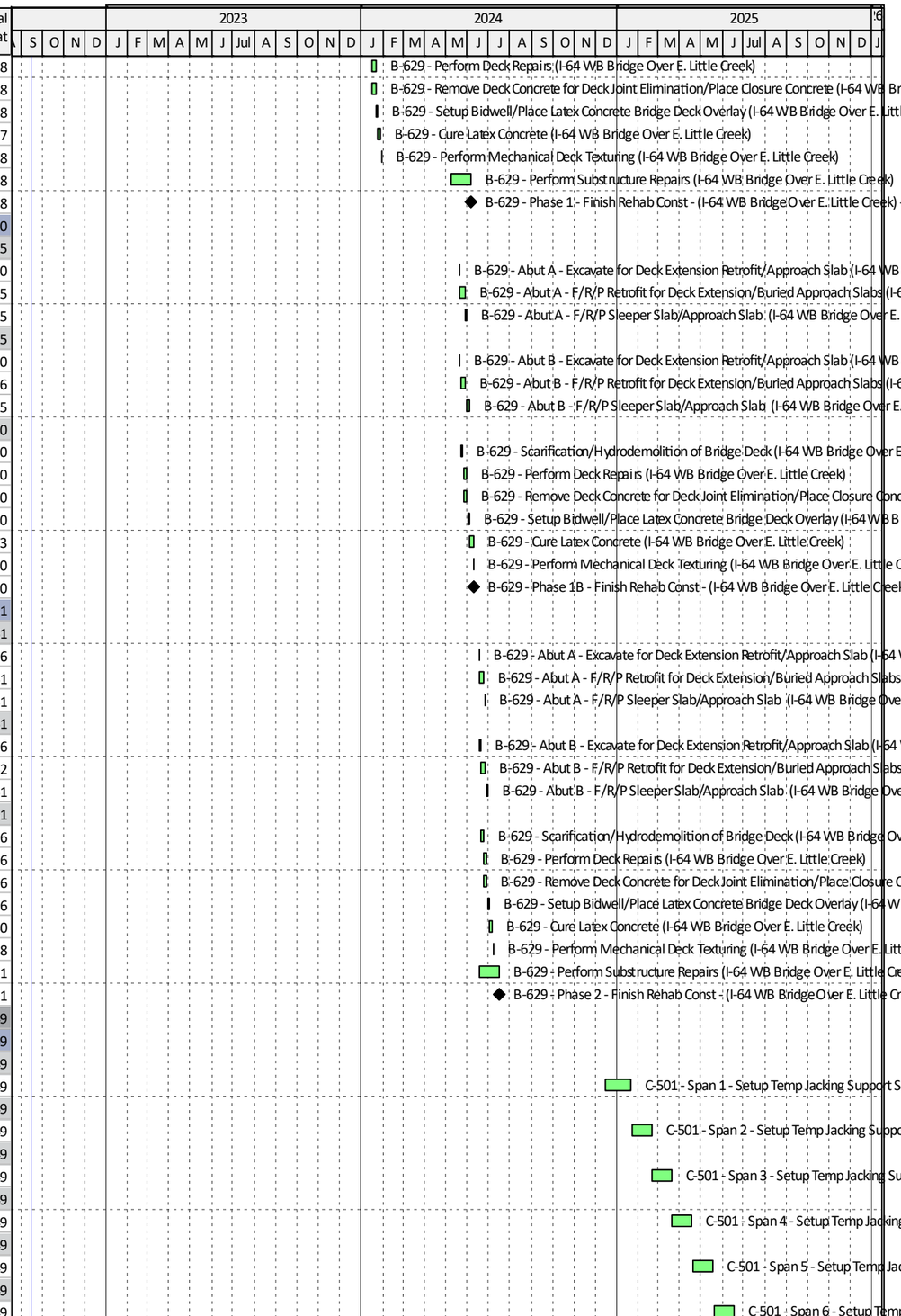
Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
CN.BR-657.2000	B-657 - Abut A - Excavate for Deck Extension Retrofit/Approach Slab (I-64 EB Bridge Over E. Little Creek)	1	23-Jan-25	23-Jan-25	126
CN.BR-657.2010	B-657 - Abut A - F/R/P Retrofit for Deck Extension/Buried Approach Slabs (I-64 EB Bridge Over E. Little Creek)	5	24-Jan-25	30-Jan-25	128
CN.BR-657.2070	B-657 - Abut A - F/R/P Sleeper Slab/Approach Slab (I-64 EB Bridge Over E. Little Creek)	2	31-Jan-25	03-Feb-25	128
ABUTMENT B		9	24-Jan-25	05-Feb-25	128
CN.BR-657.2020	B-657 - Abut B - Excavate for Deck Extension Retrofit/Approach Slab (I-64 EB Bridge Over E. Little Creek)	1	24-Jan-25	24-Jan-25	126
CN.BR-657.2030	B-657 - Abut B - F/R/P Retrofit for Deck Extension/Buried Approach Slabs (I-64 EB Bridge Over E. Little Creek)	5	27-Jan-25	31-Jan-25	129
CN.BR-657.2080	B-657 - Abut B - F/R/P Sleeper Slab/Approach Slab (I-64 EB Bridge Over E. Little Creek)	2	04-Feb-25	05-Feb-25	128
Final Work'		30	27-Jan-25	10-Mar-25	126
CN.BR-657.2040	B-657 - Scarification/Hydrodemolition of Bridge Deck (I-64 EB Bridge Over E. Little Creek)	3	27-Jan-25	29-Jan-25	126
CN.BR-657.2050	B-657 - Perform Deck Repairs (I-64 EB Bridge Over E. Little Creek)	4	30-Jan-25	04-Feb-25	126
CN.BR-657.2060	B-657 - Remove Deck Concrete for Deck Joint Elimination/Place Closure Concrete (I-64 EB Bridge Over E. Little Creek)	4	30-Jan-25	04-Feb-25	126
CN.BR-657.2090	B-657 - Setup Bidwell/Place Latex Concrete Bridge Deck Overlay (I-64 E B Bridge Over E. Little Creek)	2	05-Feb-25	06-Feb-25	126
CN.BR-657.2110	B-657 - Perform Mechanical Deck Texturing (I-64 EB Bridge Over E. Little Creek)	1	07-Feb-25	07-Feb-25	146
CN.BR-657.2100	B-657 - Cure Latex Concrete (I-64 EB Bridge Over E. Little Creek)	1	06-Feb-25	07-Feb-25	189
CN.BR-657.2120	B-657 - Perform Substructure Repairs (I-64 EB Bridge Over E. Little Creek)	20	10-Feb-25	10-Mar-25	126
CN.BR-657.2130	B-657 - Phase 2 - Finish Rehab Const - (I-64 EB Bridge Over E. Little Creek) - [FM]	0		10-Mar-25	126
EB-NW Noise Wall Sta 1022+90 to 1025+75 (285 LF)		52	16-Nov-23	05-Feb-24	139
CN.RW.1020	EB-NW - Sta 1022+90 to 1025+75 - Demo Existing Retaining Wall and Noise Wall	10	16-Nov-23	01-Dec-23	161
CN.RW.1040	EB-NW - Sta 1022+90 to 1025+75 - FRPS Barrier	10	04-Dec-23	15-Dec-23	161
CN.RW.1050	EB-NW - Sta 1022+90 to 1025+75 - Construct Noise Wall	10	23-Jan-24	05-Feb-24	139
EB-RW02 - MB7F w/ RW-3 Retaining Wall Sta 978+37.14 to 981+67.49 (330 LF)		30	16-Nov-23	03-Jan-24	50
CN.RW.1030	EB-RW01 - Sta 978+37.14 to 981+67.49 - Construct Gravity Wall	30	16-Nov-23	03-Jan-24	50
EB-RW06 - MSE Retaining Wall Sta 991+07.46 to 997+34.64 (627 LF)		45	23-Jan-24	26-Mar-24	38
CN.RW.1060	EB-RW06 - Sta 991+37.14 to 997+34 - Construct MSC Wall	45	23-Jan-24	26-Mar-24	38
EB-RW09 - MSE Retaining Wall Sta 34+50.00 to 40+50.00 (557 LF)		37	27-Mar-24	22-May-24	38
CN.RW.1070	EB-RW09 - Sta 34+50 to 40+50 - Construct MSC Wall	37	27-Mar-24	22-May-24	38
EB-RW11 - MSE Retaining Wall Sta 1007+42.30 to 1011+46.73 (404 LF)		29	23-May-24	05-Jul-24	38
CN.RW.1080	EB-RW11 - Sta 34+50 to 40+50 - Construct MSC Wall	29	23-May-24	05-Jul-24	38
EB-RW12 - RW-3 Retaining Walll Sta 1011+90.01 to 1012+75.23 (85 LF)		10	08-Jul-24	19-Jul-24	38
CN.RW.1090	EB-RW12 - Sta 1011+90 to 1012+75.23 - Construct RW-3 Retaining Wall	10	08-Jul-24	19-Jul-24	38
Segment B - WB - STA 2821+00 to 3019+46		443	16-Nov-23	16-Sep-25	61
B-630 - I-64 Bridge Over Granby [WB]		101	29-Feb-24	29-Jul-24	323
Phase 1A (I-64 Bridge Over Granby Existing Bridge Rehabilitation [W B])		101	29-Feb-24	29-Jul-24	323
ABUTMENT A		8	29-Feb-24	11-Mar-24	414
CN.B-630.1000	B-630 - Abut A - Excavate for Deck Extension Retrofit/Approach Slab (I-64 WB Bridge Over Granby)	1	29-Feb-24	29-Feb-24	82
CN.B-630.1010	B-630 - Abut A - F/R/P Retrofit for Deck Extension/Buried Approach Slabs (I-64 WB Bridge Over Granby)	5	01-Mar-24	07-Mar-24	414
CN.B-630.1080	B-630 - Abut A - F/R/P Sleeper Slab/Approach Slab (I-64 WB Bridge Over Granby)	2	08-Mar-24	11-Mar-24	414
ABUTMENT B		9	01-Mar-24	13-Mar-24	414
CN.B-630.1020	B-630 - Abut B - Excavate for Deck Extension Retrofit/Approach Slab (I-64 WB Bridge Over Granby)	1	01-Mar-24	01-Mar-24	82
CN.B-630.1040	B-630 - Abut B - F/R/P Retrofit for Deck Extension/Buried Approach Slabs (I-64 WB Bridge Over Granby)	5	04-Mar-24	08-Mar-24	415
CN.B-630.1090	B-630 - Abut B - F/R/P Sleeper Slab/Approach Slab (I-64 WB Bridge Over Granby)	2	12-Mar-24	13-Mar-24	414
SPAN 1		20	01-Mar-24	28-Mar-24	323
CN.B-630.1030	B-630 - Span 1 - Setup Temp Jacking Support System/Jack Superstructure/Replace Bearings (I-64 WB Bridge Over Granby)	20	01-Mar-24	28-Mar-24	323
SPAN 2		20	01-Apr-24	30-Apr-24	323
CN.B-630.1130	B-630 - Span 2 - Setup Temp Jacking Support System/Jack Superstructure/Replace Bearings (I-64 WB Bridge Over Granby)	20	01-Apr-24	30-Apr-24	323
SPAN 3		20	01-May-24	30-May-24	323
CN.B-630.1140	B-630 - Span 3 - Setup Temp Jacking Support System/Jack Superstructure/Replace Bearings (I-64 WB Bridge Over Granby)	20	01-May-24	30-May-24	323
SPAN 4		20	31-May-24	27-Jun-24	323
CN.B-630.1230	B-630 - Span 4 - Setup Temp Jacking Support System/Jack Superstructure/Replace Bearings (I-64 WB Bridge Over Granby)	20	31-May-24	27-Jun-24	323
Final Work'		99	04-Mar-24	29-Jul-24	323
CN.B-630.1050	B-630 - Scarification/Hydrodemolition of Bridge Deck (I-64 WB Bridge Over Granby)	3	04-Mar-24	06-Mar-24	82
CN.B-630.1060	B-630 - Perform Deck Repairs (I-64 WB Bridge Over Granby)	4	07-Mar-24	12-Mar-24	82
CN.B-630.1070	B-630 - Remove Deck Concrete for Deck Joint Elimination/Place Closure Concrete (I-64 WB Bridge Over Granby)	4	07-Mar-24	12-Mar-24	82
CN.B-630.1100	B-630 - Setup Bidwell/Place Latex Concrete Bridge Deck Overlay (I-64 W B Bridge Over Granby)	3	13-Mar-24	15-Mar-24	82
CN.B-630.1110	B-630 - Cure Latex Concrete (I-64 WB Bridge Over Granby)	5	15-Mar-24	20-Mar-24	126
CN.B-630.1120	B-630 - Perform Mechanical Deck Texturing (I-64 WB Bridge Over Granby)	1	21-Mar-24	21-Mar-24	82



Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
CN.B-630.1380	B-630 - Perform Substructure Repairs (I-64 WB Bridge Over Granby)	20	28-Jun-24	29-Jul-24	323
CN.B-630.1430	B-630 - Phase 1 - Finish Widening Const & Rehab - (I-64 WB Bridge Over Granby) - [FM]	0		29-Jul-24	323
Phase 1B (I-64 Bridge Over Granby Existing Bridge Rehabilitation [WB])		16	20-May-24	11-Jun-24	49
ABUTMENT A		8	20-May-24	30-May-24	55
CN.B-630.1150	B-630 - Abut A - Excavate for Deck Extension Retrofit/Approach Slab (I-64 WB Bridge Over Granby)	1	20-May-24	20-May-24	49
CN.B-630.1160	B-630 - Abut A - F/R/P Retrofit for Deck Extension/Buried Approach Slabs (I-64 WB Bridge Over Granby)	5	21-May-24	28-May-24	55
CN.B-630.1220	B-630 - Abut A - F/R/P Sleeper Slab/Approach Slab (I-64 WB Bridge Over Granby)	2	29-May-24	30-May-24	55
ABUTMENT B		9	21-May-24	03-Jun-24	55
CN.B-630.1170	B-630 - Abut B - Excavate for Deck Extension Retrofit/Approach Slab (I-64 WB Bridge Over Granby)	1	21-May-24	21-May-24	49
CN.B-630.1180	B-630 - Abut B - F/R/P Retrofit for Deck Extension/Buried Approach Slabs (I-64 WB Bridge Over Granby)	5	22-May-24	29-May-24	56
CN.B-630.1240	B-630 - Abut B - F/R/P Sleeper Slab/Approach Slab (I-64 WB Bridge Over Granby)	2	31-May-24	03-Jun-24	55
Final Work'		14	22-May-24	11-Jun-24	49
CN.B-630.1190	B-630 - Scarification/Hydrodemolition of Bridge Deck (I-64 WB Bridge Over Granby)	3	22-May-24	24-May-24	49
CN.B-630.1200	B-630 - Perform Deck Repairs (I-64 WB Bridge Over Granby)	4	28-May-24	31-May-24	49
CN.B-630.1210	B-630 - Remove Deck Concrete for Deck Joint Elimination/Place Closure Concrete (I-64 WB Bridge Over Granby)	4	28-May-24	31-May-24	49
CN.B-630.1250	B-630 - Setup Bidwell/Place Latex Concrete Bridge Deck Overlay (I-64 WB Bridge Over Granby)	3	03-Jun-24	05-Jun-24	49
CN.B-630.1260	B-630 - Cure Latex Concrete (I-64 WB Bridge Over Granby)	5	05-Jun-24	10-Jun-24	72
CN.B-630.1270	B-630 - Perform Mechanical Deck Texturing (I-64 WB Bridge Over Granby)	1	11-Jun-24	11-Jun-24	49
CN.B-630.1280	B-630 - Phase 2 - Finish Rehab Const - (I-64 WB Bridge Over Granby) - [FM]	0		11-Jun-24	49
Phase 2 (I-64 Bridge Over Granby Existing Bridge Rehabilitation [WB])		16	18-Jun-24	11-Jul-24	155
ABUTMENT A		8	18-Jun-24	27-Jun-24	161
CN.B-630.1290	B-630 - Abut A - Excavate for Deck Extension Retrofit/Approach Slab (I-64 WB Bridge Over Granby)	1	18-Jun-24	18-Jun-24	155
CN.B-630.1300	B-630 - Abut A - F/R/P Retrofit for Deck Extension/Buried Approach Slabs (I-64 WB Bridge Over Granby)	5	19-Jun-24	25-Jun-24	161
CN.B-630.1360	B-630 - Abut A - F/R/P Sleeper Slab/Approach Slab (I-64 WB Bridge Over Granby)	2	26-Jun-24	27-Jun-24	161
ABUTMENT B		9	19-Jun-24	01-Jul-24	161
CN.B-630.1310	B-630 - Abut B - Excavate for Deck Extension Retrofit/Approach Slab (I-64 WB Bridge Over Granby)	1	19-Jun-24	19-Jun-24	155
CN.B-630.1320	B-630 - Abut B - F/R/P Retrofit for Deck Extension/Buried Approach Slabs (I-64 WB Bridge Over Granby)	5	20-Jun-24	26-Jun-24	162
CN.B-630.1370	B-630 - Abut B - F/R/P Sleeper Slab/Approach Slab (I-64 WB Bridge Over Granby)	2	28-Jun-24	01-Jul-24	161
Final Work'		14	20-Jun-24	11-Jul-24	155
CN.B-630.1330	B-630 - Scarification/Hydrodemolition of Bridge Deck (I-64 WB Bridge Over Granby)	3	20-Jun-24	24-Jun-24	155
CN.B-630.1340	B-630 - Perform Deck Repairs (I-64 WB Bridge Over Granby)	4	25-Jun-24	28-Jun-24	155
CN.B-630.1350	B-630 - Remove Deck Concrete for Deck Joint Elimination/Place Closure Concrete (I-64 WB Bridge Over Granby)	4	25-Jun-24	28-Jun-24	155
CN.B-630.1390	B-630 - Setup Bidwell/Place Latex Concrete Bridge Deck Overlay (I-64 WB Bridge Over Granby)	3	01-Jul-24	05-Jul-24	155
CN.B-630.1400	B-630 - Cure Latex Concrete (I-64 WB Bridge Over Granby)	5	05-Jul-24	10-Jul-24	237
CN.B-630.1410	B-630 - Perform Mechanical Deck Texturing (I-64 WB Bridge Over Granby)	1	11-Jul-24	11-Jul-24	155
CN.B-630.1420	B-630 - Phase 2 - Finish Rehab Const - (I-64 WB Bridge Over Granby) - [FM]	0		11-Jul-24	155
B-629 - I-64 Bridge Over E. Little Creek [WB]		128	09-Jan-24	17-Jul-24	331
Phase 1A (I-64 Bridge Over E. Little Creek Existing Bridge Rehabilitation [WB])		101	09-Jan-24	06-Jun-24	358
ABUTMENT A		8	09-Jan-24	18-Jan-24	449
CN.B-629.1000	B-629 - Abut A - Excavate for Deck Extension Retrofit/Approach Slab (I-64 WB Bridge Over E. Little Creek)	1	09-Jan-24	09-Jan-24	118
CN.B-629.1010	B-629 - Abut A - F/R/P Retrofit for Deck Extension/Buried Approach Slabs (I-64 WB Bridge Over E. Little Creek)	5	10-Jan-24	16-Jan-24	449
CN.B-629.1080	B-629 - Abut A - F/R/P Sleeper Slab/Approach Slab (I-64 WB Bridge Over E. Little Creek)	2	17-Jan-24	18-Jan-24	449
ABUTMENT B		9	10-Jan-24	23-Jan-24	449
CN.B-629.1020	B-629 - Abut B - Excavate for Deck Extension Retrofit/Approach Slab (I-64 WB Bridge Over E. Little Creek)	1	10-Jan-24	10-Jan-24	118
CN.B-629.1040	B-629 - Abut B - F/R/P Retrofit for Deck Extension/Buried Approach Slabs (I-64 WB Bridge Over E. Little Creek)	5	11-Jan-24	17-Jan-24	450
CN.B-629.1090	B-629 - Abut B - F/R/P Sleeper Slab/Approach Slab (I-64 WB Bridge Over E. Little Creek)	2	22-Jan-24	23-Jan-24	449
SPAN 1		20	10-Jan-24	07-Feb-24	178
CN.B-629.1030	B-629 - Span 1 - Setup Temp Jacking Support System/Jack Superstructure/Replace Bearings (I-64 WB Bridge Over E. Little	20	10-Jan-24	07-Feb-24	178
SPAN 2		20	08-Feb-24	07-Mar-24	178
CN.B-629.1130	B-629 - Span 2 - Setup Temp Jacking Support System/Jack Superstructure/Replace Bearings (I-64 WB Bridge Over E. Little	20	08-Feb-24	07-Mar-24	178
SPAN 3		20	08-Mar-24	05-Apr-24	178
CN.B-629.1140	B-629 - Span 3 - Setup Temp Jacking Support System/Jack Superstructure/Replace Bearings (I-64 WB Bridge Over E. Little	20	08-Mar-24	05-Apr-24	178
SPAN 4		20	09-Apr-24	07-May-24	178
CN.B-629.1150	B-629 - Span 4 - Setup Temp Jacking Support System/Jack Superstructure/Replace Bearings (I-64 WB Bridge Over E. Little	20	09-Apr-24	07-May-24	178
Final Work'		99	11-Jan-24	06-Jun-24	358
CN.B-629.1050	B-629 - Scarification/Hydrodemolition of Bridge Deck (I-64 WB Bridge Over E. Little Creek)	3	11-Jan-24	15-Jan-24	118



