

**I-5 / US-12 / SR 507 Thurston & Grays Harbor County  
Remove Fish Barriers**



Progressive Design-Build Project Approval Application September 28, 2023

# Introductions

**Chris Christopher, P.E.**

Director of Construction Division  
State Construction Engineer

**Jon Keeth, P.E.**

Lead Construction Engineer for Projects

**MaryLou Shannon, P.E.**

Olympic Region Assistant Region Administrator  
for Construction

**Dean Moon, P.E.**

Olympic Region Project Development Engineer/PDB

**Jim Sammet, P.E. (Consultant)**

Olympic Region Tumwater Design Office,  
PDB Procurement Manager



# AGENDA

- **WSDOT's DB & PDB Background** ..... Chris Christopher
- **Fish Passage Injunction** ..... Dean Moon
- **Project Overview** ..... Dean Moon
- **Benefits of Progressive Design Build** ..... MaryLou Shannon  
(Evaluation Criteria A, B)
- **WSDOT Body of Experience** ..... Jim Sammet  
(Evaluation Criteria C, D, E)
- **PDB Lessons Learned/ Successes** ..... MaryLou Shannon
- **SVBE & MWBE Strategy**..... Jon Keeth
- **Response to PRC Questions**..... Jon Keeth
- **Questions ?**

# WSDOT Design-Build Experience

WSDOT– Authority RCW 49.20.780 and RCW 47.20.785

- **Design-Build Delivery History (Since 2001)**
  - 45 Design-Build contracts completed
  - 31 current projects under procurement or construction
- **Major Design-Build Program Examples**
  - Alaskan Way Viaduct Replacement Program
  - SR520 Bridge Replacement and HOV Program
  - Puget Sound Gateway Program SR167 & SR509
  - I-405/SR167 Corridor Program

**Total aggregate value \$11.2 Billion**



# WSDOT Design-Build Experience

## Fish Passage Design-Build Experience

- Multiple Design-Build Fish Passage projects completed
- (18) Eighteen under procurement or construction
- (2) Progressive Design-Build Projects:
  - (Coastal 29) US 101/ SR109, Grays Harbor/Jefferson/Clallam County - Remove Fish Barriers – Underway
  - (Kitsap 29) SR3/SR104/SR303/SR307/SR308 Kitsap County - Remove Fish Barriers - Awarded



# Fish Passage Federal Court Injunction

**WSDOT has about 2,000 fish barriers statewide.** Correcting barriers helps open up habitat to allow fish at all life stages to access important spawning and rearing habitat.

