



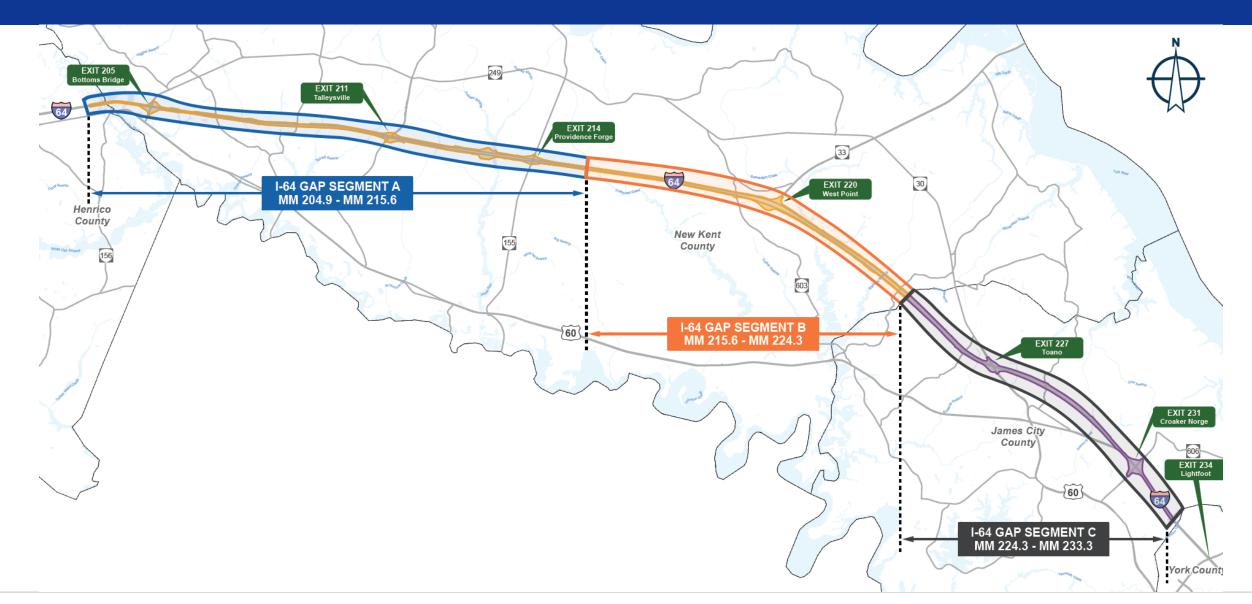
#### **2023 CONVERGENCE**

Project Updates: I-64 Gap and Hampton Roads Bridge Tunnel

Commissioner Stephen C. Brich, P.E. September 28, 2023



### **I-64 Gap Widening Overall Location Map**

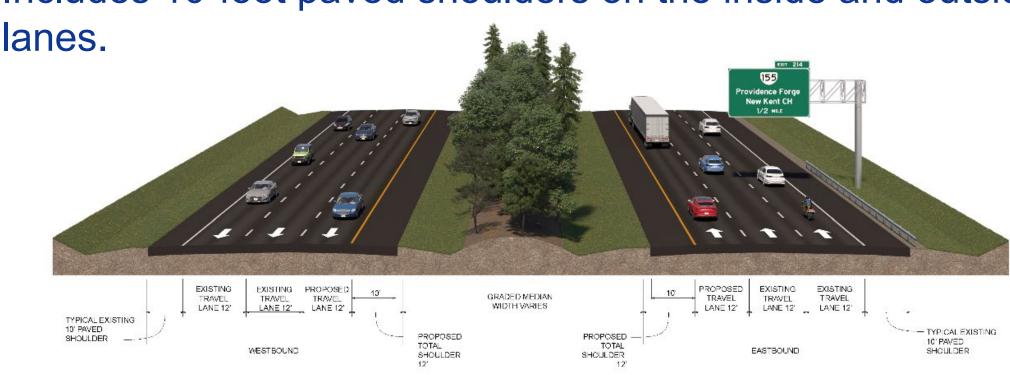




### **Project Overview – Roadway**

- Widen I-64 from four to six lanes.
- Widen the median of I-64 within the existing right-of-way.

Includes 10-foot paved shoulders on the inside and outside





# **Project Scope – Richmond District**

With an overall cost of \$750 million, the I-64 Gap Widening project is broken into three Segments A, B, C:

- Segment A is located in New Kent County from mile marker 205 to 215.6.
  - Winning bid was \$210 million
  - Commonwealth Transportation Board (CTB) awarded on September 20, 2023
  - Work to begin mid-November 2023
  - Fixed completion date: July 2027