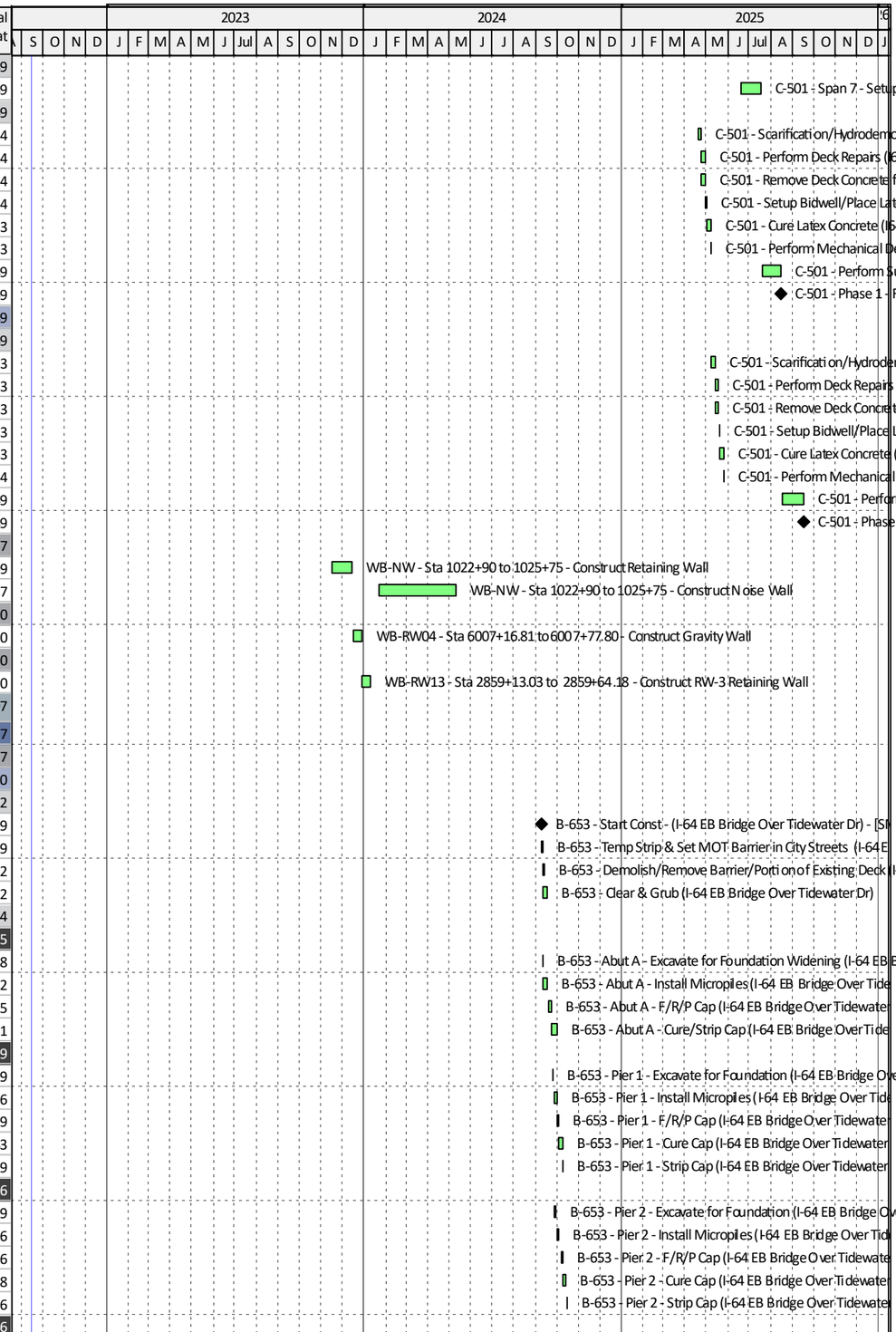
Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
CN.B-629.1060	B-629 - Perform Deck Repairs (I-64 WB Bridge Over E. Little Creek)	4	16-Jan-24	22-Jan-24	118
CN.B-629.1070	B-629 - Remove Deck Concrete for Deck Joint Elimination/Place Closure Concrete (I-64 WB Bridge Over E. Little Creek)	4	16-Jan-24	22-Jan-24	118
CN.B-629.1100	B-629 - Setup Bidwell/Place Latex Concrete Bridge Deck Overlay (I-64 WB Bridge Over E. Little Creek)	2	23-Jan-24	24-Jan-24	118
CN.B-629.1110	B-629 - Cure Latex Concrete (I-64 WB Bridge Over E. Little Creek)	5	24-Jan-24	29-Jan-24	177
CN.B-629.1120	B-629 - Perform Mechanical Deck Texturing (I-64 WB Bridge Over E. Little Creek)	1	30-Jan-24	30-Jan-24	118
CN.B-629.1160	B-629 - Perform Substructure Repairs (I-64 WB Bridge Over E. Little Creek)	20	08-May-24	06-Jun-24	358
CN.B-629.1280	B-629 - Phase 1 - Finish Rehab Const - (I-64 WB Bridge Over E. Little Creek) - [FM]	0		06-Jun-24	358
Phase 1B (I-64 Bridge Over E. Little Creek Existing Bridge Rehabilitation [WB])		15	20-May-24	10-Jun-24	50
ABUTMENT A		8	20-May-24	30-May-24	55
CN.B-629.1170	B-629 - Abut A - Excavate for Deck Extension Retrofit/Approach Slab (I-64 WB Bridge Over E. Little Creek)	1	20-May-24	20-May-24	50
CN.B-629.1180	B-629 - Abut A - F/R/P Retrofit for Deck Extension/Buried Approach Slabs (I-64 WB Bridge Over E. Little Creek)	5	21-May-24	28-May-24	55
CN.B-629.1240	B-629 - Abut A - F/R/P Sleeper Slab/Approach Slab (I-64 WB Bridge Over E. Little Creek)	2	29-May-24	30-May-24	55
ABUTMENT B		9	21-May-24	03-Jun-24	55
CN.B-629.1190	B-629 - Abut B - Excavate for Deck Extension Retrofit/Approach Slab (I-64 WB Bridge Over E. Little Creek)	1	21-May-24	21-May-24	50
CN.B-629.1200	B-629 - Abut B - F/R/P Retrofit for Deck Extension/Buried Approach Slabs (I-64 WB Bridge Over E. Little Creek)	5	22-May-24	29-May-24	56
CN.B-629.1250	B-629 - Abut B - F/R/P Sleeper Slab/Approach Slab (I-64 WB Bridge Over E. Little Creek)	2	31-May-24	03-Jun-24	55
Final Work'		13	22-May-24	10-Jun-24	50
CN.B-629.1210	B-629 - Scarification/Hydrodemolition of Bridge Deck (I-64 WB Bridge Over E. Little Creek)	3	22-May-24	24-May-24	50
CN.B-629.1220	B-629 - Perform Deck Repairs (I-64 WB Bridge Over E. Little Creek)	4	28-May-24	31-May-24	50
CN.B-629.1230	B-629 - Remove Deck Concrete for Deck Joint Elimination/Place Closure Concrete (I-64 WB Bridge Over E. Little Creek)	4	28-May-24	31-May-24	50
CN.B-629.1260	B-629 - Setup Bidwell/Place Latex Concrete Bridge Deck Overlay (I-64 WB Bridge Over E. Little Creek)	2	03-Jun-24	04-Jun-24	50
CN.B-629.1270	B-629 - Cure Latex Concrete (I-64 WB Bridge Over E. Little Creek)	5	04-Jun-24	09-Jun-24	73
CN.B-629.1290	B-629 - Perform Mechanical Deck Texturing (I-64 WB Bridge Over E. Little Creek)	1	10-Jun-24	10-Jun-24	50
CN.B-629.1300	B-629 - Phase 1B - Finish Rehab Const - (I-64 WB Bridge Over E. Little Creek) - [FM]	0		10-Jun-24	50
Phase 2 (I-64 Bridge Over E. Little Creek Existing Bridge Rehabilitation [WB])		20	18-Jun-24	17-Jul-24	151
ABUTMENT A		8	18-Jun-24	27-Jun-24	161
CN.B-629.1310	B-629 - Abut A - Excavate for Deck Extension Retrofit/Approach Slab (I-64 WB Bridge Over E. Little Creek)	1	18-Jun-24	18-Jun-24	156
CN.B-629.1330	B-629 - Abut A - F/R/P Retrofit for Deck Extension/Buried Approach Slabs (I-64 WB Bridge Over E. Little Creek)	5	19-Jun-24	25-Jun-24	161
CN.B-629.1390	B-629 - Abut A - F/R/P Sleeper Slab/Approach Slab (I-64 WB Bridge Over E. Little Creek)	2	26-Jun-24	27-Jun-24	161
ABUTMENT B		9	19-Jun-24	01-Jul-24	161
CN.B-629.1340	B-629 - Abut B - Excavate for Deck Extension Retrofit/Approach Slab (I-64 WB Bridge Over E. Little Creek)	1	19-Jun-24	19-Jun-24	156
CN.B-629.1350	B-629 - Abut B - F/R/P Retrofit for Deck Extension/Buried Approach Slabs (I-64 WB Bridge Over E. Little Creek)	5	20-Jun-24	26-Jun-24	162
CN.B-629.1400	B-629 - Abut B - F/R/P Sleeper Slab/Approach Slab (I-64 WB Bridge Over E. Little Creek)	2	28-Jun-24	01-Jul-24	161
Final Work'		20	18-Jun-24	17-Jul-24	151
CN.B-629.1360	B-629 - Scarification/Hydrodemolition of Bridge Deck (I-64 WB Bridge Over E. Little Creek)	3	20-Jun-24	24-Jun-24	156
CN.B-629.1370	B-629 - Perform Deck Repairs (I-64 WB Bridge Over E. Little Creek)	4	25-Jun-24	28-Jun-24	156
CN.B-629.1380	B-629 - Remove Deck Concrete for Deck Joint Elimination/Place Closure Concrete (I-64 WB Bridge Over E. Little Creek)	4	25-Jun-24	28-Jun-24	156
CN.B-629.1410	B-629 - Setup Bidwell/Place Latex Concrete Bridge Deck Overlay (I-64 WB Bridge Over E. Little Creek)	2	01-Jul-24	02-Jul-24	156
CN.B-629.1420	B-629 - Cure Latex Concrete (I-64 WB Bridge Over E. Little Creek)	5	02-Jul-24	07-Jul-24	240
CN.B-629.1430	B-629 - Perform Mechanical Deck Texturing (I-64 WB Bridge Over E. Little Creek)	1	08-Jul-24	08-Jul-24	158
CN.B-629.1320	B-629 - Perform Substructure Repairs (I-64 WB Bridge Over E. Little Creek)	20	18-Jun-24	17-Jul-24	151
CN.B-629.1440	B-629 - Phase 2 - Finish Rehab Const - (I-64 WB Bridge Over E. Little Creek) - [FM]	0		17-Jul-24	151
C-501 - I64 HOV Over I564 & E. Little Crk Bridge [WB]		180	16-Dec-24	16-Sep-25	49
Phase 2A (I64 HOV Over I564 & E. Little Crk Bridge Rehabilitation)		160	16-Dec-24	15-Aug-25	69
SPAN 1		20	16-Dec-24	21-Jan-25	49
CN.C-501.1000	C-501 - Span 1 - Setup Temp Jacking Support Sys/Jack Superstr/Replace Bearings (I64 HOV Over I564 & E. Little Crk Bridge	20	16-Dec-24	21-Jan-25	49
SPAN 2		20	22-Jan-25	19-Feb-25	49
CN.C-501.1010	C-501 - Span 2 - Setup Temp Jacking Support Sys/Jack Superstr/Replace Bearings (I64 HOV Over I564 & E. Little Crk Bridge	20	22-Jan-25	19-Feb-25	49
SPAN 3		20	20-Feb-25	20-Mar-25	49
CN.C-501.1020	C-501 - Span 3 - Setup Temp Jacking Support Sys/Jack Superstr/Replace Bearings (I64 HOV Over I564 & E. Little Crk Bridge	20	20-Feb-25	20-Mar-25	49
SPAN 4		20	21-Mar-25	18-Apr-25	49
CN.C-501.1030	C-501 - Span 4 - Setup Temp Jacking Support Sys/Jack Superstr/Replace Bearings (I64 HOV Over I564 & E. Little Crk Bridge	20	21-Mar-25	18-Apr-25	49
SPAN 5		20	21-Apr-25	19-May-25	49
CN.C-501.1050	C-501 - Span 5 - Setup Temp Jacking Support Sys/Jack Superstr/Replace Bearings (I64 HOV Over I564 & E. Little Crk Bridge	20	21-Apr-25	19-May-25	49
SPAN 6		20	20-May-25	18-Jun-25	49
CN.C-501.1150	C-501 - Span 6 - Setup Temp Jacking Support Sys/Jack Superstr/Replace Bearings (I64 HOV Over I564 & E. Little Crk Bridge	20	20-May-25	18-Jun-25	49



Start: 15-Sep-22
End: 15-Dec-25
Data: 15-Sep-22
Run: 16-Aug-22

Critical Remaining Work
Remaining Work
Actual Work
Changed Work
Remaining Level of Effort
Actual Level of Effort
Delay/Impact
Adverse Weather
Additional/Extra Work

