The background of the slide is a photograph of a river with several salmon swimming in the water. The river is surrounded by lush green trees and vegetation. The water is clear, and the salmon are visible in various positions throughout the river.

**SR3 / SR104 / SR303 / SR307 / SR308 Kitsap County
Remove Fish Barriers
(Kitsap 25) Project**

Progressive Design-Build Project Approval Application July 28, 2022

Introductions

Chris Christopher, P.E.

Director of Construction Division
State Construction Engineer

MaryLou Nebergall, P.E.

Olympic Region Assistant Region Administrator
for Construction

Ricky Bhalla, P.E.

Olympic Region Assistant Construction Engineer

Jim Sammet, P.E. (Consultant)

Olympic Region Tumwater Design Office
Assistant Project Engineer,
Progressive Design Build Procurement Manager



WSDOT Design-Build Experience

WSDOT – Current Design Build Authority
RCW 49.20.780 and RCW 47.20.785

- **Design-Build Delivery History (Since 2001)**
 - 44 Design-Build contracts completed
 - 23 additional projects under procurement or construction
- **Major Design-Build Project Examples**
 - Tacoma Narrows Bridge
 - Alaskan Way Viaduct – Bored Tunnel
 - SR 520 Floating Bridge and Landing
 - I-405 Corridor Program DB Projects

Total aggregate value \$9.9 Billion



WSDOT Design-Build Experience

Fish Passage Design-Build Experience

(4) Four projects completed:

- Coffee Creek Remove
- Trafton Creek & Schoolyard Creek
- SR 202/Evans Creek & Patterson creek
- I-5 & SR 548 Tributaries to California Creek

(7) Seven under procurement or construction

- SR 3/Chico Way Bridge Vic
- I-5 & SR 11 Padden Creek
- SR 108/US 101 Mason and Thurston Co.
- I-90, SR 161, SR 202, SR 203
- SR 20, Olson Creek and Unnamed Tributary to Skagit River
- US 101, Jefferson & Clallam Co.

(1) One Progressive Design-Build:

- US 101/ SR109, Grays Harbor/Jefferson/Clallam - Remove Fish Barriers Jefferson & Clallam County (Coastal 29)



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 remaining

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

Approximately **100** barriers have been removed through **2021** construction season

Fish Barrier Project Examples

SR 307 - Dogfish Creek, Tributary to Liberty Bay

Before Construction



The old crossing was a 4 ft diameter concrete pipe. The culvert was undersized for the watershed and a velocity barrier for fish passage.

After Construction



The new crossing is a 20 ft wide box culvert that provides access to 4.9 mi of habitat for chum, chinook, and coho salmon, steelhead, sea run cutthroat and resident trout.

Fish Barrier Project Examples

SR 112 - Jansen Creek, Tributary to Strait of Juan de Fuca

Before Construction



The old crossing consisted of twin 6 ft diameter concrete pipes that were a barrier to fish passage due to excessive slope

After Construction



The new crossing is a bridge that spans the full channel with a width of 52 ft and provides access to 3.55 mi of habitat to coho salmon, steelhead, sea run cutthroat and resident trout..

Fish Barrier Project Examples

SR 116 - Kilisut Harbor

Before Construction



The old crossing on SR 116 consisted of two 5 ft diameter concrete culverts that prevented adequate tidal exchange and was considered a partial barrier for fish passage.