## **Project Scope – Richmond District**

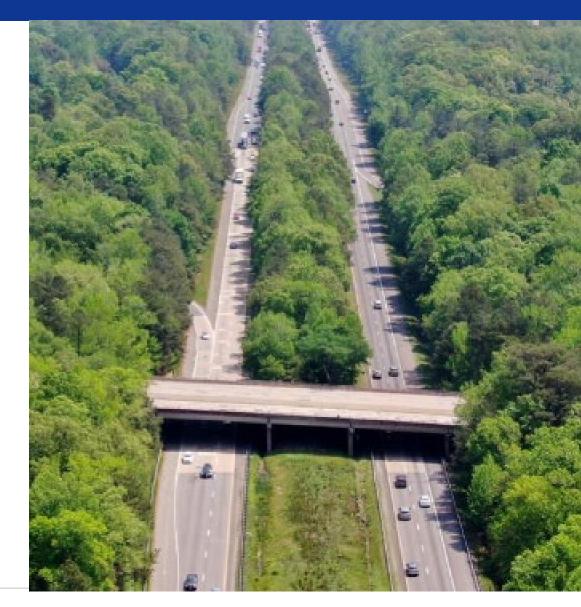
- Segment B is also located in New Kent County from mile marker 215.6 to 224.3.
  - Fixed completion date: April 2028

- Segment C is located in James City County from mile marker 224.3 to 233.3. This segment also includes paving the Lightfoot Park and Ride.
  - Fixed completion date: November 2027



### Proposed Improvements Include:

- Mill/Pave the existing travel lanes
- Constructing a 12-foot-wide travel lane and a 10-foot-wide paved shoulder in the median in both directions
- Bridge Widening
- Soundwalls
- Drainage Improvements
- New Signage and Pavement Markings
- Upgraded Intelligent Transportation System (ITS), closed-circuit television (CCTV) cameras, and fiber optic







### **Project Scope**





### **Project Information Overview**



**PROJECT FUNDING** 



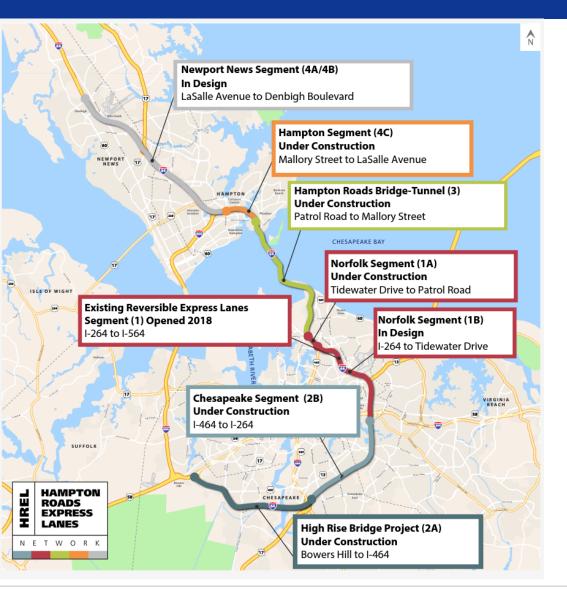
**PROJECT OWNER** 



PROJECT DESIGN-BUILDER

- Contract award: April 2019
- Contract type: Design-Build
- Notice to proceed: September 2020
- Design efforts essentially complete
- Anticipated cost at award: \$3.9 billion
  - Expended: \$1.9 billion
- Project funding:
  - 92% regional gas and sales tax
  - 8% state and federal funds

## Hampton Roads Express Lanes Network (HREL)



46-mile continuous network

 I-64 from Denbigh Boulevard to I-664 (Bowers Hill)

High Occupancy Toll (HOT-2)

Dynamic tolling system



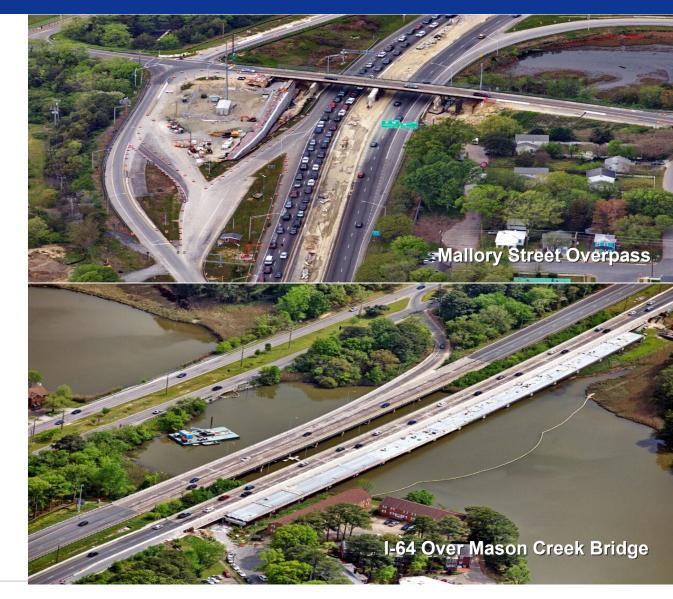
### **Construction Update – Landside**

#### **Completed work:**

- Mallory Street overpass pile driving
- East Bound Willoughby Bay pile driving
- Bay Avenue on-ramp Phase I widening