Area Covered by Injunction



**Approximately 1,000 barriers subject to the Federal Injunction**

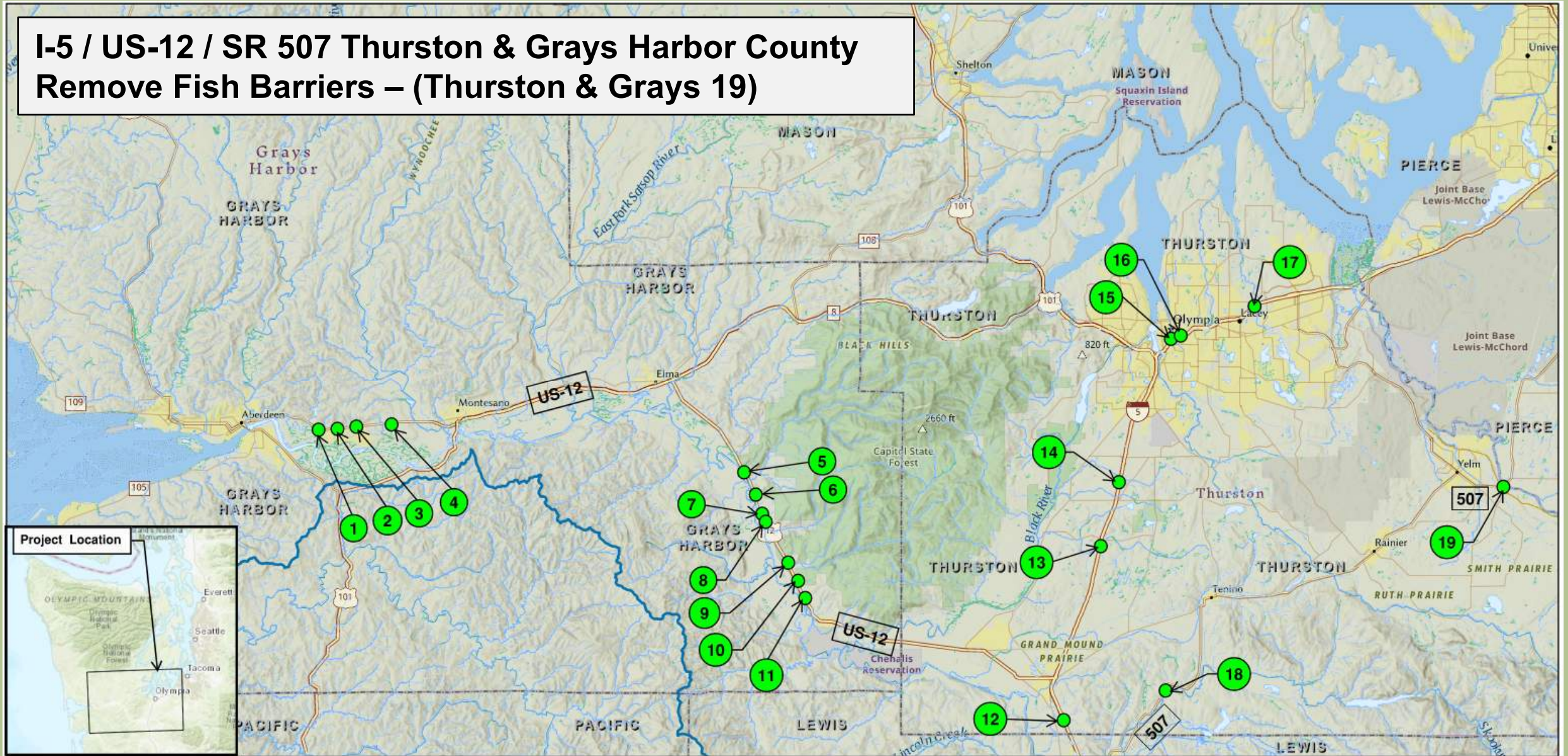
Open barriers with significant habitat that address 90% of blocked habitat by 2030. Approximately **400** barriers to be corrected

Correct deferred barriers at the end of the structure's life as part of a transportation project. Approximately **450** barriers remain

Approximately **114** barriers have been removed through **2022** construction season

# Project Overview

## I-5 / US-12 / SR 507 Thurston & Grays Harbor County Remove Fish Barriers – (Thurston & Grays 19)



# Benefits of Progressive Design Build

## Evaluation Criteria A

**Provides substantial fiscal benefit or traditional delivery method is not practical**

### **Delivery Schedule – Traditional Delivery Method Not Practical**

- Traditional delivery will not meet the Federal Injunction Date
- PDB provides faster procurement
- Multiple Culvert Amendment Bundles
  - Streamlined Environmental and Permitting
  - Faster Construction Start
- Important delivery tool for Fish Passage Program

### **Fiscal Benefit**

- Contract Incorporates Multiple Culvert Amendment Bundles
- Risk sharing approach reduces change order and claims



# Benefits of Progressive Design Build

## Evaluation Criteria B

Project meets qualifying criteria under RCW 39.10.300

1. **The construction activities are highly specialized, and a PDB approach is critical**
  - Short Construction Windows - “Fish Windows”
  - Environmentally Sensitive Locations
  - Design and Construct Stable Stream Habitat
  - Significant Structures & Complex Construction
  - Mitigation for Significant Community Impacts
  
2. **The projects selected provide opportunity for greater innovation or efficiencies between the designer and the builder**
  - The Project includes complex sites requiring railroad collaboration to develop innovation solutions
  - Construction Staging and Traffic Control on I-5 through downtown Olympia

