Long Bridge Project Overview

Bridge Key

<table>
<thead>
<tr>
<th></th>
<th>Bridges</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Polomac River Rail</td>
</tr>
<tr>
<td>2</td>
<td>Polomac River Bike-Ped</td>
</tr>
<tr>
<td>3</td>
<td>I-395 Rail</td>
</tr>
<tr>
<td>4</td>
<td>Ohio Drive SW (East) Rail</td>
</tr>
<tr>
<td>5</td>
<td>Washington Channel Rail</td>
</tr>
<tr>
<td>6</td>
<td>Maine Ave SW Rail</td>
</tr>
<tr>
<td>7</td>
<td>Maine Ave SW Ped</td>
</tr>
</tbody>
</table>
The Project corridor is separated into four areas to reflect the varying site conditions and the transition from parkland to an urban context.
Long Bridge Project Work Progress

- Comment resolution on 30% design plans ongoing
- Utility test pitting
- Plat development for property needs
- Stakeholder coordination
- Permitting outreach
- Construction contract procurement

Amtrak train crossing Potomac River on existing Long Bridge
# Construction Procurement Schedule

## South Package (Design Build)

<table>
<thead>
<tr>
<th>Event</th>
<th>Anticipated Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Release of Request for Qualifications</td>
<td>June 30, 2023</td>
</tr>
<tr>
<td>Statements of Qualification Due</td>
<td>November 30, 2023</td>
</tr>
<tr>
<td>Shortlist announcement</td>
<td>January 2024</td>
</tr>
<tr>
<td>Release of Request for Proposals</td>
<td>February 5, 2024</td>
</tr>
<tr>
<td>Proposals Due</td>
<td>July 2, 2024</td>
</tr>
<tr>
<td>Notification of Highest Ranked Proposer</td>
<td>August 16, 2024</td>
</tr>
<tr>
<td>Design-Build Agreement execution</td>
<td>October 9, 2024</td>
</tr>
<tr>
<td>Substantial Completion</td>
<td>Late 2030</td>
</tr>
</tbody>
</table>

## North Package (Progressive Design Build)

<table>
<thead>
<tr>
<th>Event</th>
<th>Anticipated Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Release of Request for Qualifications</td>
<td>March 24, 2023</td>
</tr>
<tr>
<td>Statements of Qualification Due</td>
<td>May 5, 2023</td>
</tr>
<tr>
<td>Shortlist announcement</td>
<td>June 21, 2023</td>
</tr>
<tr>
<td>Release of Request for Proposals</td>
<td>July 7, 2023</td>
</tr>
<tr>
<td>Proposals Due</td>
<td>September 15, 2023</td>
</tr>
<tr>
<td>Notification of Highest Ranked Proposer</td>
<td>October 20, 2023</td>
</tr>
<tr>
<td>PDB Agreement execution</td>
<td>December 2023</td>
</tr>
<tr>
<td>PDB Phase 1 Services</td>
<td>Q1-Q3 2024</td>
</tr>
<tr>
<td>PDB Phase 2 (contingent) start</td>
<td>Fall 2024</td>
</tr>
<tr>
<td>Substantial Completion</td>
<td>Late 2030</td>
</tr>
</tbody>
</table>
The North Package Progressive Design Build

View looking north into Washington, DC
Overview—Contract Structures

- **Design-Bid-Build**
  - Owner
  - Designer
  - Contractor

- **Design-Build**
  - Owner
  - Contractor
  - Designer

- **Progressive Design-Build**
  - Owner
  - Contractor
  - Designer

- **CM/GC or CMAR**
  - Owner
  - Designer (Collaboration)
  - Contractor
Design-Bid Build Project Phases

Design

100% Design

Procure via Low Bid

Construction

Construction

VPRA

Industry
Design-Build Project Delivery Method

• Design-Build (DB)—Long Bridge South Package
  • Owner advertises RFQs and screens respondents for their qualifications:
    • Best Value—3-4 teams are shortlisted
    • Low Bid—Initial screen of firms, then award based upon low bid upon firms invited to bid
  • Proposers are provided 30% plans and performance specifications
  • Firms develop Alternative Technical Concepts (ATCs) and look for creative ways to build the work more cheaply or efficiently
    • Best Value—award based on some formula accounting for proposal technical score and price
    • Low Bid—award based upon price alone
  • Greater price competition than PDB, but also greater potential for construction claims, particularly for Low Bid DB, because for some projects it can be very difficult to estimate final cost at 30% design
Design-Build Procurement Steps