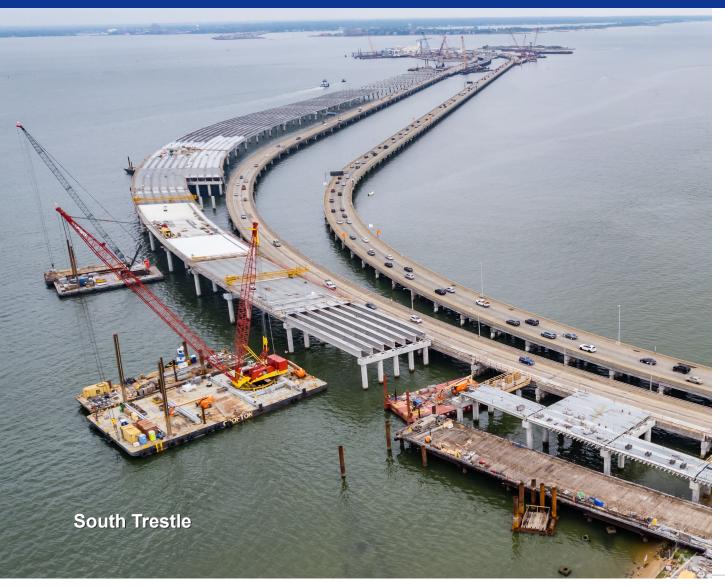
#### Work in progress:

- Mallory Street interchange improvements and overpass replacement
- Widening Work at all mainline and overpass bridges
- Norfolk soundwall installation
- Roadway widening and drainage throughout project corridor





### **Construction Update – Marine Trestle**



#### **Completed work:**

- Eastbound south temporary trestle
- Phase I north trestle eastbound pile driving
- Bay Avenue on-ramp Phase I widening

#### Work in progress:

- North trestle abutment concrete
- North trestle Phase I traffic switch winter 2024
- South trestle deck placements
- Existing south trestle demo



### **Construction Update – Islands**

#### **Completed work:**

- North Island widening
- North Island receiving pit excavation
- South Island launch pit
- Tunnel boring machine (TBM) support equipment and infrastructure

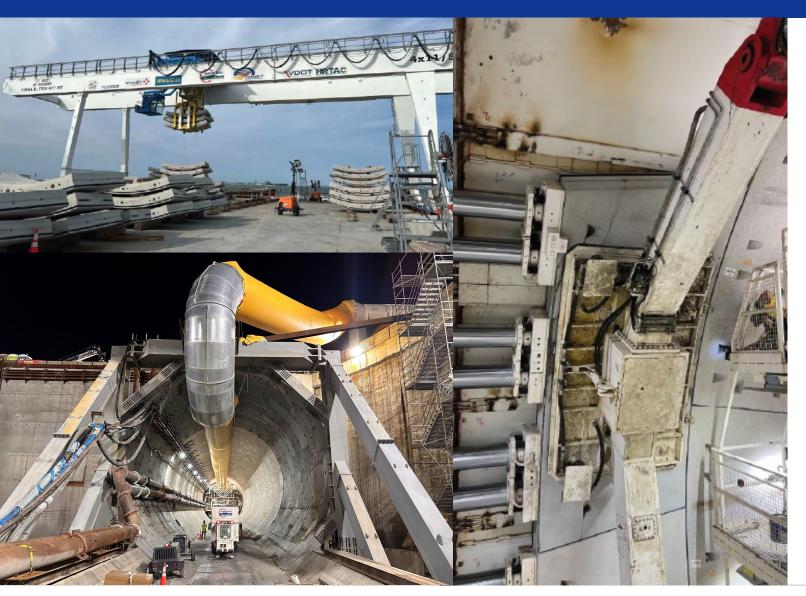
#### Work in progress:

- North Island jet grouting
- North Island receiving pit structural concrete
- South Island tunnel approach structure interior walls
- South Island expansion





### **Construction Update – Tunnel**



#### Tunnel #1:

- Start of mining: April 2023
- To date:
  - 1,345 of 7,940 ft mined
  - 195 of 1,194 rings placed
- Expected breakthrough spring 2024

#### **TBM turnaround:**

Expected 5-month duration

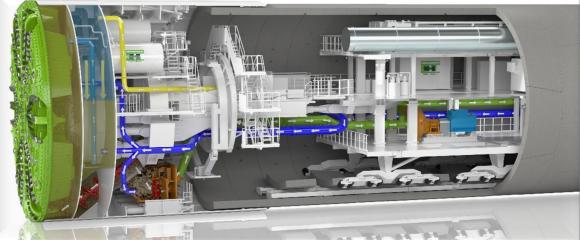
#### Tunnel #2:

- Start of mining expected fall
  2024
- Total Length: 7,940 ft



### What Makes HRBT Unique





- First bored tunnel for VDOT
  - Second largest TBM in North America
  - Fourth bored vehicular tunnel in the United States
- No impacts to navigable waterways
  - New tunnel will be 155 ft. below water surface
- Minimal impacts to traveling public
  - Segments shipped by barge
  - Spoils hauled by water
- Continuous operation
  - Not subject to adverse weather
  - Able to continue 24/7 without interruption