After Construction

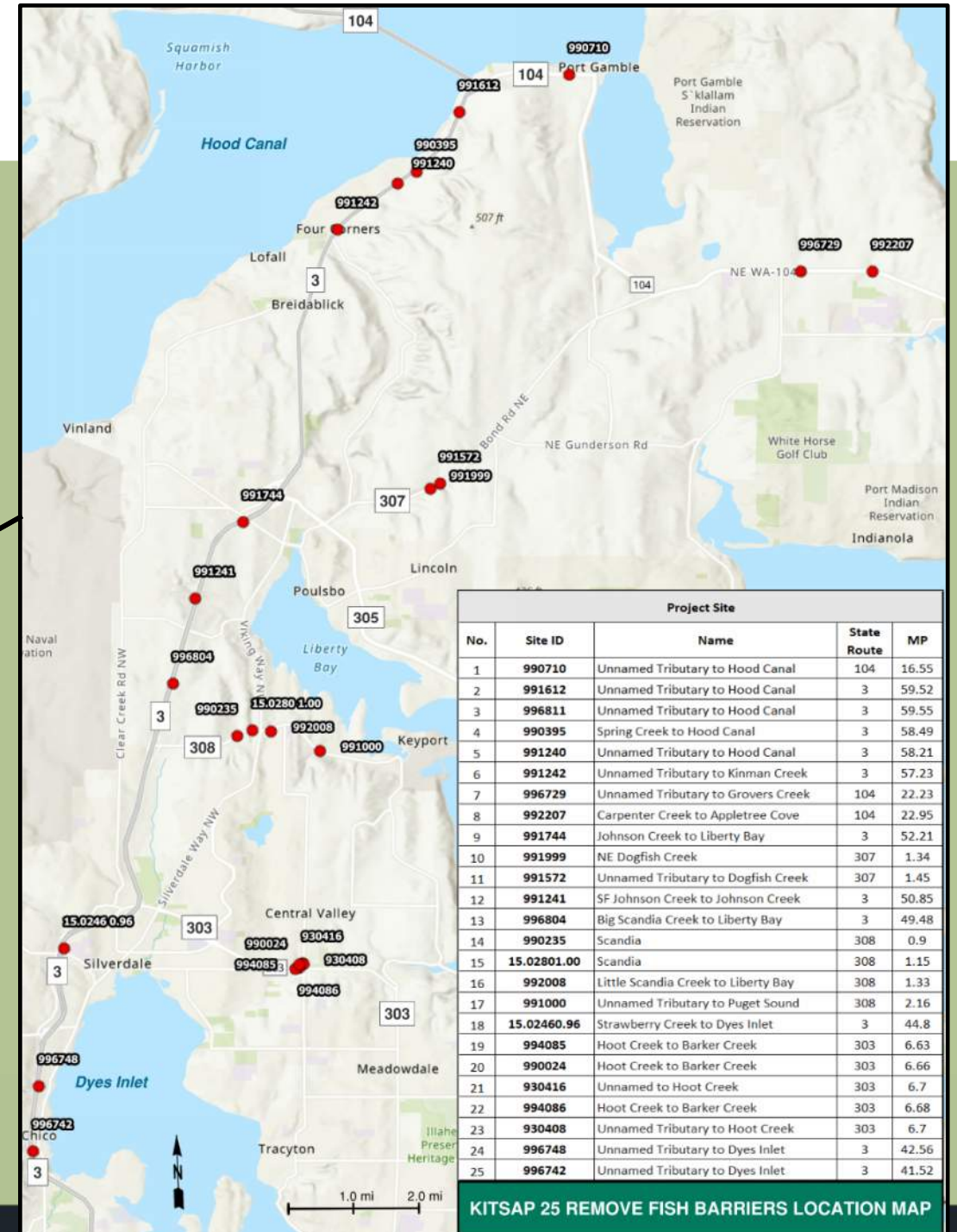
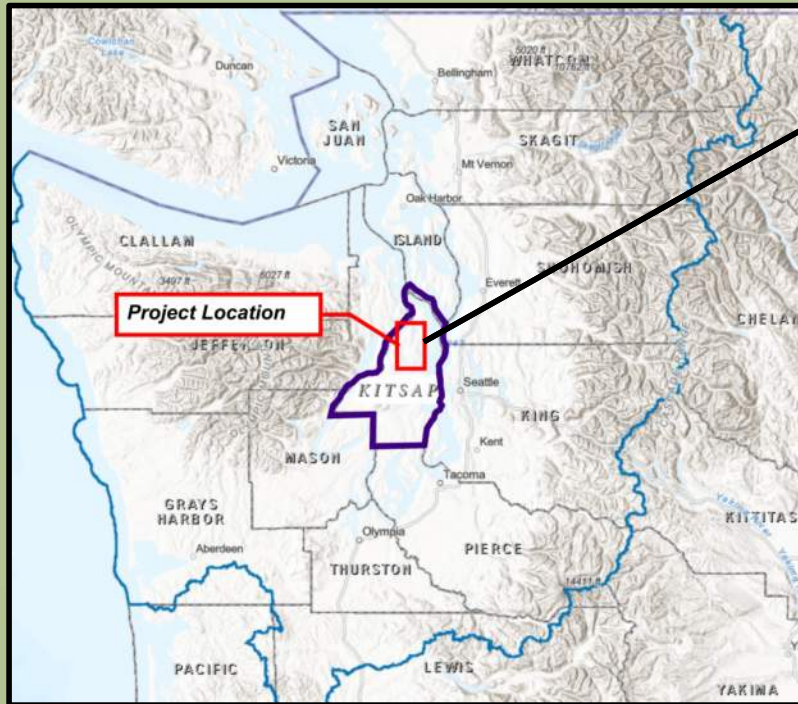