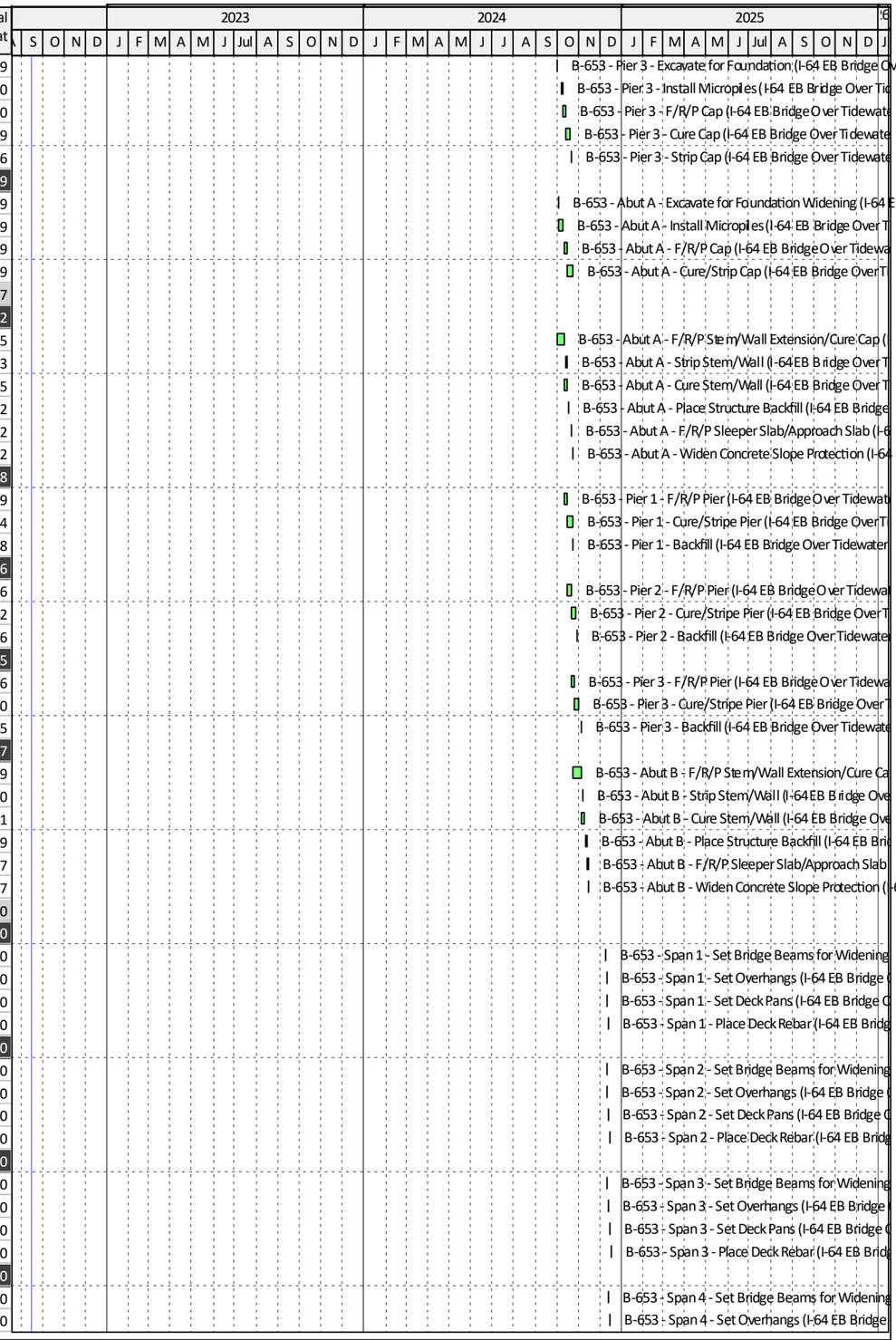
Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
SPAN 7		20	19-Jun-25	17-Jul-25	49
CN.C-501.1180	C-501 - Span 7 - Setup Temp Jacking Support Sys/Jack Superstr/Replace Bearings (I64 HOV Over I564 & E. Little Crk Bridge	20	19-Jun-25	17-Jul-25	49
Final Work'		80	21-Apr-25	15-Aug-25	69
CN.C-501.1040	C-501 - Scarificati on/Hydrodemolition of Bridge Deck (I64 HOV Over I564 & E. Little Crk Bridge)	3	21-Apr-25	23-Apr-25	124
CN.C-501.1060	C-501 - Perform Deck Repairs (I64 HOV Over I564 & E. Little Crk Bridge)	4	24-Apr-25	30-Apr-25	124
CN.C-501.1070	C-501 - Remove Deck Concrete for Deck Joint Elimination/Place Closure Concrete (I64 HOV Over I564 & E. Little Crk Bridge	4	24-Apr-25	30-Apr-25	124
CN.C-501.1080	C-501 - Setup Bidwell/Place Latex Concrete Bridge Deck Overlay (I64 HOV Over I564 & E. Little Crk Bridge)	2	01-May-25	02-May-25	124
CN.C-501.1090	C-501 - Cure Latex Concrete (I64 HOV Over I564 & E. Little Crk Bridge)	5	02-May-25	07-May-25	183
CN.C-501.1100	C-501 - Perform Mechanical DeckTexturing (I64 HOV Over I564 & E. Little Crk Bridge)	1	08-May-25	08-May-25	123
CN.C-501.1190	C-501 - Perform Substructure Repairs (I64 HOV Over I564 & E. Little Crk Bridge)	20	21-Jul-25	15-Aug-25	49
CN.C-501.1200	C-501 - Phase 1 - Finish Rehab Const - (I64 HOV Over I564 & E. Little Crk Bridge) - [FM]	0		15-Aug-25	69
Phase 2B (I64 HOV Over I564 & E. Little Crk Bridge Rehabilitation)		87	09-May-25	16-Sep-25	49
Final Work'		87	09-May-25	16-Sep-25	49
CN.C-501.1110	C-501 - Scarificati on/Hydrodemolition of Bridge Deck (I64 HOV Over I564 & E. Little Crk Bridge)	3	09-May-25	13-May-25	123
CN.C-501.1120	C-501 - Perform Deck Repairs (I64 HOV Over I564 & E. Little Crk Bridge)	4	14-May-25	19-May-25	123
CN.C-501.1130	C-501 - Remove Deck Concrete for Deck Joint Elimination/Place Closure Concrete (I64 HOV Over I564 & E. Little Crk Bridge	4	14-May-25	19-May-25	123
CN.C-501.1140	C-501 - Setup Bidwell/Place Latex Concrete Bridge Deck Overlay (I64 HOV Over I564 & E. Little Crk Bridge)	2	20-May-25	21-May-25	123
CN.C-501.1160	C-501 - Cure Latex Concrete (I64 HOV Over I564 & E. Little Crk Bridge)	5	21-May-25	26-May-25	183
CN.C-501.1170	C-501 - Perform Mechanical DeckTexturing (I64 HOV Over I564 & E. Little Crk Bridge)	1	27-May-25	27-May-25	124
CN.C-501.1210	C-501 - Perform Substructure Repairs (I64 HOV Over I564 & E. Little Crk Bridge)	20	18-Aug-25	16-Sep-25	49
CN.C-501.1220	C-501 - Phase 2 - Finish Rehab Const - (I64 HOV Over I564 & E. Little Crk Bridge) - [FM]	0		16-Sep-25	49
WB-NW Noise Wall Sta 2847+85 to 202+09 (2,220 LF)		117	16-Nov-23	10-May-24	387
CN.RW.1150	WB-NW - Sta 1022+90 to 1025+75 - Construct Retaining Wall	20	16-Nov-23	15-Dec-23	409
CN.RW.1140	WB-NW - Sta 1022+90 to 1025+75 - Construct Noise Wall	75	23-Jan-24	10-May-24	387
WB-RW04 - Gravity Retaining Wall Sta 6007+16.81 to 6007+77.80 (61LF)		7	18-Dec-23	28-Dec-23	470
CN.RW.1160	WB-RW04 - Sta 6007+16.81 to 6007+77.80 - Construct Gravity Wall	7	18-Dec-23	28-Dec-23	470
WB-RW13 - RW-3 Retaining Wall Sta 2859+13.03 to 2859+64.18 (51 LF)		7	29-Dec-23	09-Jan-24	470
CN.RW.1170	WB-RW13 - Sta 2859+13.03 to 2859+64.18 - Construct RW-3 Retaining Wall	7	29-Dec-23	09-Jan-24	470
Segment C		267	30-May-24	07-Jul-25	97
Segment C - EB - STA 1026+87 to 1090+90		237	30-May-24	21-May-25	127
B-653 - EB I-64 Bridge over Tidewater Dr		169	09-Sep-24	21-May-25	127
Phase 1A (Bridge Widening [EB])		86	09-Sep-24	20-Jan-25	0
Initial Work		7	09-Sep-24	17-Sep-24	22
CN.B-653.1010	B-653 - Start Const - (I-64 EB Bridge Over Tidewater Dr) - [SM]	0	09-Sep-24		19
CN.B-653.1000	B-653 - Temp Strip & Set MOT Barrier in City Streets (I-64 EB Bridge Over Tidewater Dr)	2	09-Sep-24	10-Sep-24	19
CN.B-653.1030	B-653 - Demolish/Remove Barrier/Portion of Existing Deck (I-64 EB Bridge Over Tidewater Dr)	2	11-Sep-24	12-Sep-24	22
CN.B-653.1050	B-653 - Clear & Grub (I-64 EB Bridge Over Tidewater Dr)	5	11-Sep-24	17-Sep-24	22
Foundations		31	11-Sep-24	23-Oct-24	44
ABUTMENT A		15	11-Sep-24	01-Oct-24	35
CN.B-653.1020	B-653 - Abut A - Excavate for Foundation Widening (I-64 EB Bridge Over Tidewater Dr)	1	11-Sep-24	11-Sep-24	28
CN.B-653.1060	B-653 - Abut A - Install Micropiles (I-64 EB Bridge Over Tidewater Dr)	5	12-Sep-24	18-Sep-24	32
CN.B-653.1150	B-653 - Abut A - F/R/P Cap (I-64 EB Bridge Over Tidewater Dr)	4	19-Sep-24	24-Sep-24	35
CN.B-653.1170	B-653 - Abut A - Cure/Strip Cap (I-64 EB Bridge Over Tidewater Dr)	7	24-Sep-24	01-Oct-24	51
PIER 1		12	25-Sep-24	10-Oct-24	29
CN.B-653.1180	B-653 - Pier 1 - Excavate for Foundation (I-64 EB Bridge Over Tidewater Dr)	2	25-Sep-24	26-Sep-24	19
CN.B-653.1200	B-653 - Pier 1 - Install Micropiles (I-64 EB Bridge Over Tidewater Dr)	3	27-Sep-24	01-Oct-24	26
CN.B-653.1240	B-653 - Pier 1 - F/R/P Cap (I-64 EB Bridge Over Tidewater Dr)	3	02-Oct-24	04-Oct-24	29
CN.B-653.1300	B-653 - Pier 1 - Cure Cap (I-64 EB Bridge Over Tidewater Dr)	5	04-Oct-24	09-Oct-24	43
CN.B-653.1340	B-653 - Pier 1 - Strip Cap (I-64 EB Bridge Over Tidewater Dr)	1	10-Oct-24	10-Oct-24	29
PIER 2		13	27-Sep-24	15-Oct-24	26
CN.B-653.1210	B-653 - Pier 2 - Excavate for Foundation (I-64 EB Bridge Over Tidewater Dr)	2	27-Sep-24	30-Sep-24	19
CN.B-653.1260	B-653 - Pier 2 - Install Micropiles (I-64 EB Bridge Over Tidewater Dr)	3	02-Oct-24	04-Oct-24	26
CN.B-653.1310	B-653 - Pier 2 - F/R/P Cap (I-64 EB Bridge Over Tidewater Dr)	3	07-Oct-24	09-Oct-24	26
CN.B-653.1330	B-653 - Pier 2 - Cure Cap (I-64 EB Bridge Over Tidewater Dr)	5	09-Oct-24	14-Oct-24	38
CN.B-653.1430	B-653 - Pier 2 - Strip Cap (I-64 EB Bridge Over Tidewater Dr)	1	15-Oct-24	15-Oct-24	26
PIER 3		15	01-Oct-24	21-Oct-24	46



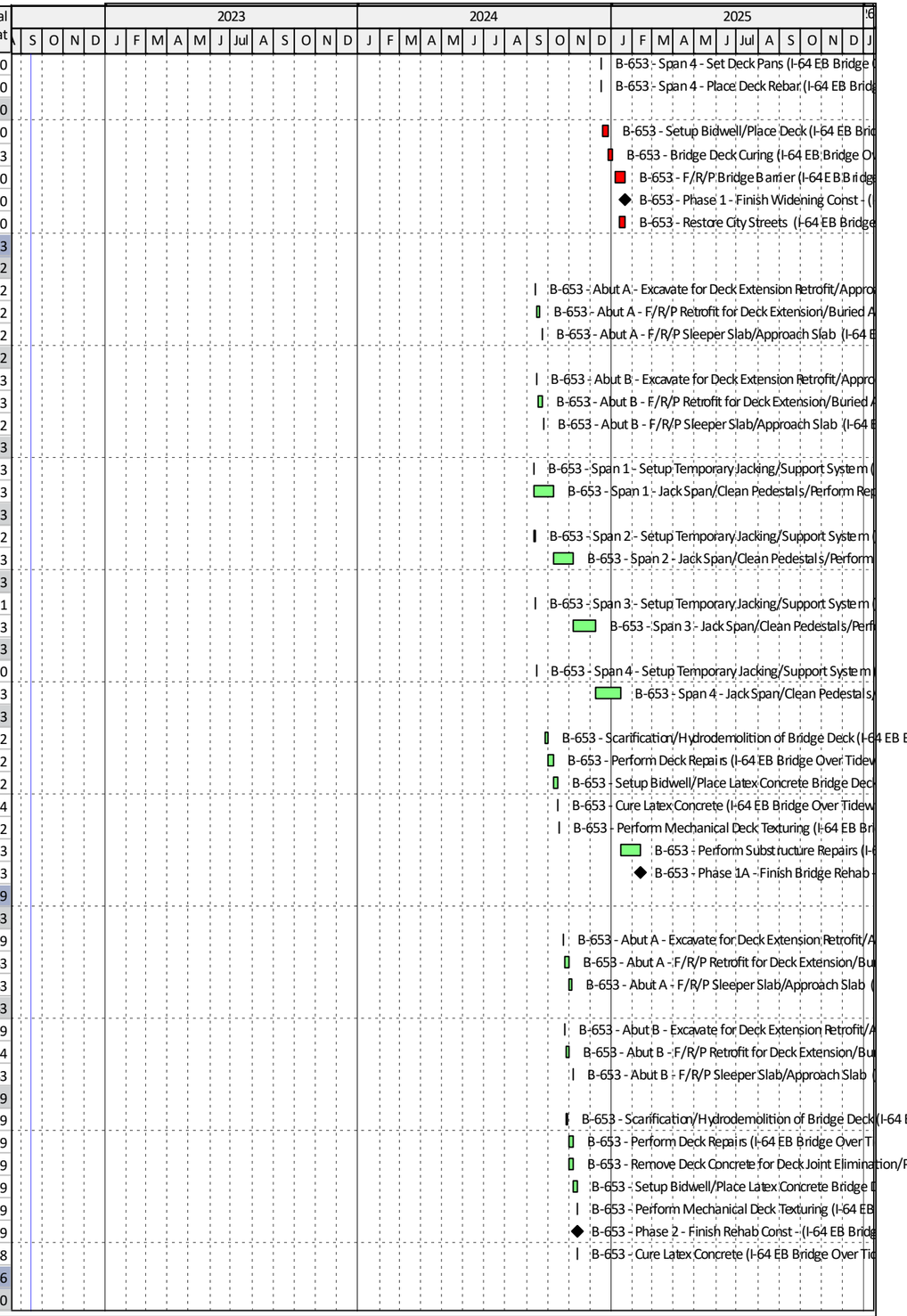
Start: 15-Sep-22
End: 15-Dec-25
Data: 15-Sep-22
Run: 16-Aug-22

Critical Remaining Work
Remaining Work
Actual Work
Changed Work
Remaining Level of Effort
Actual Level of Effort
Delay/Impact
Adverse Weather
Additional/Extra Work