# Benefits of Progressive Design Build

## Evaluation Criteria B

Project meets qualifying criteria under RCW 39.10.300

### 3. “Significant savings in project delivery time” achieved by:

- Faster Procurement and Project Delivery
- Staffing – Leverage Industry Resources
- Bundling Efficiencies - Sequencing of Culvert Bundles for Construction
- Delivery Schedule – Traditional Design-Bid-Build Method Not Practical

# WSDOT Body of Experience

(Evaluation Criteria C - Public Body has necessary experience or team)

## 1. Sufficient contract administration personnel with construction experience

- **Strong Design-Build Delivery History**
  - 76 total projects,
  - 45 completed, 31 currently under development or in construction
  - Total contract value **\$11.2 billion**
- **DBIA Certified Training Program - Over 800 staff trained**
- **Documented DB Processes**
  - WSDOT Design-Build Manual, Design Manual, Construction Manual etc.
- **RCW 39.10 Delivery Experience**
  - Heavy Civil GC/CM: Seattle Multimodal Terminal at Colman Dock Project
  - Progressive Design Build: US101/SR109, Grays Harbor/Jefferson/Clallam-Remove Fish Barriers
  - Progressive Design Build: SR3/SR104./SR303/SR307/SR308, Kitsap County-Remove Fish Barriers

# WSDOT Body of Experience

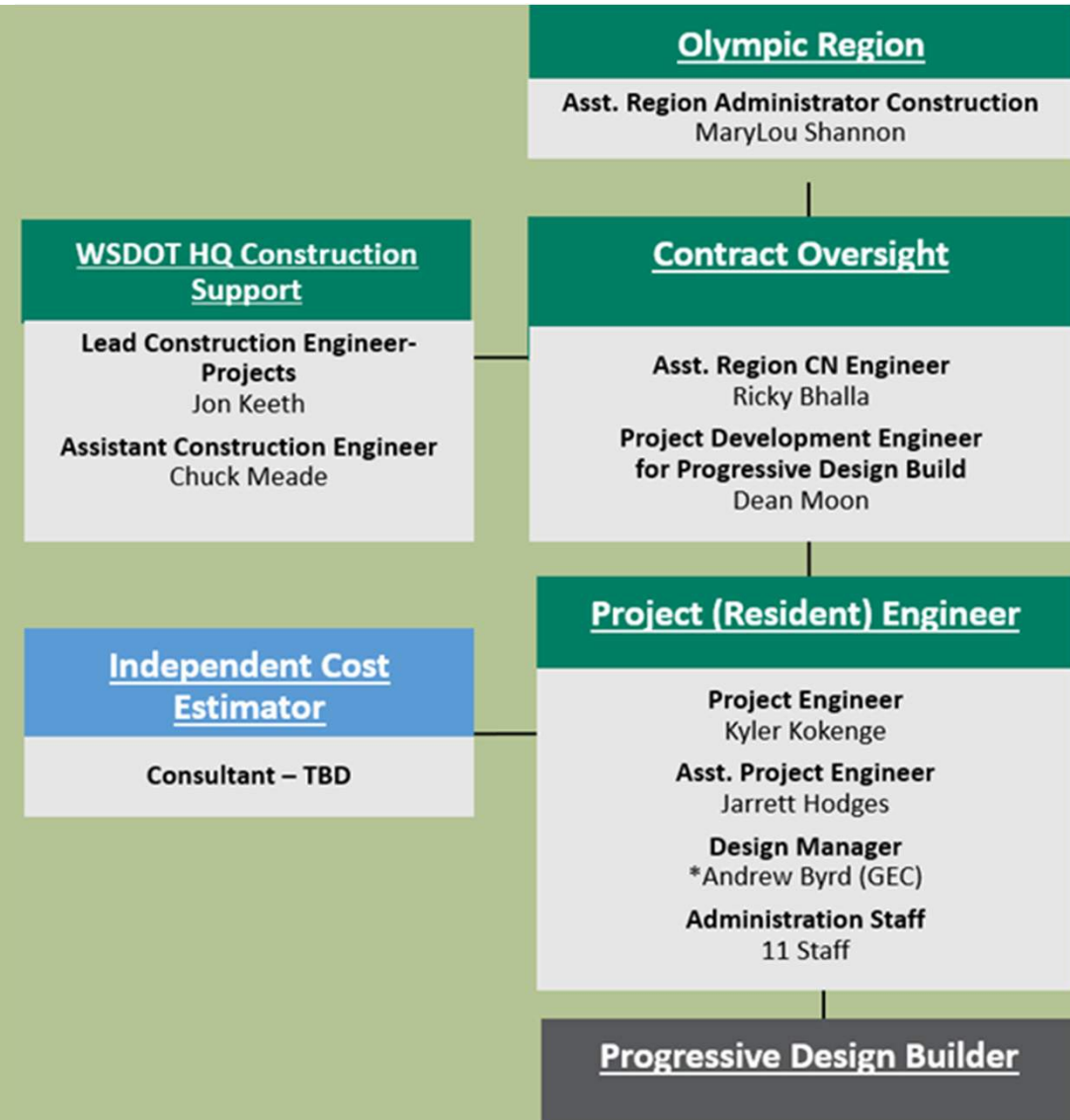
## (Evaluation Criteria C)