The new crossing is a multi-span bridge totaling approximately 410 ft. The reconstructed channel includes a tidal marsh area and a navigable connection for small craft between Oak Bay and Kilisut Harbor.

Project Overview

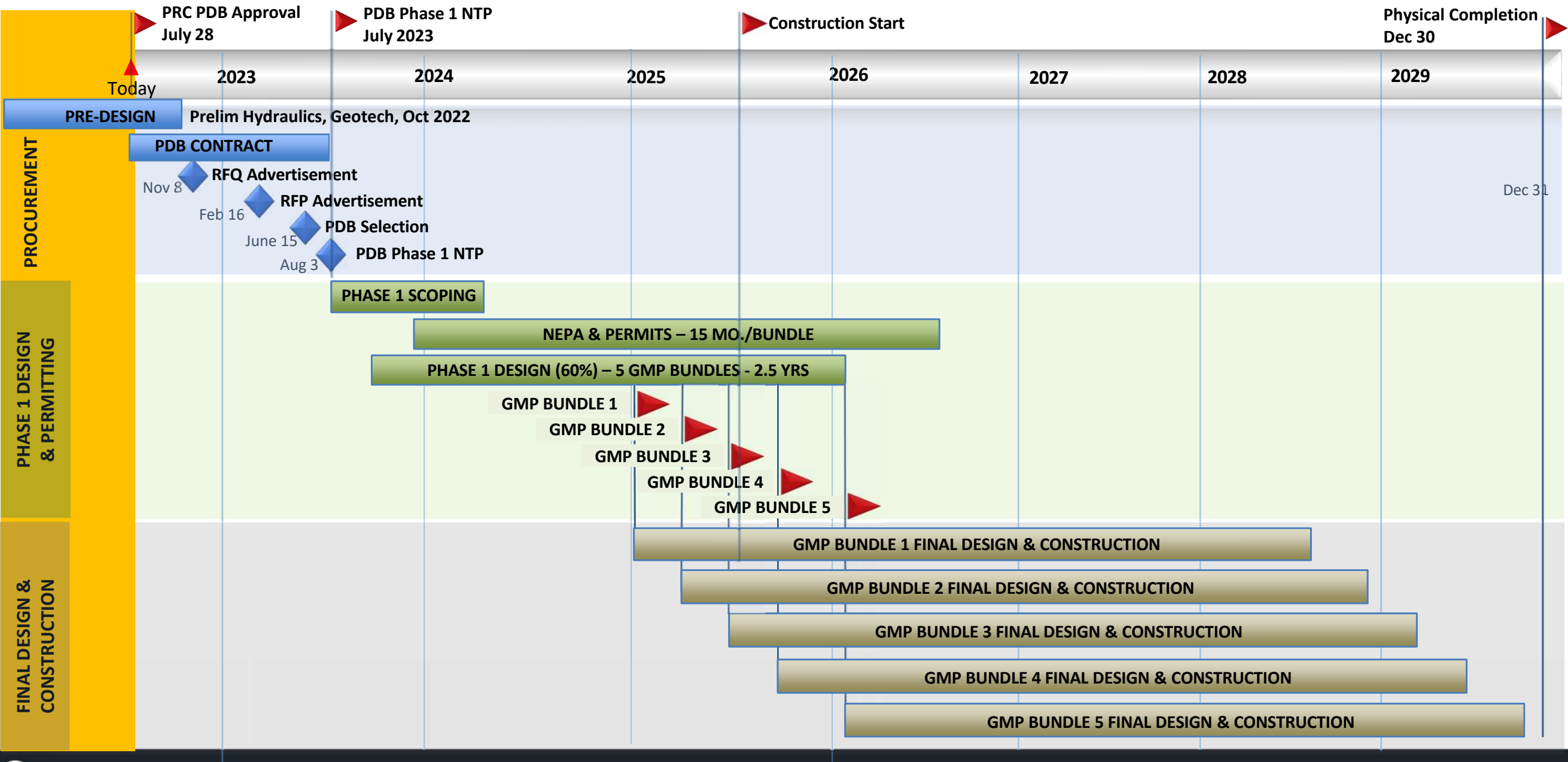
SR3 / SR104 / SR303 / SR307 / SR308 Kitsap County Remove Fish Barriers – (Kitsap 25)