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
CN.B-653.123C	B-653 - Pier 3 - Excavate for Foundation (I-64 EB Bridge Over Tidewater Dr)	2	01-Oct-24	02-Oct-24	19
CN.B-653.132C	B-653 - Pier 3 - Install Micropiles (I-64 EB Bridge Over Tidewater Dr)	3	07-Oct-24	09-Oct-24	50
CN.B-653.135C	B-653 - Pier 3 - F/R/P Cap (I-64 EB Bridge Over Tidewater Dr)	3	10-Oct-24	14-Oct-24	50
CN.B-653.142C	B-653 - Pier 3 - Cure Cap (I-64 EB Bridge Over Tidewater Dr)	5	14-Oct-24	19-Oct-24	79
CN.B-653.150C	B-653 - Pier 3 - Strip Cap (I-64 EB Bridge Over Tidewater Dr)	1	21-Oct-24	21-Oct-24	46
ABUTMENT B		15	03-Oct-24	23-Oct-24	19
CN.B-653.128C	B-653 - Abut A - Excavate for Foundation Widening (I-64 EB Bridge Over Tidewater Dr)	1	03-Oct-24	03-Oct-24	19
CN.B-653.129C	B-653 - Abut A - Install Micropiles (I-64 EB Bridge Over Tidewater Dr)	5	04-Oct-24	10-Oct-24	19
CN.B-653.139C	B-653 - Abut A - F/R/P Cap (I-64 EB Bridge Over Tidewater Dr)	4	11-Oct-24	16-Oct-24	19
CN.B-653.147C	B-653 - Abut A - Cure/Strip Cap (I-64 EB Bridge Over Tidewater Dr)	7	16-Oct-24	23-Oct-24	29
Substructure		32	02-Oct-24	15-Nov-24	37
ABUTMENT A		16	02-Oct-24	23-Oct-24	52
CN.B-653.125C	B-653 - Abut A - F/R/P Stem/Wall Extension/Cure Cap (I-64 EB Bridge Over Tidewater Dr)	8	02-Oct-24	11-Oct-24	35
CN.B-653.141C	B-653 - Abut A - Strip Stem/Wall (I-64 EB Bridge Over Tidewater Dr)	2	14-Oct-24	15-Oct-24	53
CN.B-653.140C	B-653 - Abut A - Cure Stem/Wall (I-64 EB Bridge Over Tidewater Dr)	5	11-Oct-24	16-Oct-24	55
CN.B-653.148C	B-653 - Abut A - Place Structure Backfill (I-64 EB Bridge Over Tidewater Dr)	2	17-Oct-24	18-Oct-24	52
CN.B-653.149C	B-653 - Abut A - F/R/P Sleeper Slab/Approach Slab (I-64 EB Bridge Over Tidewater Dr)	2	21-Oct-24	22-Oct-24	52
CN.B-653.154C	B-653 - Abut A - Widen Concrete Slope Protection (I-64 EB Bridge Over Tidewater Dr)	1	23-Oct-24	23-Oct-24	52
PIER 1		10	11-Oct-24	24-Oct-24	28
CN.B-653.138C	B-653 - Pier 1 - F/R/P Pier (I-64 EB Bridge Over Tidewater Dr)	4	11-Oct-24	16-Oct-24	29
CN.B-653.146C	B-653 - Pier 1 - Cure/Stripe Pier (I-64 EB Bridge Over Tidewater Dr)	7	16-Oct-24	23-Oct-24	44
CN.B-653.155C	B-653 - Pier 1 - Backfill (I-64 EB Bridge Over Tidewater Dr)	1	24-Oct-24	24-Oct-24	28
PIER 2		10	16-Oct-24	29-Oct-24	26
CN.B-653.145C	B-653 - Pier 2 - F/R/P Pier (I-64 EB Bridge Over Tidewater Dr)	4	16-Oct-24	21-Oct-24	26
CN.B-653.152C	B-653 - Pier 2 - Cure/Stripe Pier (I-64 EB Bridge Over Tidewater Dr)	7	21-Oct-24	28-Oct-24	42
CN.B-653.159C	B-653 - Pier 2 - Backfill (I-64 EB Bridge Over Tidewater Dr)	1	29-Oct-24	29-Oct-24	26
PIER 3		10	22-Oct-24	04-Nov-24	45
CN.B-653.153C	B-653 - Pier 3 - F/R/P Pier (I-64 EB Bridge Over Tidewater Dr)	4	22-Oct-24	25-Oct-24	46
CN.B-653.157C	B-653 - Pier 3 - Cure/Stripe Pier (I-64 EB Bridge Over Tidewater Dr)	7	25-Oct-24	01-Nov-24	80
CN.B-653.164C	B-653 - Pier 3 - Backfill (I-64 EB Bridge Over Tidewater Dr)	1	04-Nov-24	04-Nov-24	45
ABUTMENT B		16	24-Oct-24	15-Nov-24	37
CN.B-653.156C	B-653 - Abut B - F/R/P Stem/Wall Extension/Cure Cap (I-64 EB Bridge Over Tidewater Dr)	8	24-Oct-24	04-Nov-24	19
CN.B-653.168C	B-653 - Abut B - Strip Stem/Wall (I-64 EB Bridge Over Tidewater Dr)	2	06-Nov-24	07-Nov-24	20
CN.B-653.167C	B-653 - Abut B - Cure Stem/Wall (I-64 EB Bridge Over Tidewater Dr)	5	04-Nov-24	09-Nov-24	31
CN.B-653.172C	B-653 - Abut B - Place Structure Backfill (I-64 EB Bridge Over Tidewater Dr)	2	11-Nov-24	12-Nov-24	19
CN.B-653.174C	B-653 - Abut B - F/R/P Sleeper Slab/Approach Slab (I-64 EB Bridge Over Tidewater Dr)	2	13-Nov-24	14-Nov-24	37
CN.B-653.176C	B-653 - Abut B - Widen Concrete Slope Protection (I-64 EB Bridge Over Tidewater Dr)	1	15-Nov-24	15-Nov-24	37
Superstructure		7	10-Dec-24	18-Dec-24	0
SPAN 1		4	10-Dec-24	13-Dec-24	0
CN.B-653.179C	B-653 - Span 1 - Set Bridge Beams for Widening (I-64 EB Bridge Over Tidewater Dr)	1	10-Dec-24	10-Dec-24	0
CN.B-653.181C	B-653 - Span 1 - Set Overhangs (I-64 EB Bridge Over Tidewater Dr)	1	11-Dec-24	11-Dec-24	0
CN.B-653.183C	B-653 - Span 1 - Set Deck Pans (I-64 EB Bridge Over Tidewater Dr)	1	12-Dec-24	12-Dec-24	0
CN.B-653.186C	B-653 - Span 1 - Place Deck Rebar (I-64 EB Bridge Over Tidewater Dr)	1	13-Dec-24	13-Dec-24	0
SPAN 2		4	11-Dec-24	16-Dec-24	0
CN.B-653.182C	B-653 - Span 2 - Set Bridge Beams for Widening (I-64 EB Bridge Over Tidewater Dr)	1	11-Dec-24	11-Dec-24	0
CN.B-653.184C	B-653 - Span 2 - Set Overhangs (I-64 EB Bridge Over Tidewater Dr)	1	12-Dec-24	12-Dec-24	0
CN.B-653.187C	B-653 - Span 2 - Set Deck Pans (I-64 EB Bridge Over Tidewater Dr)	1	13-Dec-24	13-Dec-24	0
CN.B-653.190C	B-653 - Span 2 - Place Deck Rebar (I-64 EB Bridge Over Tidewater Dr)	1	16-Dec-24	16-Dec-24	0
SPAN 3		4	12-Dec-24	17-Dec-24	0
CN.B-653.185C	B-653 - Span 3 - Set Bridge Beams for Widening (I-64 EB Bridge Over Tidewater Dr)	1	12-Dec-24	12-Dec-24	0
CN.B-653.188C	B-653 - Span 3 - Set Overhangs (I-64 EB Bridge Over Tidewater Dr)	1	13-Dec-24	13-Dec-24	0
CN.B-653.191C	B-653 - Span 3 - Set Deck Pans (I-64 EB Bridge Over Tidewater Dr)	1	16-Dec-24	16-Dec-24	0
CN.B-653.193C	B-653 - Span 3 - Place Deck Rebar (I-64 EB Bridge Over Tidewater Dr)	1	17-Dec-24	17-Dec-24	0
SPAN 4		4	13-Dec-24	18-Dec-24	0
CN.B-653.189C	B-653 - Span 4 - Set Bridge Beams for Widening (I-64 EB Bridge Over Tidewater Dr)	1	13-Dec-24	13-Dec-24	0
CN.B-653.192C	B-653 - Span 4 - Set Overhangs (I-64 EB Bridge Over Tidewater Dr)	1	16-Dec-24	16-Dec-24	0



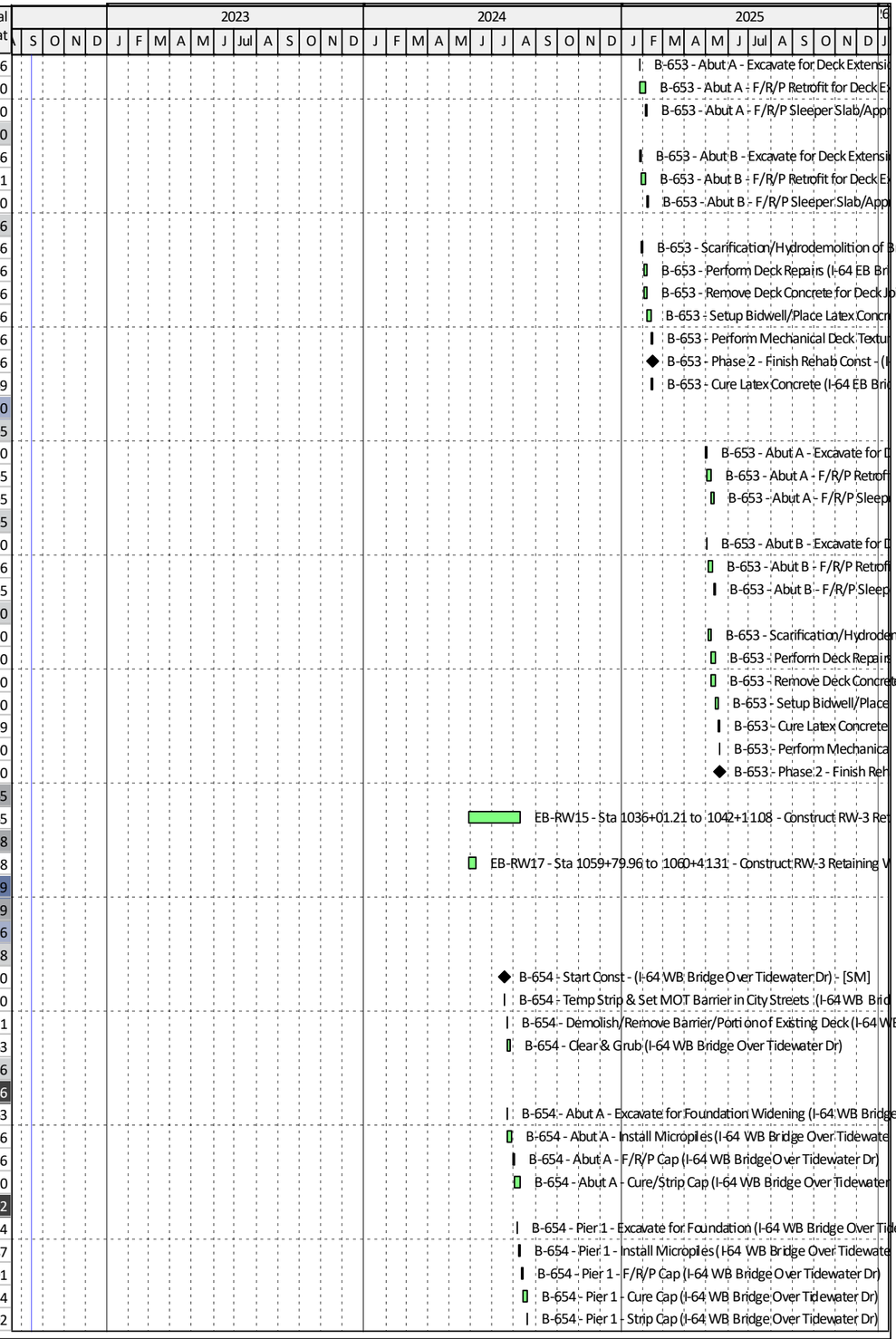
Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
CN.B-653.194C	B-653 - Span 4 - Set Deck Pans (I-64 EB Bridge Over Tidewater Dr)	1	17-Dec-24	17-Dec-24	0
CN.B-653.195C	B-653 - Span 4 - Place Deck Rebar (I-64 EB Bridge Over Tidewater Dr)	1	18-Dec-24	18-Dec-24	0
Final Work		16	19-Dec-24	20-Jan-25	0
CN.B-653.1960	B-653 - Setup Bidwell/Place Deck (I-64 EB Bridge Over Tidewater Dr)	5	19-Dec-24	27-Dec-24	0
CN.B-653.1970	B-653 - Bridge Deck Curing (I-64 EB Bridge Over Tidewater Dr)	7	27-Dec-24	03-Jan-25	3
CN.B-653.1980	B-653 - F/R/P Bridge Barrier (I-64 EB Bridge Over Tidewater Dr)	10	06-Jan-25	20-Jan-25	0
CN.B-653.2010	B-653 - Phase 1 - Finish Widening Const - (I-64 EB Bridge Over Tidewater Dr) - [FM]	0		20-Jan-25	0
CN.B-653.1990	B-653 - Restore City Streets (I-64 EB Bridge Over Tidewater Dr)	5	13-Jan-25	20-Jan-25	0
Phase 1A (Existing Bridge Rehabilitation [EB])		101	11-Sep-24	12-Feb-25	193
ABUTMENT A		8	13-Sep-24	24-Sep-24	22
CN.B-653.1100	B-653 - Abut A - Excavate for Deck Extension Retrofit/Approach Slab (I-64 EB Bridge Over Tidewater Dr)	1	13-Sep-24	13-Sep-24	22
CN.B-653.1120	B-653 - Abut A - F/R/P Retrofit for Deck Extension/Buried Approach Slabs (I-64 EB Bridge Over Tidewater Dr)	5	16-Sep-24	20-Sep-24	22
CN.B-653.1160	B-653 - Abut A - F/R/P Sleeper Slab/Approach Slab (I-64 EB Bridge Over Tidewater Dr)	2	23-Sep-24	24-Sep-24	22
ABUTMENT B		9	16-Sep-24	26-Sep-24	22
CN.B-653.1130	B-653 - Abut B - Excavate for Deck Extension Retrofit/Approach Slab (I-64 EB Bridge Over Tidewater Dr)	1	16-Sep-24	16-Sep-24	23
CN.B-653.1140	B-653 - Abut B - F/R/P Retrofit for Deck Extension/Buried Approach Slabs (I-64 EB Bridge Over Tidewater Dr)	5	17-Sep-24	23-Sep-24	23
CN.B-653.1190	B-653 - Abut B - F/R/P Sleeper Slab/Approach Slab (I-64 EB Bridge Over Tidewater Dr)	2	25-Sep-24	26-Sep-24	22
SPAN 1		21	11-Sep-24	09-Oct-24	193
CN.B-653.1040	B-653 - Span 1 - Setup Temporary Jacking/Support System (I-64 EB Bridge Over Tidewater Dr)	1	11-Sep-24	11-Sep-24	193
CN.B-653.1070	B-653 - Span 1 - Jack Span/Clean Pedestals/Perform Repairs/Replace Bearings (I-64 EB Bridge Over Tidewater Dr)	20	12-Sep-24	09-Oct-24	193
SPAN 2		40	12-Sep-24	07-Nov-24	193
CN.B-653.1080	B-653 - Span 2 - Setup Temporary Jacking/Support System (I-64 EB Bridge Over Tidewater Dr)	1	12-Sep-24	12-Sep-24	212
CN.B-653.1360	B-653 - Span 2 - Jack Span/Clean Pedestals/Perform Repairs/Replace Bearings (I-64 EB Bridge Over Tidewater Dr)	20	10-Oct-24	07-Nov-24	193
SPAN 3		59	13-Sep-24	09-Dec-24	193
CN.B-653.1090	B-653 - Span 3 - Setup Temporary Jacking/Support System (I-64 EB Bridge Over Tidewater Dr)	1	13-Sep-24	13-Sep-24	231
CN.B-653.1700	B-653 - Span 3 - Jack Span/Clean Pedestals/Perform Repairs/Replace Bearings (I-64 EB Bridge Over Tidewater Dr)	20	08-Nov-24	09-Dec-24	193
SPAN 4		78	16-Sep-24	14-Jan-25	193
CN.B-653.1110	B-653 - Span 4 - Setup Temporary Jacking/Support System (I-64 EB Bridge Over Tidewater Dr)	1	16-Sep-24	16-Sep-24	250
CN.B-653.1800	B-653 - Span 4 - Jack Span/Clean Pedestals/Perform Repairs/Replace Bearings (I-64 EB Bridge Over Tidewater Dr)	20	10-Dec-24	14-Jan-25	193
Final Work'		89	27-Sep-24	12-Feb-25	193
CN.B-653.1220	B-653 - Scarification/Hydrodemolition of Bridge Deck (I-64 EB Bridge Over Tidewater Dr)	3	27-Sep-24	01-Oct-24	22
CN.B-653.1270	B-653 - Perform Deck Repairs (I-64 EB Bridge Over Tidewater Dr)	6	02-Oct-24	09-Oct-24	22
CN.B-653.1370	B-653 - Setup Bidwell/Place Latex Concrete Bridge Deck Overlay (I-64 EB Bridge Over Tidewater Dr)	4	10-Oct-24	15-Oct-24	22
CN.B-653.1440	B-653 - Cure Latex Concrete (I-64 EB Bridge Over Tidewater Dr)	1	15-Oct-24	16-Oct-24	34
CN.B-653.1510	B-653 - Perform Mechanical Deck Texturing (I-64 EB Bridge Over Tidewater Dr)	1	17-Oct-24	17-Oct-24	22
CN.B-653.2000	B-653 - Perform Substructure Repairs (I-64 EB Bridge Over Tidewater Dr)	20	15-Jan-25	12-Feb-25	193
CN.B-653.2130	B-653 - Phase 1A - Finish Bridge Rehab - (I-64 EB Bridge Over Tidewater Dr) - [FM]	0		12-Feb-25	193
Phase 1B (Existing Bridge Rehabilitation [EB])		14	24-Oct-24	13-Nov-24	39
ABUTMENT A		8	24-Oct-24	04-Nov-24	43
CN.B-653.1580	B-653 - Abut A - Excavate for Deck Extension Retrofit/Approach Slab (I-64 EB Bridge Over Tidewater Dr)	1	24-Oct-24	24-Oct-24	39
CN.B-653.1600	B-653 - Abut A - F/R/P Retrofit for Deck Extension/Buried Approach Slabs (I-64 EB Bridge Over Tidewater Dr)	5	25-Oct-24	31-Oct-24	43
CN.B-653.1690	B-653 - Abut A - F/R/P Sleeper Slab/Approach Slab (I-64 EB Bridge Over Tidewater Dr)	2	01-Nov-24	04-Nov-24	43
ABUTMENT B		9	25-Oct-24	07-Nov-24	43
CN.B-653.1610	B-653 - Abut B - Excavate for Deck Extension Retrofit/Approach Slab (I-64 EB Bridge Over Tidewater Dr)	1	25-Oct-24	25-Oct-24	39
CN.B-653.1620	B-653 - Abut B - F/R/P Retrofit for Deck Extension/Buried Approach Slabs (I-64 EB Bridge Over Tidewater Dr)	5	28-Oct-24	01-Nov-24	44
CN.B-653.1710	B-653 - Abut B - F/R/P Sleeper Slab/Approach Slab (I-64 EB Bridge Over Tidewater Dr)	2	06-Nov-24	07-Nov-24	43
Final Work'		12	28-Oct-24	13-Nov-24	39
CN.B-653.1630	B-653 - Scarification/Hydrodemolition of Bridge Deck (I-64 EB Bridge Over Tidewater Dr)	3	28-Oct-24	30-Oct-24	39
CN.B-653.1650	B-653 - Perform Deck Repairs (I-64 EB Bridge Over Tidewater Dr)	4	31-Oct-24	06-Nov-24	39
CN.B-653.1660	B-653 - Remove Deck Concrete for Deck Joint Elimination/Place Closure Concrete (I-64 EB Bridge Over Tidewater Dr)	4	31-Oct-24	06-Nov-24	39
CN.B-653.1730	B-653 - Setup Bidwell/Place Latex Concrete Bridge Deck Overlay (I-64 EB Bridge Over Tidewater Dr)	4	07-Nov-24	12-Nov-24	39
CN.B-653.1770	B-653 - Perform Mechanical Deck Texturing (I-64 EB Bridge Over Tidewater Dr)	1	13-Nov-24	13-Nov-24	39
CN.B-653.1780	B-653 - Phase 2 - Finish Rehab Const - (I-64 EB Bridge Over Tidewater Dr) - [FM]	0		13-Nov-24	39
CN.B-653.1750	B-653 - Cure Latex Concrete (I-64 EB Bridge Over Tidewater Dr)	1	12-Nov-24	13-Nov-24	68
Phase 2A (Existing Bridge Rehabilitation [EB])		14	27-Jan-25	13-Feb-25	46
ABUTMENT A		8	27-Jan-25	05-Feb-25	50