### 2. Sufficient contract administration personnel with construction experience

#### Contract Administration Team Organization

- Construction Personnel Knowledgeable in DB process & capable to oversee & administer the contract
- Project (Resident) Engineer's Office
  - Project Engineer (Project Manager) – Kyler Kokenge
  - Assistant Project Engineer – Jarrett Hodges
  - Design Manager – Andrew Byrd\*
  - 11 staff – Dedicated to contract administration
- Olympic Region Construction support
- HQ Construction support
- Independent Cost Estimator support
- \*Staff augmentation through General Engineering Consultant (GEC)

*All knowledgeable and experienced in PDB contract administration process*



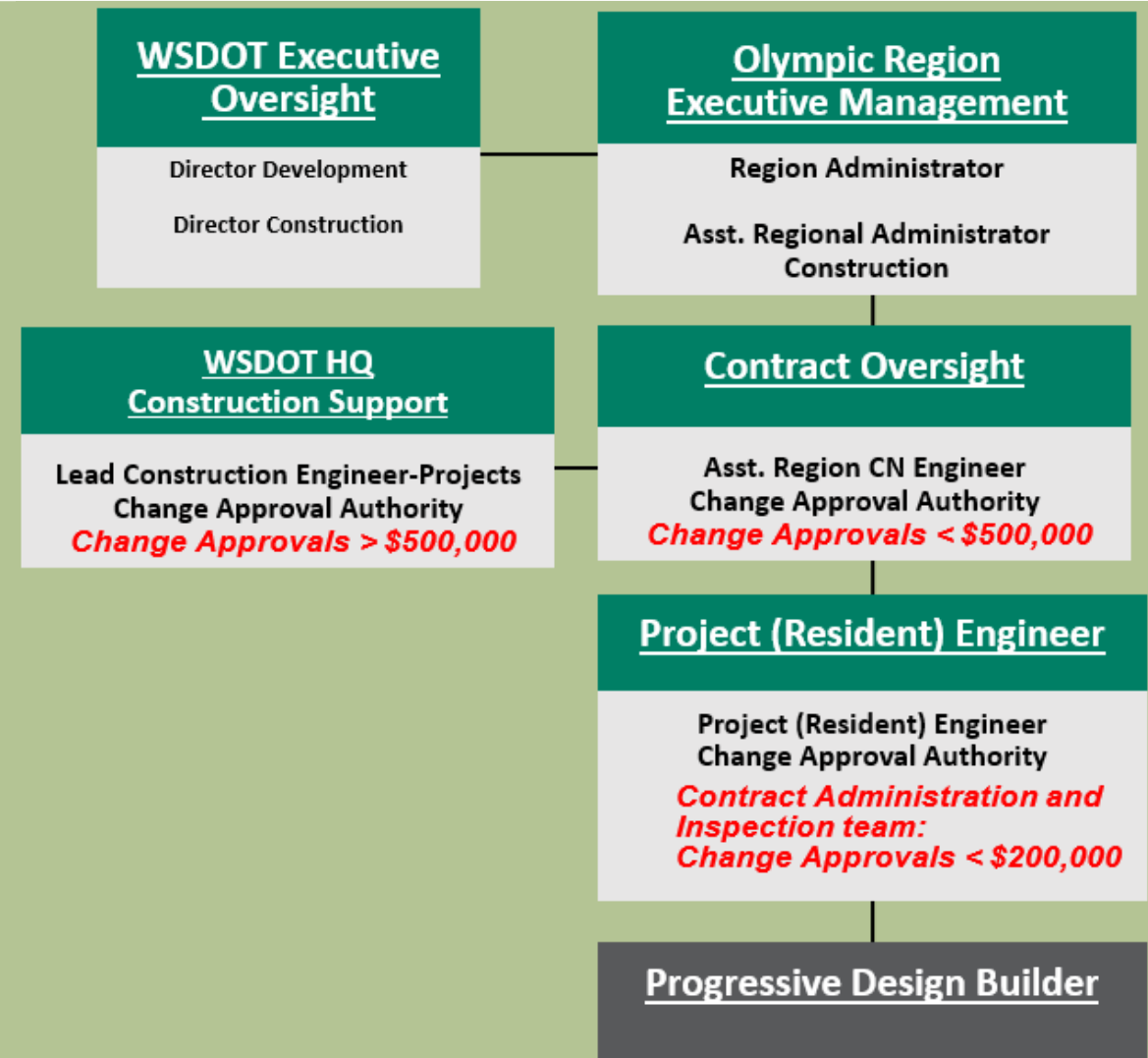
# WSDOT Body of Experience

(Evaluation Criteria C)

## 3. Written management plan with clear & logical lines of authority

### WSDOT Project Management

- Established design and construction oversight procedures for managing quality, cost, and schedule for design-build projects
- Standard Processes outlined in WSDOT *Design Manual*, *Construction Manual*, and *Design Build Manual*
- Management supported by organization's project controls methods
- Established Change Management Process



# WSDOT Body of Experience

(Evaluation Criteria C)