- Located in Kitsap County
- 25 Fish Barrier Locations
- Locations in Close Proximity
- Project Budget: \$457 Million



KITSAP 25 REMOVE FISH BARRIERS LOCATION MAP

Project Schedule



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

- PDB Provides Faster Procurement
- PDB with Multiple GMP Bundles
 - Streamlined Environmental and Permitting
 - Faster Construction Start
- Important delivery tool for Fish Passage Program

Fiscal Benefit

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

✓ *Project Meets Evaluation Criteria A*

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

2. **The project selected provides opportunity for greater innovation or efficiencies**
 - Innovation Through Collaborative Approach
 - WSDOT-Contractor-Resource Agencies/Co-Managers
 - GMP Bundling Efficiencies

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 GMP Bundles for Construction
 - Delivery Schedule – Traditional Design-Bid-Build Method Not Practical

✓ *Project Meets All Three Criteria*

WSDOT Body of Experience

Evaluation Criteria C.1

Project Delivery Knowledge and Experience

Strong Design-Build Delivery History

- 67 total projects,
- 44 completed, 23 currently under development or in construction
- Total contract value **\$9.9 billion**

DBIA Certified Training Program

- Over 800 staff trained (internal & external staff)

Documented DB Processes

- WSDOT Design-Build Manual

RCW 39.10 Delivery Experience

- Heavy Civil GC/CM: Seattle Multimodal Terminal at Colman Dock Project
- Project Progressive Design Build: US101, SR109, Grays Harbor/Jefferson/Clallam-Remove Fish Barriers (Coast 29) Project