Start: 15-Sep-22
End: 15-Dec-25
Data: 15-Sep-22
Run: 16-Aug-22

Critical Remaining Work
Remaining Work
Actual Work
Changed Work
Remaining Level of Effort
Actual Level of Effort
Delay/Impact
Adverse Weather
Additional/Extra Work

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
CN.B-653.2020	B-653 - Abut A - Excavate for Deck Extension Retrofit/Approach Slab (I-64 EB Bridge Over Tidewater Dr)	1	27-Jan-25	27-Jan-25	46
CN.B-653.2030	B-653 - Abut A - F/R/P Retrofit for Deck Extension/Buried Approach Slabs (I-64 EB Bridge Over Tidewater Dr)	5	28-Jan-25	03-Feb-25	50
CN.B-653.2090	B-653 - Abut A - F/R/P Sleeper Slab/Approach Slab (I-64 EB Bridge Over Tidewater Dr)	2	04-Feb-25	05-Feb-25	50
ABUTMENT B		9	28-Jan-25	07-Feb-25	50
CN.B-653.2040	B-653 - Abut B - Excavate for Deck Extension Retrofit/Approach Slab (I-64 EB Bridge Over Tidewater Dr)	1	28-Jan-25	28-Jan-25	46
CN.B-653.2050	B-653 - Abut B - F/R/P Retrofit for Deck Extension/Buried Approach Slabs (I-64 EB Bridge Over Tidewater Dr)	5	29-Jan-25	04-Feb-25	51
CN.B-653.2100	B-653 - Abut B - F/R/P Sleeper Slab/Approach Slab (I-64 EB Bridge Over Tidewater Dr)	2	06-Feb-25	07-Feb-25	50
Final Work'		12	29-Jan-25	13-Feb-25	46
CN.B-653.2060	B-653 - Scarification/Hydrodemolition of Bridge Deck (I-64 EB Bridge Over Tidewater Dr)	3	29-Jan-25	31-Jan-25	46
CN.B-653.2070	B-653 - Perform Deck Repairs (I-64 EB Bridge Over Tidewater Dr)	4	03-Feb-25	06-Feb-25	46
CN.B-653.2080	B-653 - Remove Deck Concrete for Deck Joint Elimination/Place Closure Concrete (I-64 EB Bridge Over Tidewater Dr)	4	03-Feb-25	06-Feb-25	46
CN.B-653.2110	B-653 - Setup Bidwell/Place Latex Concrete Bridge Deck Overlay (I-64 E B Bridge Over Tidewater Dr)	4	07-Feb-25	12-Feb-25	46
CN.B-653.2140	B-653 - Perform Mechanical Deck Texturing (I-64 EB Bridge Over Tidewater Dr)	1	13-Feb-25	13-Feb-25	46
CN.B-653.2150	B-653 - Phase 2 - Finish Rehab Const - (I-64 EB Bridge Over Tidewater Dr) - [FM]	0		13-Feb-25	46
CN.B-653.2120	B-653 - Cure Latex Concrete (I-64 EB Bridge Over Tidewater Dr)	1	12-Feb-25	13-Feb-25	69
Phase 2B (Existing Bridge Rehabilitation [EB])		15	01-May-25	21-May-25	100
ABUTMENT A		8	01-May-25	12-May-25	105
CN.B-653.2160	B-653 - Abut A - Excavate for Deck Extension Retrofit/Approach Slab (I-64 EB Bridge Over Tidewater Dr)	1	01-May-25	01-May-25	100
CN.B-653.2170	B-653 - Abut A - F/R/P Retrofit for Deck Extension/Buried Approach Slabs (I-64 EB Bridge Over Tidewater Dr)	5	02-May-25	08-May-25	105
CN.B-653.2230	B-653 - Abut A - F/R/P Sleeper Slab/Approach Slab (I-64 EB Bridge Over Tidewater Dr)	2	09-May-25	12-May-25	105
ABUTMENT B		9	02-May-25	14-May-25	105
CN.B-653.2180	B-653 - Abut B - Excavate for Deck Extension Retrofit/Approach Slab (I-64 EB Bridge Over Tidewater Dr)	1	02-May-25	02-May-25	100
CN.B-653.2190	B-653 - Abut B - F/R/P Retrofit for Deck Extension/Buried Approach Slabs (I-64 EB Bridge Over Tidewater Dr)	5	05-May-25	09-May-25	106
CN.B-653.2240	B-653 - Abut B - F/R/P Sleeper Slab/Approach Slab (I-64 EB Bridge Over Tidewater Dr)	2	13-May-25	14-May-25	105
Final Work'		13	05-May-25	21-May-25	100
CN.B-653.2200	B-653 - Scarification/Hydrodemolition of Bridge Deck (I-64 EB Bridge Over Tidewater Dr)	3	05-May-25	07-May-25	100
CN.B-653.2210	B-653 - Perform Deck Repairs (I-64 EB Bridge Over Tidewater Dr)	4	08-May-25	13-May-25	100
CN.B-653.2220	B-653 - Remove Deck Concrete for Deck Joint Elimination/Place Closure Concrete (I-64 EB Bridge Over Tidewater Dr)	4	08-May-25	13-May-25	100
CN.B-653.2250	B-653 - Setup Bidwell/Place Latex Concrete Bridge Deck Overlay (I-64 E B Bridge Over Tidewater Dr)	4	14-May-25	19-May-25	100
CN.B-653.2260	B-653 - Cure Latex Concrete (I-64 EB Bridge Over Tidewater Dr)	1	19-May-25	20-May-25	149
CN.B-653.2270	B-653 - Perform Mechanical Deck Texturing (I-64 EB Bridge Over Tidewater Dr)	1	21-May-25	21-May-25	100
CN.B-653.2280	B-653 - Phase 2 - Finish Rehab Const - (I-64 EB Bridge Over Tidewater Dr) - [FM]	0		21-May-25	100
EB-RW15 - RW-3 Retaining Walll Sta 1036+01.21 to 1042+11.08 (610 LF)		50	30-May-24	09-Aug-24	65
CN.RW.1100	EB-RW15 - Sta 1036+01.21 to 1042+11.08 - Construct RW-3 Retaining Wall	50	30-May-24	09-Aug-24	65
EB-RW17 - RW-3 Retaining Walll Sta 1059+79.96 to 1060+41.31 (61 LF)		7	30-May-24	07-Jun-24	108
CN.RW.1110	EB-RW17 - Sta 1059+79.96 to 1060+41.31 - Construct RW-3 Retaining Wall	7	30-May-24	07-Jun-24	108
Segment C - WB - STA 309+46 to 3082+06.03		234	18-Jul-24	07-Jul-25	59
B-654 - WB I-64 Bridge over Tidewater Dr		234	18-Jul-24	07-Jul-25	59
Phase 1A (Bridge Widening [WB])		121	18-Jul-24	20-Jan-25	6
Initial Work		7	18-Jul-24	26-Jul-24	118
CN.B-654.1010	B-654 - Start Const - (I-64 WB Bridge Over Tidewater Dr) - [SM]	0	18-Jul-24		10
CN.B-654.1000	B-654 - Temp Strip & Set MOT Barrier in City Streets (I-64 WB Bridge Over Tidewater Dr)	2	18-Jul-24	19-Jul-24	10
CN.B-654.1030	B-654 - Demolish/Remove Barrier/Portion of Existing Deck (I-64 WB Bridge Over Tidewater Dr)	2	22-Jul-24	23-Jul-24	121
CN.B-654.1050	B-654 - Clear & Grub (I-64 WB Bridge Over Tidewater Dr)	5	22-Jul-24	26-Jul-24	63
Foundations		29	22-Jul-24	02-Sep-24	86
ABUTMENT A		15	22-Jul-24	09-Aug-24	86
CN.B-654.1020	B-654 - Abut A - Excavate for Foundation Widening (I-64 WB Bridge Over Tidewater Dr)	1	22-Jul-24	22-Jul-24	63
CN.B-654.1060	B-654 - Abut A - Install Micropiles (I-64 WB Bridge Over Tidewater Dr)	5	23-Jul-24	29-Jul-24	86
CN.B-654.1080	B-654 - Abut A - F/R/P Cap (I-64 WB Bridge Over Tidewater Dr)	4	30-Jul-24	02-Aug-24	86
CN.B-654.1090	B-654 - Abut A - Cure/Strip Cap (I-64 WB Bridge Over Tidewater Dr)	7	02-Aug-24	09-Aug-24	130
PIER 1		12	05-Aug-24	20-Aug-24	92
CN.B-654.1100	B-654 - Pier 1 - Excavate for Foundation (I-64 WB Bridge Over Tidewater Dr)	2	05-Aug-24	06-Aug-24	54
CN.B-654.1120	B-654 - Pier 1 - Install Micropiles (I-64 WB Bridge Over Tidewater Dr)	3	07-Aug-24	09-Aug-24	87
CN.B-654.1150	B-654 - Pier 1 - F/R/P Cap (I-64 WB Bridge Over Tidewater Dr)	3	12-Aug-24	14-Aug-24	91
CN.B-654.1210	B-654 - Pier 1 - Cure Cap (I-64 WB Bridge Over Tidewater Dr)	5	14-Aug-24	19-Aug-24	144
CN.B-654.1270	B-654 - Pier 1 - Strip Cap (I-64 WB Bridge Over Tidewater Dr)	1	20-Aug-24	20-Aug-24	92



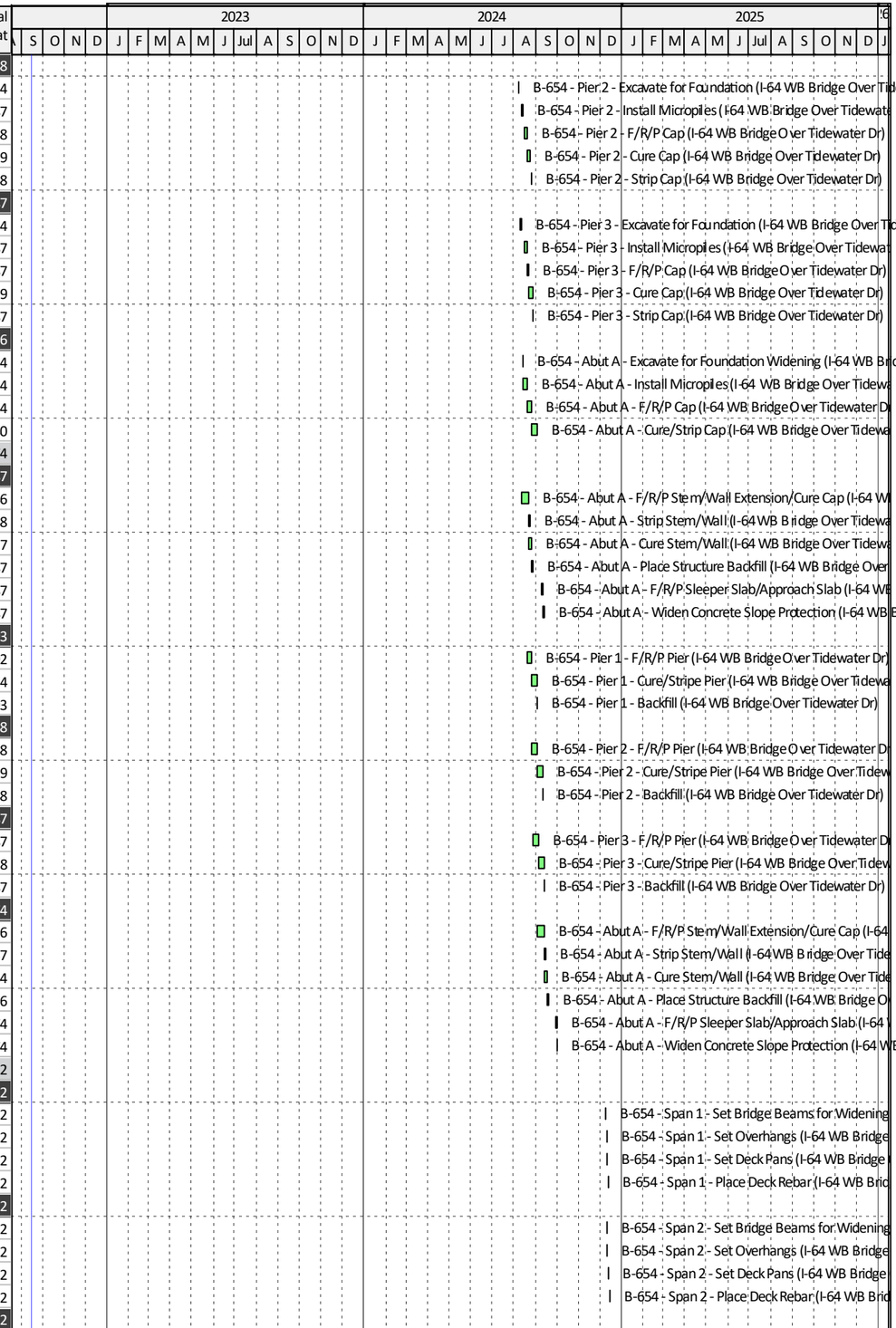
Start: 15-Sep-22
End: 15-Dec-25
Data: 15-Sep-22
Run: 16-Aug-22

Critical Remaining Work
Remaining Work
Actual Work
Changed Work
Remaining Level of Effort
Actual Level of Effort
Delay/Impact
Adverse Weather
Additional/Extra Work