## 4. Necessary & appropriate funding and time to carry out the project

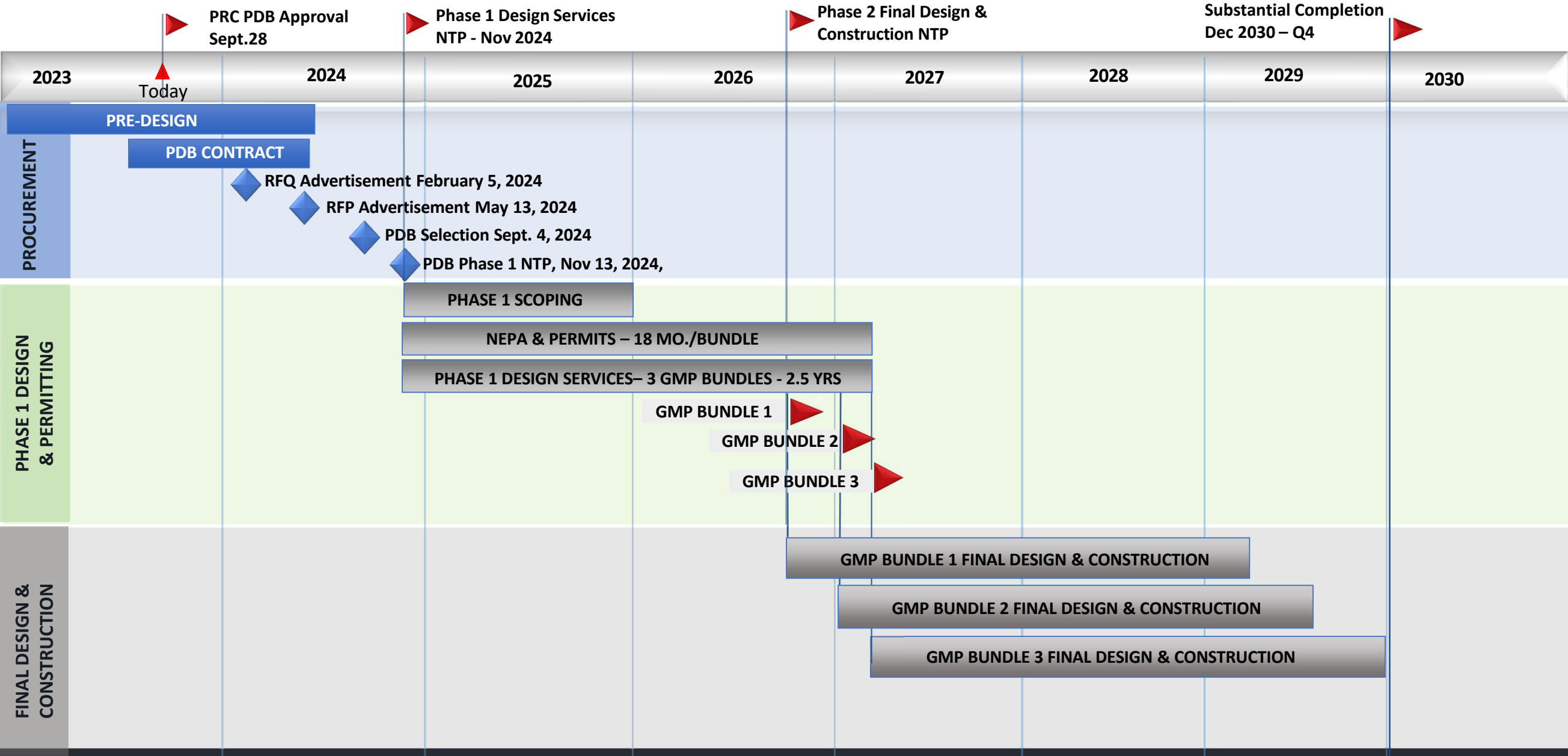
### *Project Funding*

- This project is fully funded as part of the WSDOT Fish Passage Program

### *Project Schedule*

- Procurement Schedule; 9 months to Select Design-Builder
- Phase 1 Design Schedule; 2.5 years to complete Design for GMP Bundles
- NEPA & Permitting for Culvert Amendment Bundles; 18 Months for each Bundle
- Phase 2 Final Design & Construction; 3.5 years to complete Culvert Bundles

# Project Schedule



# WSDOT Body of Experience

(Evaluation Criteria C)

## 5. Continuity of project management team with project type & scope experience

### *Project Management Team*

- Demonstrated DB and PDB Fish Passage projects
- Established PDB Delivery Team
- PDB Procurement - Tumwater Design Office
  - 2 Successful PDB Procurements for Fish Passage Projects
- PDB Administration - Project (Resident) Engineer's office
  - Currently administering PDB Contract for Coastal 29 Project
  - Expanding and training PDB staff for the Kitsap 29 Project



# WSDOT Body of Experience

(Evaluation Criteria C)

## 6) Necessary & appropriate construction budget

### ***Construction Budget***

- Construction budget based on Conceptual Design Level Construction Estimate
- Estimate Includes 20-30% allowance for scope definition
- Administration costs and contingencies developed for total Project Budget