WSDOT Body of Experience

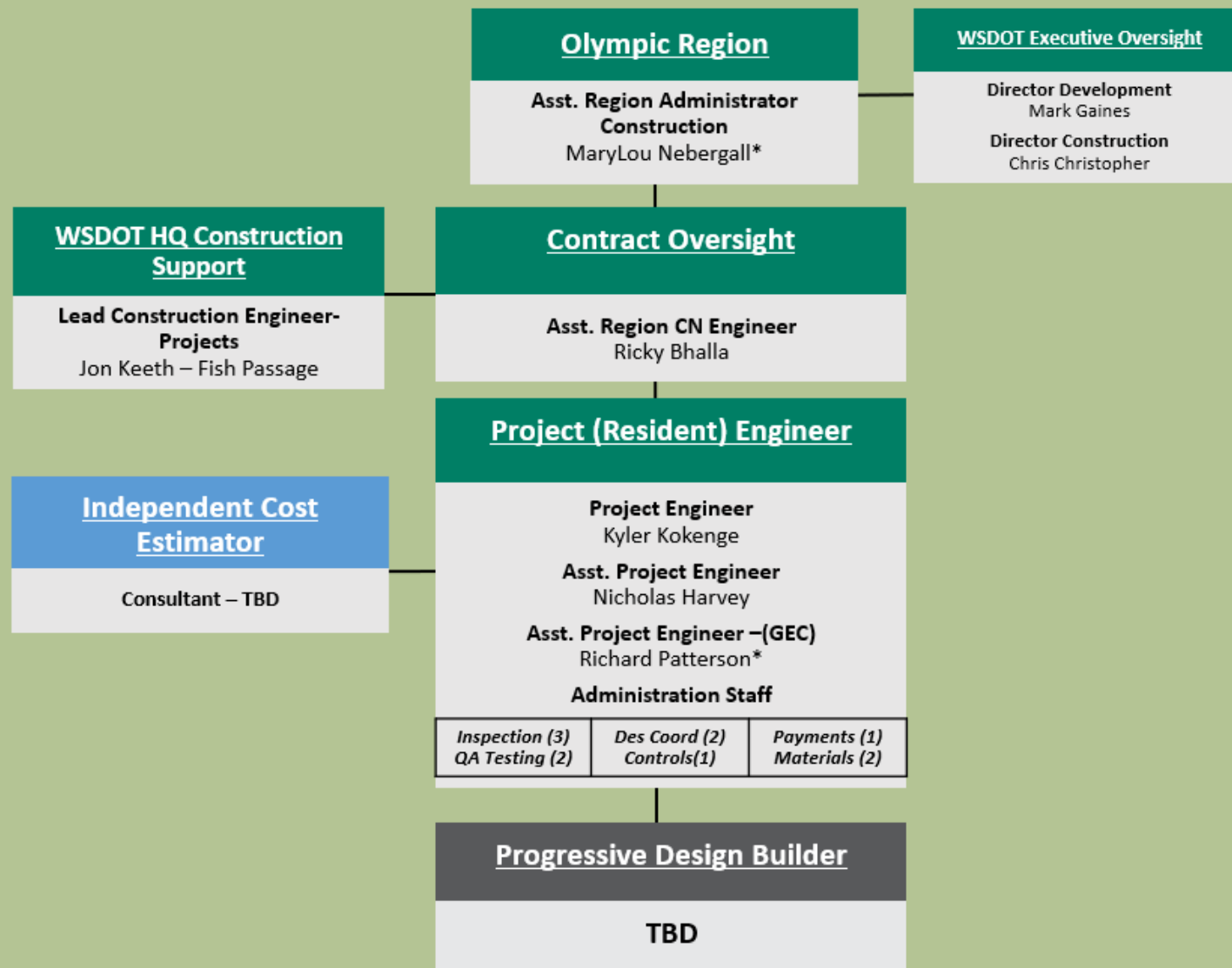
Evaluation Criteria C.2

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 – Kyler Kokenge
 - Assistant PE – Nicholas Harvey
- Region Construction support
- HQ Construction support

Team is knowledgeable and experienced in Design-Build contract administration process