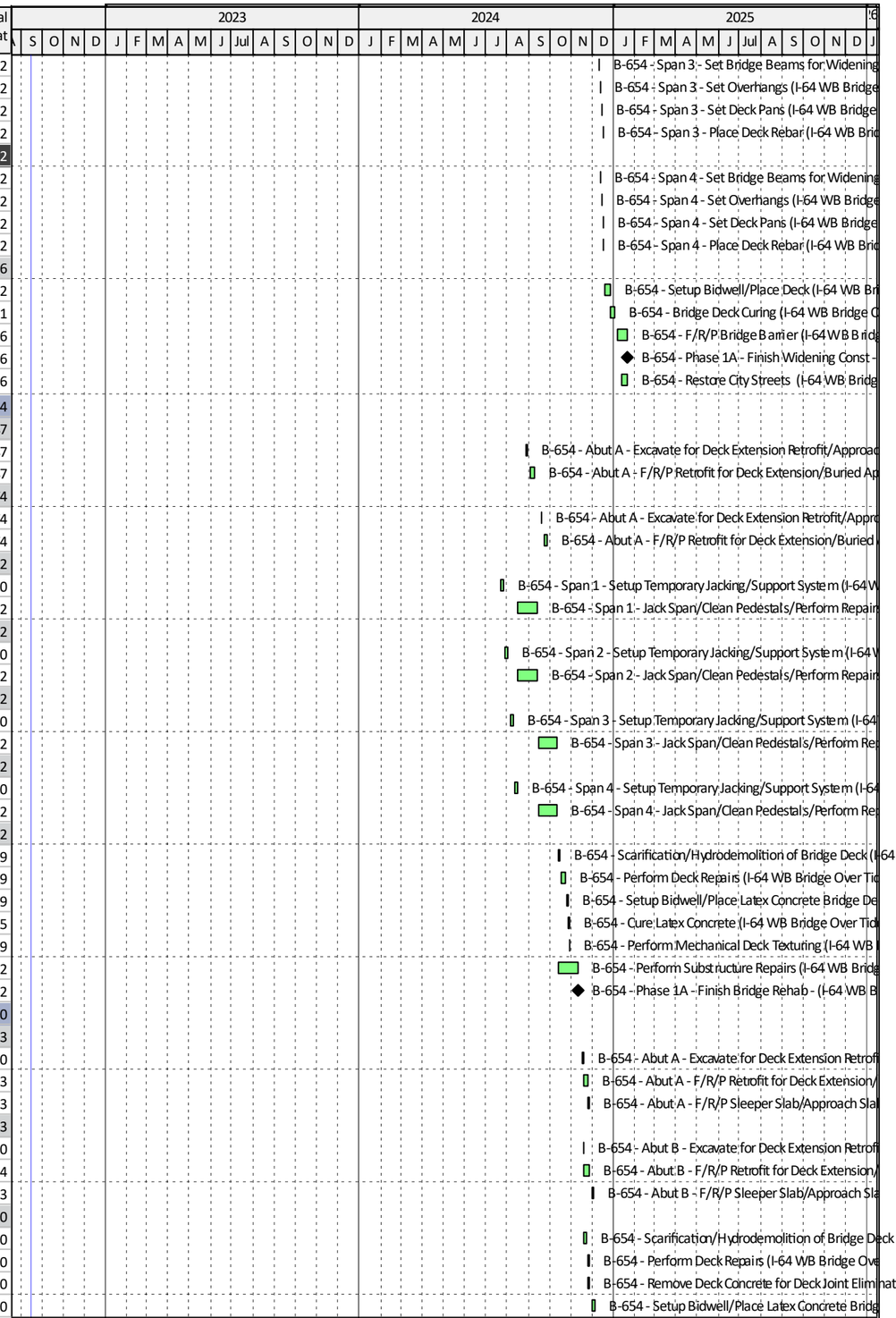
VDOT I-64 HREL SEGMENT 1A BID SCHEDULE

(ACAA) INFO COLUMNS (11x17) | TASK filter: All Activities

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
PIER 2		14	07-Aug-24	26-Aug-24	88
CN.B-654.113C	B-654 - Pier 2 - Excavate for Foundation (I-64 WB Bridge Over Tidewater Dr)	2	07-Aug-24	08-Aug-24	54
CN.B-654.117C	B-654 - Pier 2 - Install Micropiles (I-64 WB Bridge Over Tidewater Dr)	3	12-Aug-24	14-Aug-24	87
CN.B-654.122C	B-654 - Pier 2 - F/R/P Cap (I-64 WB Bridge Over Tidewater Dr)	3	15-Aug-24	19-Aug-24	88
CN.B-654.126C	B-654 - Pier 2 - Cure Cap (I-64 WB Bridge Over Tidewater Dr)	5	19-Aug-24	24-Aug-24	139
CN.B-654.134C	B-654 - Pier 2 - Strip Cap (I-64 WB Bridge Over Tidewater Dr)	1	26-Aug-24	26-Aug-24	88
PIER 3		14	09-Aug-24	28-Aug-24	87
CN.B-654.114C	B-654 - Pier 3 - Excavate for Foundation (I-64 WB Bridge Over Tidewater Dr)	2	09-Aug-24	12-Aug-24	54
CN.B-654.123C	B-654 - Pier 3 - Install Micropiles (I-64 WB Bridge Over Tidewater Dr)	3	15-Aug-24	19-Aug-24	87
CN.B-654.128C	B-654 - Pier 3 - F/R/P Cap (I-64 WB Bridge Over Tidewater Dr)	3	20-Aug-24	22-Aug-24	87
CN.B-654.133C	B-654 - Pier 3 - Cure Cap (I-64 WB Bridge Over Tidewater Dr)	5	22-Aug-24	27-Aug-24	139
CN.B-654.139C	B-654 - Pier 3 - Strip Cap (I-64 WB Bridge Over Tidewater Dr)	1	28-Aug-24	28-Aug-24	87
ABUTMENT B		13	13-Aug-24	02-Sep-24	56
CN.B-654.119C	B-654 - Abut A - Excavate for Foundation Widening (I-64 WB Bridge Over Tidewater Dr)	1	13-Aug-24	13-Aug-24	54
CN.B-654.120C	B-654 - Abut A - Install Micropiles (I-64 WB Bridge Over Tidewater Dr)	5	14-Aug-24	20-Aug-24	54
CN.B-654.130C	B-654 - Abut A - F/R/P Cap (I-64 WB Bridge Over Tidewater Dr)	4	21-Aug-24	26-Aug-24	54
CN.B-654.136C	B-654 - Abut A - Cure/Strip Cap (I-64 WB Bridge Over Tidewater Dr)	7	26-Aug-24	02-Sep-24	80
Substructure		36	12-Aug-24	02-Oct-24	74
ABUTMENT A		22	12-Aug-24	12-Sep-24	87
CN.B-654.116C	B-654 - Abut A - F/R/P Stem/Wall Extension/Cure Cap (I-64 WB Bridge Over Tidewater Dr)	8	12-Aug-24	21-Aug-24	86
CN.B-654.132C	B-654 - Abut A - Strip Stem/Wall (I-64 WB Bridge Over Tidewater Dr)	2	22-Aug-24	23-Aug-24	88
CN.B-654.131C	B-654 - Abut A - Cure Stem/Wall (I-64 WB Bridge Over Tidewater Dr)	5	21-Aug-24	26-Aug-24	137
CN.B-654.137C	B-654 - Abut A - Place Structure Backfill (I-64 WB Bridge Over Tidewater Dr)	2	27-Aug-24	28-Aug-24	87
CN.B-654.147C	B-654 - Abut A - F/R/P Sleeper Slab/Approach Slab (I-64 WB Bridge Over Tidewater Dr)	2	10-Sep-24	11-Sep-24	87
CN.B-654.149C	B-654 - Abut A - Widen Concrete Slope Protection (I-64 WB Bridge Over Tidewater Dr)	1	12-Sep-24	12-Sep-24	87
PIER 1		8	21-Aug-24	03-Sep-24	93
CN.B-654.129C	B-654 - Pier 1 - F/R/P Pier (I-64 WB Bridge Over Tidewater Dr)	4	21-Aug-24	26-Aug-24	92
CN.B-654.135C	B-654 - Pier 1 - Cure/Stripe Pier (I-64 WB Bridge Over Tidewater Dr)	7	26-Aug-24	02-Sep-24	144
CN.B-654.143C	B-654 - Pier 1 - Backfill (I-64 WB Bridge Over Tidewater Dr)	1	03-Sep-24	03-Sep-24	93
PIER 2		10	27-Aug-24	11-Sep-24	88
CN.B-654.138C	B-654 - Pier 2 - F/R/P Pier (I-64 WB Bridge Over Tidewater Dr)	4	27-Aug-24	03-Sep-24	88
CN.B-654.145C	B-654 - Pier 2 - Cure/Stripe Pier (I-64 WB Bridge Over Tidewater Dr)	7	03-Sep-24	10-Sep-24	139
CN.B-654.148C	B-654 - Pier 2 - Backfill (I-64 WB Bridge Over Tidewater Dr)	1	11-Sep-24	11-Sep-24	88
PIER 3		10	29-Aug-24	13-Sep-24	87
CN.B-654.141C	B-654 - Pier 3 - F/R/P Pier (I-64 WB Bridge Over Tidewater Dr)	4	29-Aug-24	05-Sep-24	87
CN.B-654.146C	B-654 - Pier 3 - Cure/Stripe Pier (I-64 WB Bridge Over Tidewater Dr)	7	05-Sep-24	12-Sep-24	138
CN.B-654.151C	B-654 - Pier 3 - Backfill (I-64 WB Bridge Over Tidewater Dr)	1	13-Sep-24	13-Sep-24	87
ABUTMENT B		22	03-Sep-24	02-Oct-24	74
CN.B-654.144C	B-654 - Abut A - F/R/P Stem/Wall Extension/Cure Cap (I-64 WB Bridge Over Tidewater Dr)	8	03-Sep-24	12-Sep-24	56
CN.B-654.152C	B-654 - Abut A - Strip Stem/Wall (I-64 WB Bridge Over Tidewater Dr)	2	13-Sep-24	16-Sep-24	57
CN.B-654.150C	B-654 - Abut A - Cure Stem/Wall (I-64 WB Bridge Over Tidewater Dr)	5	12-Sep-24	17-Sep-24	84
CN.B-654.155C	B-654 - Abut A - Place Structure Backfill (I-64 WB Bridge Over Tidewater Dr)	2	18-Sep-24	19-Sep-24	56
CN.B-654.158C	B-654 - Abut A - F/R/P Sleeper Slab/Approach Slab (I-64 WB Bridge Over Tidewater Dr)	2	30-Sep-24	01-Oct-24	74
CN.B-654.159C	B-654 - Abut A - Widen Concrete Slope Protection (I-64 WB Bridge Over Tidewater Dr)	1	02-Oct-24	02-Oct-24	74
Superstructure		7	10-Dec-24	18-Dec-24	2
SPAN 1		4	10-Dec-24	13-Dec-24	2
CN.B-654.180C	B-654 - Span 1 - Set Bridge Beams for Widening (I-64 WB Bridge Over Tidewater Dr)	1	10-Dec-24	10-Dec-24	2
CN.B-654.181C	B-654 - Span 1 - Set Overhangs (I-64 WB Bridge Over Tidewater Dr)	1	11-Dec-24	11-Dec-24	2
CN.B-654.183C	B-654 - Span 1 - Set Deck Pans (I-64 WB Bridge Over Tidewater Dr)	1	12-Dec-24	12-Dec-24	2
CN.B-654.186C	B-654 - Span 1 - Place Deck Rebar (I-64 WB Bridge Over Tidewater Dr)	1	13-Dec-24	13-Dec-24	2
SPAN 2		4	11-Dec-24	16-Dec-24	2
CN.B-654.182C	B-654 - Span 2 - Set Bridge Beams for Widening (I-64 WB Bridge Over Tidewater Dr)	1	11-Dec-24	11-Dec-24	2
CN.B-654.184C	B-654 - Span 2 - Set Overhangs (I-64 WB Bridge Over Tidewater Dr)	1	12-Dec-24	12-Dec-24	2
CN.B-654.187C	B-654 - Span 2 - Set Deck Pans (I-64 WB Bridge Over Tidewater Dr)	1	13-Dec-24	13-Dec-24	2
CN.B-654.190C	B-654 - Span 2 - Place Deck Rebar (I-64 WB Bridge Over Tidewater Dr)	1	16-Dec-24	16-Dec-24	2
SPAN 3		4	12-Dec-24	17-Dec-24	2