### ***Project Budget***

Costs for Professional Services (A/E, Legal etc.)	\$ 8,100,000
Estimated project construction costs ( <i>including construction contingencies</i> ):	\$380,369,000
Contract administration costs (owner, cm etc.)	\$ 21,300,000
Contingencies (Construction – approximately 5% of construction total)	\$ 18,306,000
<u>Sales Tax</u>	<u>\$ 28,570,000</u>
<b>Total</b>	<b>\$457,645,000</b>

# WSDOT Body of Experience

## Evaluation Criteria D - Construction personnel independent of the DB team

### ***Construction Administration***

- WSDOT Olympic Region Organizational Structure Ensures Independent Contract Oversight
- Project (Resident) Engineer's Office Staffing
  - Independent Project Management
  - Project Manager + (2) Assistant PMs
  - Project Administration Staff
    - Inspection (3), QA Testing (1)
    - Design Coordination (1), Project Controls (1)
    - Payments (1), Materials (2)
  - Independent Cost Estimator (Consultant)

***All knowledgeable and experienced in PDB process***

# WSDOT Body of Experience

## Evaluation Criteria E

Public Body has resolved any audit findings relative to previous projects

### *Audit Findings*

- WSDOT has no audit findings to resolve

# Current PDB Lessons Learned

## WSDOT PDB Projects

- US-101/SR 109 Grays Harbor/Jefferson/Clallam - Remove Fish Barriers Project (Coastal 29)
- SR 3/ SR 104/ SR 303/SR 307/ SR 307 Kitsap Co. Remove Fish Barriers (Kitsap 29)