- Two-step procurement: South Package

**Step 1 - RFQ**
- Prepare RFQ
- RFQ with Industry
- Review and Shortlist

**Step 2 - RFP**
- Prepare RFP
- RFP with Industry
- Review and Identify Preferred Proposer
Progressive Design Build Project Delivery Method

- Progressive Design-Build (PDB)—Long Bridge North Package
  - A two-phase contract—Phase 1 is design development beyond 30%. Contractor begins price negotiations at about 60% design. Phase 1 ends and Phase 2 begins when a price is agreed to and construction is ready to start.
  - Accounts for scope and risk involved with complex project with outside factors that are difficult to control
  - Contract awarded mostly based upon qualifications
  - Price developed by contractor during Phase 1 is verified by an Independent Cost Estimator (ICE). If contractor’s price is more than 10% greater than the ICE’s estimate and this difference cannot be resolved through negotiation, then the contract is terminated, the contractor’s designer completes the design, and the construction is bid as a classic Design-Bid-Build (DBB) contract
Progressive Design-Build Project Phases

Preliminary Engineering

Design/Preconstruction Agreement

Preliminary Engineering

Procure Design-Build

Design/Construction Oversight

Construction

Construction Price

Construction Price Negotiations

60% Design

Design Review/Input Feedback/Input

Design by Design-Build

Design Review/Input Feedback/Input

30% Design

Phase 1

Phase 2
Progressive Design Build Procurement Steps

- Two-step procurement: North Package

**Step 1 – Request For Qualifications**
- Prepare RFQ
- RFQ with Industry
- Review and Shortlist 3-4 Teams

**Step 2 – Request For Proposals**
- Prepare RFP
- RFP with Industry
- Review and Identify Preferred Proposer
Progressive Design Build Procurement—Two Steps

• Step 1—Statements of Qualifications evaluated for relevant project experience, key personnel, overall project approach, quality management. The 3-4 highest scoring teams are then shortlisted.

• Step 2—Proposals are evaluated for detailed project approach broken out into Phase 1 and Phase 2 services, risk management, quality management, and approach to negotiating a construction price for Phase 2 services. Price for Phase 1 services and Phase 2 construction multipliers are part of the selection formula.

Salamander Hotel, Washington Marina, Maine Avenue Pedestrian Bridge, Maine Avenue Rail Bridge, 14th Street Ramp
Progressive Design Build Contract-Two Phases

• Phase 1 (Design Development/Construction Price Negotiation) progresses the design beyond 30% and develops a price starting around 60%. ICE develops estimate on an open book basis until each side’s prices are within 10%.

• Phase 2 (Design Completion/Construction) finishes the design and constructs the work agreed upon during the Phase 1 price negotiations.

North Package corridor looking south to Virginia
Means of Controlling Cost for PDB

Phase 1—team’s not-to-exceed fee limits what can be charged for Phase 1 services.

Phase 2—
1. Construction multiplier (profit margin and home office overhead) is capped.
2. ICE rigorously evaluates the Design-Builder’s price to ensure it is fair.
3. The contractor's estimates are required to be open book.
4. ICE estimate may not be more than 10% less than the contractor’s price, otherwise contractor’s price is rejected. VPRA can require the PDB designer to complete the design.
5. Self-performance is limited to 50% of the construction price, remaining 50% is subject to competitive bidding by subcontractors.
Next Steps for North Package

- For VPRA evaluation team—develop shortlist from submitted SOQs by June 21, 2023
- For Long Bridge Project team—release RFP by July 7, 2023
- For shortlisted PDB teams—submit proposals by September 15, 2023
- For VPRA Board—approve contract award at December 6, 2023 Board Meeting

Amtrak train heading north through North Package corridor