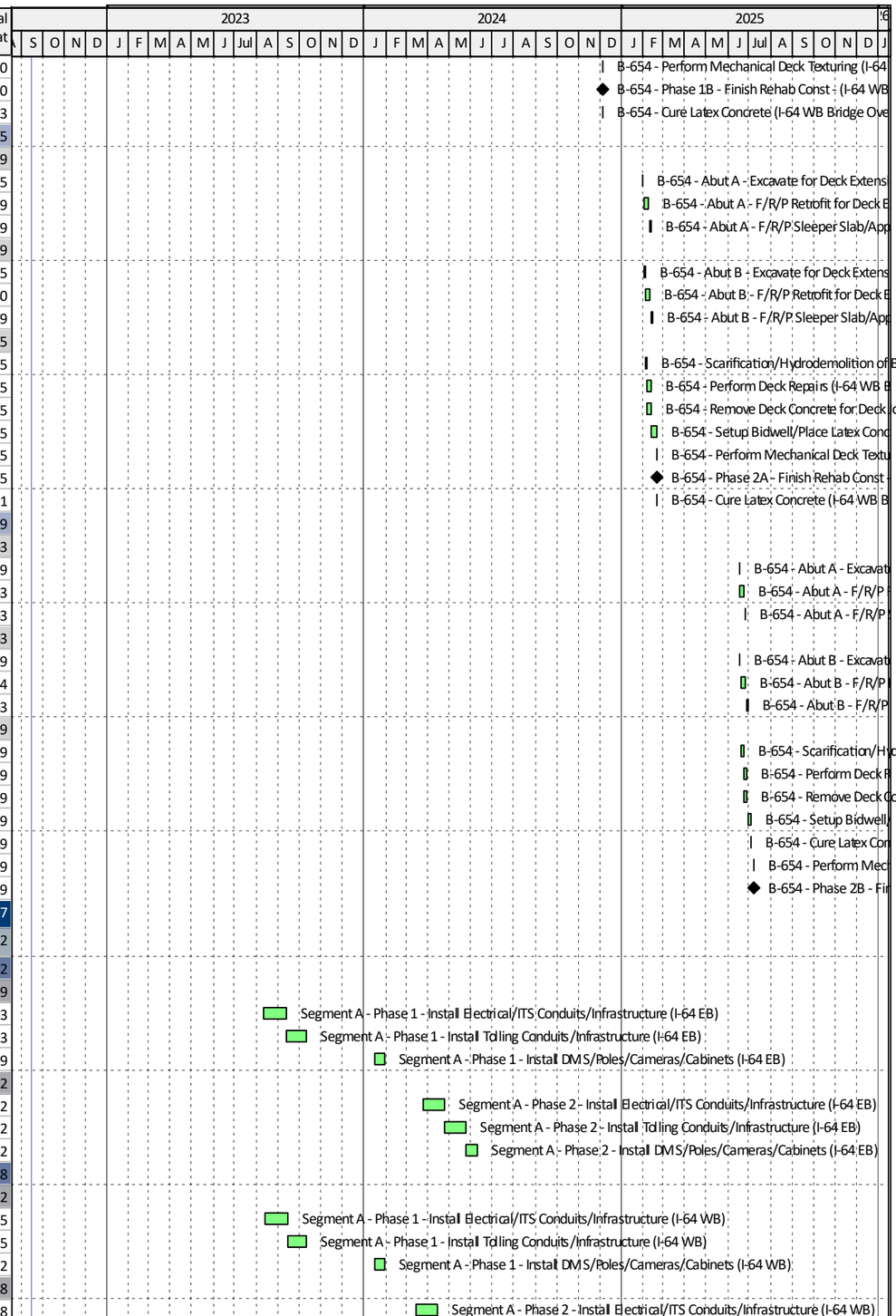
Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
CN.B-654.1850	B-654 - Span 3 - Set Bridge Beams for Widening (I-64 WB Bridge Over Tidewater Dr)	1	12-Dec-24	12-Dec-24	2
CN.B-654.1880	B-654 - Span 3 - Set Overhangs (I-64 WB Bridge Over Tidewater Dr)	1	13-Dec-24	13-Dec-24	2
CN.B-654.1910	B-654 - Span 3 - Set Deck Pans (I-64 WB Bridge Over Tidewater Dr)	1	16-Dec-24	16-Dec-24	2
CN.B-654.1930	B-654 - Span 3 - Place Deck Rebar (I-64 WB Bridge Over Tidewater Dr)	1	17-Dec-24	17-Dec-24	2
SPAN 4		4	13-Dec-24	18-Dec-24	2
CN.B-654.1890	B-654 - Span 4 - Set Bridge Beams for Widening (I-64 WB Bridge Over Tidewater Dr)	1	13-Dec-24	13-Dec-24	2
CN.B-654.1920	B-654 - Span 4 - Set Overhangs (I-64 WB Bridge Over Tidewater Dr)	1	16-Dec-24	16-Dec-24	2
CN.B-654.1940	B-654 - Span 4 - Set Deck Pans (I-64 WB Bridge Over Tidewater Dr)	1	17-Dec-24	17-Dec-24	2
CN.B-654.1950	B-654 - Span 4 - Place Deck Rebar (I-64 WB Bridge Over Tidewater Dr)	1	18-Dec-24	18-Dec-24	2
Final Work		16	19-Dec-24	20-Jan-25	6
CN.B-654.1960	B-654 - Setup Bidwell/Place Deck (I-64 WB Bridge Over Tidewater Dr)	5	19-Dec-24	27-Dec-24	2
CN.B-654.1970	B-654 - Bridge Deck Curing (I-64 WB Bridge Over Tidewater Dr)	7	27-Dec-24	03-Jan-25	11
CN.B-654.1980	B-654 - F/R/P Bridge Barrier (I-64 WB Bridge Over Tidewater Dr)	10	06-Jan-25	20-Jan-25	6
CN.B-654.2000	B-654 - Phase 1A - Finish Widening Const - (I-64 WB Bridge Over Tidewater Dr) - [FM]	0		20-Jan-25	6
CN.B-654.1990	B-654 - Restore City Streets (I-64 WB Bridge Over Tidewater Dr)	5	13-Jan-25	20-Jan-25	6
Phase 1A (Existing Bridge Rehabilitation [WB])		78	22-Jul-24	11-Nov-24	44
ABUTMENT A		6	29-Aug-24	09-Sep-24	87
CN.B-654.1400	B-654 - Abut A - Excavate for Deck Extension Retrofit/Approach Slab (I-64 WB Bridge Over Tidewater Dr)	1	29-Aug-24	29-Aug-24	87
CN.B-654.1420	B-654 - Abut A - F/R/P Retrofit for Deck Extension/Buried Approach Slabs (I-64 WB Bridge Over Tidewater Dr)	5	03-Sep-24	09-Sep-24	87
ABUTMENT B		6	20-Sep-24	27-Sep-24	74
CN.B-654.1560	B-654 - Abut A - Excavate for Deck Extension Retrofit/Approach Slab (I-64 WB Bridge Over Tidewater Dr)	1	20-Sep-24	20-Sep-24	74
CN.B-654.1570	B-654 - Abut A - F/R/P Retrofit for Deck Extension/Buried Approach Slabs (I-64 WB Bridge Over Tidewater Dr)	5	23-Sep-24	27-Sep-24	74
SPAN 1		38	22-Jul-24	13-Sep-24	2
CN.B-654.1040	B-654 - Span 1 - Setup Temporary Jacking/Support System (I-64 WB Bridge Over Tidewater Dr)	5	22-Jul-24	26-Jul-24	10
CN.B-654.1240	B-654 - Span 1 - Jack Span/Clean Pedestals/Perform Repairs/Replace Bearings (I-64 WB Bridge Over Tidewater Dr)	20	15-Aug-24	13-Sep-24	2
SPAN 2		33	29-Jul-24	13-Sep-24	2
CN.B-654.1070	B-654 - Span 2 - Setup Temporary Jacking/Support System (I-64 WB Bridge Over Tidewater Dr)	5	29-Jul-24	02-Aug-24	10
CN.B-654.1250	B-654 - Span 2 - Jack Span/Clean Pedestals/Perform Repairs/Replace Bearings (I-64 WB Bridge Over Tidewater Dr)	20	15-Aug-24	13-Sep-24	2
SPAN 3		48	05-Aug-24	11-Oct-24	2
CN.B-654.1110	B-654 - Span 3 - Setup Temporary Jacking/Support System (I-64 WB Bridge Over Tidewater Dr)	5	05-Aug-24	09-Aug-24	20
CN.B-654.1530	B-654 - Span 3 - Jack Span/Clean Pedestals/Perform Repairs/Replace Bearings (I-64 WB Bridge Over Tidewater Dr)	20	16-Sep-24	11-Oct-24	2
SPAN 4		43	12-Aug-24	11-Oct-24	2
CN.B-654.1180	B-654 - Span 4 - Setup Temporary Jacking/Support System (I-64 WB Bridge Over Tidewater Dr)	5	12-Aug-24	16-Aug-24	20
CN.B-654.1540	B-654 - Span 4 - Jack Span/Clean Pedestals/Perform Repairs/Replace Bearings (I-64 WB Bridge Over Tidewater Dr)	20	16-Sep-24	11-Oct-24	2
Final Work'		20	14-Oct-24	11-Nov-24	2
CN.B-654.1600	B-654 - Scarification/Hydrodemolition of Bridge Deck (I-64 WB Bridge Over Tidewater Dr)	3	14-Oct-24	16-Oct-24	9
CN.B-654.1620	B-654 - Perform Deck Repairs (I-64 WB Bridge Over Tidewater Dr)	6	17-Oct-24	24-Oct-24	9
CN.B-654.1630	B-654 - Setup Bidwell/Place Latex Concrete Bridge Deck Overlay (I-64 WB Bridge Over Tidewater Dr)	2	25-Oct-24	28-Oct-24	9
CN.B-654.1640	B-654 - Cure Latex Concrete (I-64 WB Bridge Over Tidewater Dr)	1	28-Oct-24	29-Oct-24	15
CN.B-654.1650	B-654 - Perform Mechanical Deck Texturing (I-64 WB Bridge Over Tidewater Dr)	1	30-Oct-24	30-Oct-24	9
CN.B-654.1610	B-654 - Perform Substructure Repairs (I-64 WB Bridge Over Tidewater Dr)	20	14-Oct-24	11-Nov-24	2
CN.B-654.1660	B-654 - Phase 1A - Finish Bridge Rehab - (I-64 WB Bridge Over Tidewater Dr) - [FM]	0		11-Nov-24	2
Phase 1B (Existing Bridge Rehabilitation [WB])		13	18-Nov-24	06-Dec-24	30
ABUTMENT A		8	18-Nov-24	27-Nov-24	33
CN.B-654.1670	B-654 - Abut A - Excavate for Deck Extension Retrofit/Approach Slab (I-64 WB Bridge Over Tidewater Dr)	1	18-Nov-24	18-Nov-24	30
CN.B-654.1680	B-654 - Abut A - F/R/P Retrofit for Deck Extension/Buried Approach Slabs (I-64 WB Bridge Over Tidewater Dr)	5	19-Nov-24	25-Nov-24	33
CN.B-654.1740	B-654 - Abut A - F/R/P Sleeper Slab/Approach Slab (I-64 WB Bridge Over Tidewater Dr)	2	26-Nov-24	27-Nov-24	33
ABUTMENT B		9	19-Nov-24	03-Dec-24	33
CN.B-654.1690	B-654 - Abut B - Excavate for Deck Extension Retrofit/Approach Slab (I-64 WB Bridge Over Tidewater Dr)	1	19-Nov-24	19-Nov-24	30
CN.B-654.1700	B-654 - Abut B - F/R/P Retrofit for Deck Extension/Buried Approach Slabs (I-64 WB Bridge Over Tidewater Dr)	5	20-Nov-24	26-Nov-24	34
CN.B-654.1750	B-654 - Abut B - F/R/P Sleeper Slab/Approach Slab (I-64 WB Bridge Over Tidewater Dr)	2	02-Dec-24	03-Dec-24	33
Final Work'		11	20-Nov-24	06-Dec-24	30
CN.B-654.1710	B-654 - Scarification/Hydrodemolition of Bridge Deck (I-64 WB Bridge Over Tidewater Dr)	3	20-Nov-24	22-Nov-24	30
CN.B-654.1720	B-654 - Perform Deck Repairs (I-64 WB Bridge Over Tidewater Dr)	3	25-Nov-24	27-Nov-24	30
CN.B-654.1730	B-654 - Remove Deck Concrete for Deck Joint Elimination/Place Closure Concrete (I-64 WB Bridge Over Tidewater Dr)	3	25-Nov-24	27-Nov-24	30
CN.B-654.1760	B-654 - Setup Bidwell/Place Latex Concrete Bridge Deck Overlay (I-64 WB Bridge Over Tidewater Dr)	4	02-Dec-24	05-Dec-24	30



Start: 15-Sep-22
End: 15-Dec-25
Data: 15-Sep-22
Run: 16-Aug-22

Critical Remaining Work
Remaining Work
Actual Work
Changed Work
Remaining Level of Effort
Actual Level of Effort
Delay/Impact
Adverse Weather
Additional/Extra Work

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
CN.B-654.1780	B-654 - Perform Mechanical Deck Texturing (I-64 WB Bridge Over Tidewater Dr)	1	06-Dec-24	06-Dec-24	30
CN.B-654.1790	B-654 - Phase 1B - Finish Rehab Const - (I-64 WB Bridge Over Tidewater Dr) - [FM]	0		06-Dec-24	30
CN.B-654.1770	B-654 - Cure Latex Concrete (I-64 WB Bridge Over Tidewater Dr)	1	05-Dec-24	06-Dec-24	53
Phase 2A (Existing Bridge Rehabilitation [WB])		14	31-Jan-25	20-Feb-25	75
ABUTMENT A		8	31-Jan-25	11-Feb-25	79
CN.B-654.2010	B-654 - Abut A - Excavate for Deck Extension Retrofit/Approach Slab (I-64 WB Bridge Over Tidewater Dr)	1	31-Jan-25	31-Jan-25	75
CN.B-654.2020	B-654 - Abut A - F/R/P Retrofit for Deck Extension/Buried Approach Slabs (I-64 WB Bridge Over Tidewater Dr)	5	03-Feb-25	07-Feb-25	79
CN.B-654.2080	B-654 - Abut A - F/R/P Sleeper Slab/Approach Slab (I-64 WB Bridge Over Tidewater Dr)	2	10-Feb-25	11-Feb-25	79
ABUTMENT B		9	03-Feb-25	13-Feb-25	79
CN.B-654.2030	B-654 - Abut B - Excavate for Deck Extension Retrofit/Approach Slab (I-64 WB Bridge Over Tidewater Dr)	1	03-Feb-25	03-Feb-25	75
CN.B-654.2040	B-654 - Abut B - F/R/P Retrofit for Deck Extension/Buried Approach Slabs (I-64 WB Bridge Over Tidewater Dr)	5	04-Feb-25	10-Feb-25	80
CN.B-654.2090	B-654 - Abut B - F/R/P Sleeper Slab/Approach Slab (I-64 WB Bridge Over Tidewater Dr)	2	12-Feb-25	13-Feb-25	79
Final Work'		12	04-Feb-25	20-Feb-25	75
CN.B-654.2050	B-654 - Scarification/Hydrodemolition of Bridge Deck (I-64 WB Bridge Over Tidewater Dr)	3	04-Feb-25	06-Feb-25	75
CN.B-654.2060	B-654 - Perform Deck Repairs (I-64 WB Bridge Over Tidewater Dr)	4	07-Feb-25	12-Feb-25	75
CN.B-654.2070	B-654 - Remove Deck Concrete for Deck Joint Elimination/Place Closure Concrete (I-64 WB Bridge Over Tidewater Dr)	4	07-Feb-25	12-Feb-25	75
CN.B-654.2100	B-654 - Setup Bidwell/Place Latex Concrete Bridge Deck Overlay (I-64 WB Bridge Over Tidewater Dr)	4	13-Feb-25	19-Feb-25	75
CN.B-654.2120	B-654 - Perform Mechanical Deck Texturing (I-64 WB Bridge Over Tidewater Dr)	1	20-Feb-25	20-Feb-25	75
CN.B-654.2130	B-654 - Phase 2A - Finish Rehab Const - (I-64 WB Bridge Over Tidewater Dr) - [FM]	0		20-Feb-25	75
CN.B-654.2110	B-654 - Cure Latex Concrete (I-64 WB Bridge Over Tidewater Dr)	1	19-Feb-25	20-Feb-25	111
Phase 2B (Existing Bridge Rehabilitation [WB])		14	17-Jun-25	07-Jul-25	59
ABUTMENT A		8	17-Jun-25	26-Jun-25	63
CN.B-654.2140	B-654 - Abut A - Excavate for Deck Extension Retrofit/Approach Slab (I-64 WB Bridge Over Tidewater Dr)	1	17-Jun-25	17-Jun-25	59
CN.B-654.2150	B-654 - Abut A - F/R/P Retrofit for Deck Extension/Buried Approach Slabs (I-64 WB Bridge Over Tidewater Dr)	5	18-Jun-25	24-Jun-25	63
CN.B-654.2210	B-654 - Abut A - F/R/P Sleeper Slab/Approach Slab (I-64 WB Bridge Over Tidewater Dr)	2	25-Jun-25	26-Jun-25	63
ABUTMENT B		9	18-Jun-25	30-Jun-25	63
CN.B-654.2160	B-654 - Abut B - Excavate for Deck Extension Retrofit/Approach Slab (I-64 WB Bridge Over Tidewater Dr)	1	18-Jun-25	18-Jun-25	59
CN.B-654.2170	B-654 - Abut B - F/R/P Retrofit for Deck Extension/Buried Approach Slabs (I-64 WB Bridge Over Tidewater Dr)	5	19-Jun-25	25-Jun-25	64
CN.B-654.2220	B-654 - Abut B - F/R/P Sleeper Slab/Approach Slab (I-64 WB Bridge Over Tidewater Dr)	2	27-Jun-25	30-Jun-25	63
Final Work'		12	19-Jun-25	07-Jul-25	59
CN.B-654.2180	B-654 - Scarification/Hydrodemolition of Bridge Deck (I-64 WB Bridge Over Tidewater Dr)	3	19-Jun-25	23-Jun-25	59
CN.B-654.2190	B-654 - Perform Deck Repairs (I-64 WB Bridge Over Tidewater Dr)	4	24-Jun-25	27-Jun-25	59
CN.B-654.2200	B-654 - Remove Deck Concrete for Deck Joint Elimination/Place Closure Concrete (I-64 WB Bridge Over Tidewater Dr)	4	24-Jun-25	27-Jun-25	59
CN.B-654.2230	B-654 - Setup Bidwell/Place Latex Concrete Bridge Deck Overlay (I-64 WB Bridge Over Tidewater Dr)	4	30-Jun-25	03-Jul-25	59
CN.B-654.2240	B-654 - Cure Latex Concrete (I-64 WB Bridge Over Tidewater Dr)	1	03-Jul-25	04-Jul-25	89
CN.B-654.2250	B-654 - Perform Mechanical Deck Texturing (I-64 WB Bridge Over Tidewater Dr)	1	07-Jul-25	07-Jul-25	59
CN.B-654.2260	B-654 - Phase 2B - Finish Rehab Const - (I-64 WB Bridge Over Tidewater Dr) - [FM]	0		07-Jul-25	59
=====ITS/TOLLING/ELECTRICAL====		405	11-Aug-23	15-Apr-25	107
Segment A		200	11-Aug-23	10-Jun-24	262
Segment A - EB - STA 964+34.38 to 975+00		200	11-Aug-23	10-Jun-24	262
Phase 1		114	11-Aug-23	31-Jan-24	259
CN.ITS.1000	Segment A - Phase 1 - Install Electrical/ITS Conduits/Infrastructure (I-64 EB)	20	11-Aug-23	13-Sep-23	323
CN.ITS.1020	Segment A - Phase 1 - Install Tolling Conduits/Infrastructure (I-64 EB)	20	13-Sep-23	11-Oct-23	323
CN.ITS.1040	Segment A - Phase 1 - Install DMS/Poles/Cameras/Cabinets (I-64 EB)	10	17-Jan-24	31-Jan-24	259
Phase 2		50	25-Mar-24	10-Jun-24	262
CN.ITS.1070	Segment A - Phase 2 - Install Electrical/ITS Conduits/Infrastructure (I-64 EB)	20	25-Mar-24	24-Apr-24	262
CN.ITS.1090	Segment A - Phase 2 - Install Tolling Conduits/Infrastructure (I-64 EB)	20	24-Apr-24	24-May-24	262
CN.ITS.1110	Segment A - Phase 2 - Install DMS/Poles/Cameras/Cabinets (I-64 EB)	10	24-May-24	10-Jun-24	262
Segment A - WB - STA 2810+42.50 to 2821+00		193	14-Aug-23	30-May-24	248
Phase 1		113	14-Aug-23	31-Jan-24	232
CN.ITS.1010	Segment A - Phase 1 - Install Electrical/ITS Conduits/Infrastructure (I-64 WB)	20	14-Aug-23	14-Sep-23	295
CN.ITS.1030	Segment A - Phase 1 - Install Tolling Conduits/Infrastructure (I-64 WB)	20	14-Sep-23	12-Oct-23	295
CN.ITS.1050	Segment A - Phase 1 - Install DMS/Poles/Cameras/Cabinets (I-64 WB)	10	17-Jan-24	31-Jan-24	232
Phase 2		50	15-Mar-24	30-May-24	248
CN.ITS.1060	Segment A - Phase 2 - Install Electrical/ITS Conduits/Infrastructure (I-64 WB)	20	15-Mar-24	15-Apr-24	248