## Lessons Learned

- Contract is well defined and hasn't been modified significantly from Coastal 29
- Increased Phase 1 Scope and Level of Effort
  - NEPA
  - Changes stream design and technical requirements for scour & lateral migration
  - Significant resource co-manager engagement & managing expectations
  - Advancing geotechnical engineering to mitigate risks
- Low initial cost estimate & inflationary cost increases

# SVBE & MWBE Goals

## **Small and Veteran-Owned Business Enterprises (SVBE)**

- Enforceable Contract Goals
- Goals expressed as a percentage of the Design-Builder's total proposal price plus change orders.
- Small Business Enterprises (SBE) To Be Determined (Up to 5%)
- Veteran-Owned Business (VOB) TBD (Up to 5%)

## **Minority and Women Business Enterprise (MWBE)**

- Voluntary Contract Goals
- Goals expressed as a percentage of the Design-Builder's total proposal price plus change orders.
- Minority Business Enterprises (MBE) 10 percent
- Women Business Enterprises (WBE) 6 percent

The Contract will require the selected design-builder to submit a SVBE and MWBE participation plan and meet good faith effort requirements.

# PRC Committee Questions and Responses

## WA STATE DEPT. OF TRANSPORTATION – DESIGN-BUILD

### *THURSTON & GRAYS HARBOR COUNTIES REMOVAL OF FISH BARRIERS PROJECT*

1. Please provide a more aggregated project schedule to reference. The only schedule available was the graphic that compares DBB to DB and PDB but is not refined enough to make sure some project milestones are being considered.
2. At what point do you begin the outreach process? Currently it appears as if you only think about it when the construction phase begins rather than at inception of the project.
3. As a follow-up to your response to Question 10 (Subcontractor Outreach), please address the following:
  - Could WSDOT bring a past successful story of the Capacity Building Mentorship Program (CBMP)? Perhaps having an actual participant of the CBMP to share their experience from a project. WSDOT has an established program with a good foundation and desire know more about the quality aspect of the program over numbers.
  - Looking at the past records of participation the goals are met and exceeded. What are your thoughts of raising them? The pattern indicates that WSDOT can set higher goals – the Design-Builder shows a healthy pattern of beating the goals. Shall we raise the goals and find out the limits? SBE 9%, VOB 2%, MBE 15% and WBE 9%

# PRC Committee Questions and Responses

## 1. Please provide a more aggregated project schedule to reference.

- Project Schedule Covered in Presentation - see slide 15
- Question Response included a more detailed aggregated schedule

# PRC Committee Questions and Responses

2. At what point do you begin the outreach process? Currently it appears as if you only think about it when the construction phase begins rather than at inception of the project.

*Outreach begins at project initiation and continues through each phase of the project:*

- Pre-Design Phase
- Procurement Phase
- Proposal Phase
- Phase 1 Design Services
- Phase 2 Final Design and Construction



# PRC Committee Questions and Responses

**3. (a) Could WSDOT bring a past successful story of the Capacity Building Mentorship Program (CBMP)? Perhaps having an actual participant of the CBMP to share their experience from a project. WSDOT has an established program with a good foundation and desire know more about the quality aspect of the program over numbers.**

- We have provided a copy of the most recent report for the Capacity Building Mentorship Program from the Minority Business Development Agency as Attachment 2 in response to this question.
- The CBMP report included testimonials from participants in the program

# PRC Committee Questions and Responses

**3. (b) Looking at the past records of participation the goals are met and exceeded. What are your thoughts of raising them? The pattern indicates that WSDOT can set higher goals – the Design-Builder shows a healthy pattern of beating the goals. Shall we raise the goals and find out the limits? SBE 9%, VOB 2%, MBE 15% and WBE 9%**

- WSDOT must administer a narrowly tailored MBE and WBE programs based upon availability.
- The current administrative code requirement for SVBE participation is five percent.



**Questions ?**