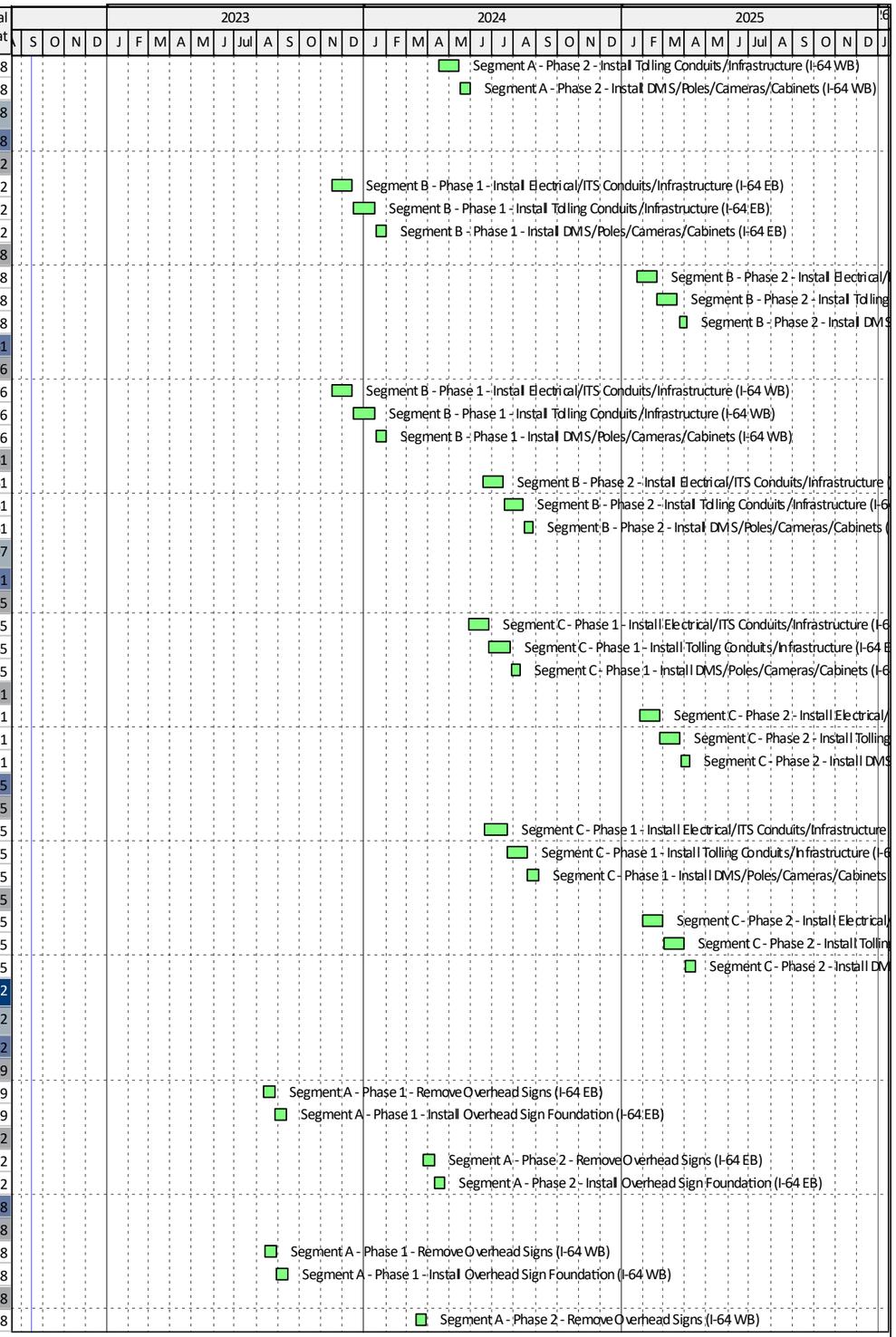
Start: 15-Sep-22
End: 15-Dec-25
Data: 15-Sep-22
Run: 16-Aug-22

Critical Remaining Work
Remaining Work
Actual Work
Changed Work
Remaining Level of Effort
Actual Level of Effort
Delay/Impact
Adverse Weather
Additional/Extra Work

VDOT I-64 HREL SEGMENT 1A BID SCHEDULE

(ACAA) INFO COLUMNS (11x17) | TASK filter: All Activities

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
CN.ITS.1080	Segment A - Phase 2 - Install Tolling Conduits/Infrastructure (I-64 WB)	20	16-Apr-24	15-May-24	248
CN.ITS.1100	Segment A - Phase 2 - Install DMS/Poles/Cameras/Cabinets (I-64 WB)	10	16-May-24	30-May-24	248
Segment B		334	16-Nov-23	04-Apr-25	48
Segment B - EB - STA 975+00 to 1026+87		334	16-Nov-23	04-Apr-25	48
Phase 1		50	16-Nov-23	01-Feb-24	232
CN.ITS.1120	Segment B - Phase 1 - Install Electrical/ITS Conduits/Infrastructure (I-64 EB)	20	16-Nov-23	15-Dec-23	232
CN.ITS.1140	Segment B - Phase 1 - Install Tolling Conduits/Infrastructure (I-64 EB)	20	18-Dec-23	17-Jan-24	232
CN.ITS.1160	Segment B - Phase 1 - Install DMS/Poles/Cameras/Cabinets (I-64 EB)	10	18-Jan-24	01-Feb-24	232
Phase 2		50	23-Jan-25	04-Apr-25	48
CN.ITS.1210	Segment B - Phase 2 - Install Electrical/ITS Conduits/Infrastructure (I-64 EB)	20	23-Jan-25	20-Feb-25	48
CN.ITS.1220	Segment B - Phase 2 - Install Tolling Conduits/Infrastructure (I-64 EB)	20	21-Feb-25	21-Mar-25	48
CN.ITS.1230	Segment B - Phase 2 - Install DMS/Poles/Cameras/Cabinets (I-64 EB)	10	24-Mar-25	04-Apr-25	48
Segment B - WB - STA 2821+00 to 3019+46		191	16-Nov-23	28-Aug-24	61
Phase 1		50	16-Nov-23	01-Feb-24	76
CN.ITS.1130	Segment B - Phase 1 - Install Electrical/ITS Conduits/Infrastructure (I-64 WB)	20	16-Nov-23	15-Dec-23	76
CN.ITS.1150	Segment B - Phase 1 - Install Tolling Conduits/Infrastructure (I-64 WB)	20	18-Dec-23	17-Jan-24	76
CN.ITS.1170	Segment B - Phase 1 - Install DMS/Poles/Cameras/Cabinets (I-64 WB)	10	18-Jan-24	01-Feb-24	76
Phase 2		50	18-Jun-24	28-Aug-24	61
CN.ITS.1180	Segment B - Phase 2 - Install Electrical/ITS Conduits/Infrastructure (I-64 WB)	20	18-Jun-24	17-Jul-24	61
CN.ITS.1190	Segment B - Phase 2 - Install Tolling Conduits/Infrastructure (I-64 WB)	20	18-Jul-24	14-Aug-24	61
CN.ITS.1200	Segment B - Phase 2 - Install DMS/Poles/Cameras/Cabinets (I-64 WB)	10	15-Aug-24	28-Aug-24	61
Segment C		212	30-May-24	15-Apr-25	107
Segment C - EB - STA 1026+87 to 1090+90		208	30-May-24	08-Apr-25	111
Phase 1		50	30-May-24	09-Aug-24	85
CN.ITS.1240	Segment C - Phase 1 - Install Electrical/ITS Conduits/Infrastructure (I-64 EB)	20	30-May-24	26-Jun-24	85
CN.ITS.1260	Segment C - Phase 1 - Install Tolling Conduits/Infrastructure (I-64 EB)	20	27-Jun-24	26-Jul-24	85
CN.ITS.1280	Segment C - Phase 1 - Install DMS/Poles/Cameras/Cabinets (I-64 EB)	10	29-Jul-24	09-Aug-24	85
Phase 2		50	27-Jan-25	08-Apr-25	111
CN.ITS.1300	Segment C - Phase 2 - Install Electrical/ITS Conduits/Infrastructure (I-64 EB)	20	27-Jan-25	24-Feb-25	111
CN.ITS.1320	Segment C - Phase 2 - Install Tolling Conduits/Infrastructure (I-64 EB)	20	25-Feb-25	25-Mar-25	111
CN.ITS.1340	Segment C - Phase 2 - Install DMS/Poles/Cameras/Cabinets (I-64 EB)	10	26-Mar-25	08-Apr-25	111
Segment C - WB - STA 309+46 to 3082+06.03		196	21-Jun-24	15-Apr-25	95
Phase 1		50	21-Jun-24	04-Sep-24	75
CN.ITS.1250	Segment C - Phase 1 - Install Electrical/ITS Conduits/Infrastructure (I-64 WB)	20	21-Jun-24	22-Jul-24	75
CN.ITS.1270	Segment C - Phase 1 - Install Tolling Conduits/Infrastructure (I-64 WB)	20	23-Jul-24	19-Aug-24	75
CN.ITS.1290	Segment C - Phase 1 - Install DMS/Poles/Cameras/Cabinets (I-64 WB)	10	20-Aug-24	04-Sep-24	75
Phase 2		50	31-Jan-25	15-Apr-25	95
CN.ITS.1310	Segment C - Phase 2 - Install Electrical/ITS Conduits/Infrastructure (I-64 WB)	20	31-Jan-25	28-Feb-25	95
CN.ITS.1330	Segment C - Phase 2 - Install Tolling Conduits/Infrastructure (I-64 WB)	20	03-Mar-25	31-Mar-25	95
CN.ITS.1350	Segment C - Phase 2 - Install DMS/Poles/Cameras/Cabinets (I-64 WB)	10	01-Apr-25	15-Apr-25	95
===== OVERHEAD SIGNS =====		375	11-Aug-23	28-Feb-25	162
Segment A		170	11-Aug-23	24-Apr-24	322
Segment A - EB - STA 964+34.38 to 975+00		170	11-Aug-23	24-Apr-24	322
Phase 1		20	11-Aug-23	13-Sep-23	369
CN.OS.1000	Segment A - Phase 1 - Remove Overhead Signs (I-64 EB)	10	11-Aug-23	28-Aug-23	369
CN.OS.1020	Segment A - Phase 1 - Install Overhead Sign Foundation (I-64 EB)	10	28-Aug-23	13-Sep-23	369
Phase 2		20	25-Mar-24	24-Apr-24	322
CN.OS.1050	Segment A - Phase 2 - Remove Overhead Signs (I-64 EB)	10	25-Mar-24	10-Apr-24	322
CN.OS.1070	Segment A - Phase 2 - Install Overhead Sign Foundation (I-64 EB)	10	10-Apr-24	24-Apr-24	322
Segment A - WB - STA 2810+42.50 to 2821+00		163	14-Aug-23	15-Apr-24	328
Phase 1		20	14-Aug-23	14-Sep-23	348
CN.OS.1010	Segment A - Phase 1 - Remove Overhead Signs (I-64 WB)	10	14-Aug-23	29-Aug-23	348
CN.OS.1030	Segment A - Phase 1 - Install Overhead Sign Foundation (I-64 WB)	10	29-Aug-23	14-Sep-23	348
Phase 2		20	15-Mar-24	15-Apr-24	328
CN.OS.1040	Segment A - Phase 2 - Remove Overhead Signs (I-64 WB)	10	15-Mar-24	28-Mar-24	328



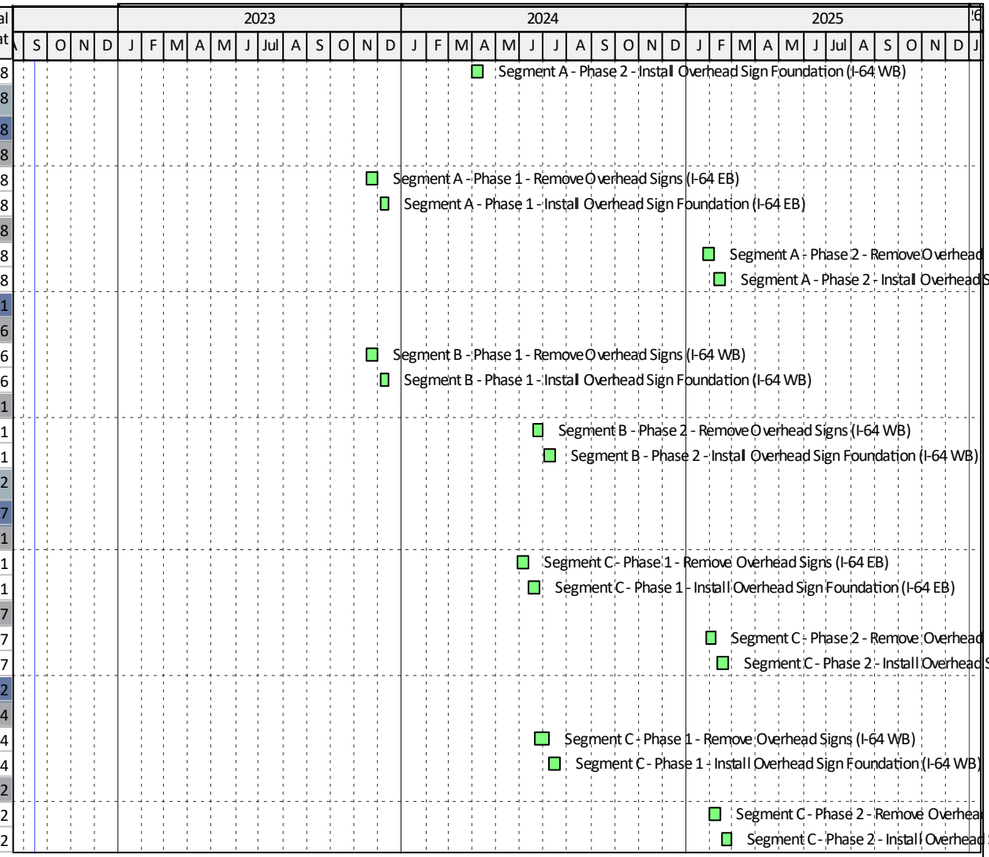
Start: 15-Sep-22
End: 15-Dec-25
Data: 15-Sep-22
Run: 16-Aug-22

Critical Remaining Work
Remaining Work
Actual Work
Changed Work
Remaining Level of Effort
Actual Level of Effort
Delay/Impact
Adverse Weather
Additional/Extra Work

VDOT I-64 HREL SEGMENT 1A BID SCHEDULE

(ACAA) INFO COLUMNS (11x17) | TASK filter: All Activities

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
CN.OS.1060	Segment A - Phase 2 - Install Overhead Sign Foundation (I-64 WB)	10	01-Apr-24	15-Apr-24	328
Segment B		304	16-Nov-23	20-Feb-25	128
Segment B - EB - STA 975+00 to 1026+87		304	16-Nov-23	20-Feb-25	128
Phase 1		20	16-Nov-23	15-Dec-23	278
CN.OS.1080	Segment A - Phase 1 - Remove Overhead Signs (I-64 EB)	10	16-Nov-23	01-Dec-23	278
CN.OS.1100	Segment A - Phase 1 - Install Overhead Sign Foundation (I-64 EB)	10	04-Dec-23	15-Dec-23	278
Phase 2		20	23-Jan-25	20-Feb-25	128
CN.OS.1140	Segment A - Phase 2 - Remove Overhead Signs (I-64 EB)	10	23-Jan-25	05-Feb-25	128
CN.OS.1150	Segment A - Phase 2 - Install Overhead Sign Foundation (I-64 EB)	10	06-Feb-25	20-Feb-25	128
Segment B - WB - STA 2821+00 to 3019+46		161	16-Nov-23	17-Jul-24	141
Phase 1		20	16-Nov-23	15-Dec-23	136
CN.OS.1090	Segment B - Phase 1 - Remove Overhead Signs (I-64 WB)	10	16-Nov-23	01-Dec-23	136
CN.OS.1110	Segment B - Phase 1 - Install Overhead Sign Foundation (I-64 WB)	10	04-Dec-23	15-Dec-23	136
Phase 2		20	18-Jun-24	17-Jul-24	141
CN.OS.1120	Segment B - Phase 2 - Remove Overhead Signs (I-64 WB)	10	18-Jun-24	01-Jul-24	141
CN.OS.1130	Segment B - Phase 2 - Install Overhead Sign Foundation (I-64 WB)	10	02-Jul-24	17-Jul-24	141
Segment C		182	30-May-24	28-Feb-25	162
Segment C - EB - STA 1026+87 to 1090+90		178	30-May-24	24-Feb-25	157
Phase 1		20	30-May-24	26-Jun-24	131
CN.OS.1160	Segment C - Phase 1 - Remove Overhead Signs (I-64 EB)	10	30-May-24	12-Jun-24	131
CN.OS.1170	Segment C - Phase 1 - Install Overhead Sign Foundation (I-64 EB)	10	13-Jun-24	26-Jun-24	131
Phase 2		20	27-Jan-25	24-Feb-25	157
CN.OS.1200	Segment C - Phase 2 - Remove Overhead Signs (I-64 EB)	10	27-Jan-25	07-Feb-25	157
CN.OS.1220	Segment C - Phase 2 - Install Overhead Sign Foundation (I-64 EB)	10	10-Feb-25	24-Feb-25	157
Segment C - WB - STA 309+46 to 3082+06.03		166	21-Jun-24	28-Feb-25	162
Phase 1		20	21-Jun-24	22-Jul-24	124
CN.OS.1180	Segment C - Phase 1 - Remove Overhead Signs (I-64 WB)	10	21-Jun-24	08-Jul-24	124
CN.OS.1190	Segment C - Phase 1 - Install Overhead Sign Foundation (I-64 WB)	10	09-Jul-24	22-Jul-24	124
Phase 2		20	31-Jan-25	28-Feb-25	162
CN.OS.1210	Segment C - Phase 2 - Remove Overhead Signs (I-64 WB)	10	31-Jan-25	13-Feb-25	162
CN.OS.1230	Segment C - Phase 2 - Install Overhead Sign Foundation (I-64 WB)	10	17-Feb-25	28-Feb-25	162



Start: 15-Sep-22
End: 15-Dec-25
Data: 15-Sep-22
Run: 16-Aug-22

Critical Remaining Work
Remaining Work
Actual Work
Changed Work
Remaining Level of Effort
Actual Level of Effort
Delay/Impact
Adverse Weather
Additional/Extra Work

VDOT I-64 HREL SEGMENT 1A BID SCHEDULE

(ACAA) INFO COLUMNS (11x17) | TASK filter: All Activities