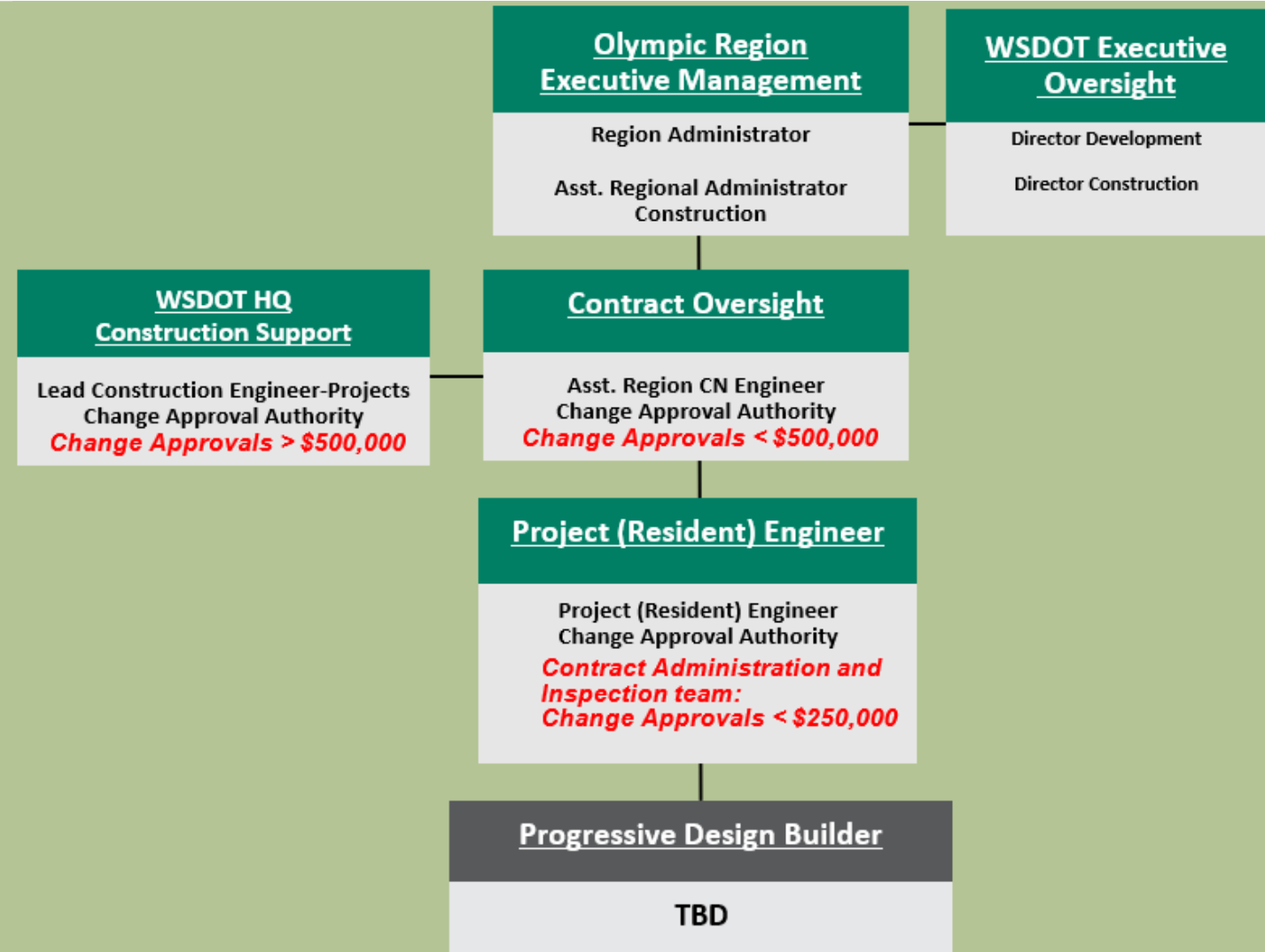
WSDOT Body of Experience

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*
- Established Change Management Process



WSDOT Body of Experience

Evaluation Criteria C.4

Necessary & appropriate funding and time to carry out the project

Project Funding

- Fish Passage Program fully funded (\$3B+) provides budget flexibility

Project Schedule

- Procurement Schedule; 9 months to Select Design-Builder
- Phase 1 Design Schedule; 3 years to complete Design for GMP Bundles
- NEPA & Permitting for GMP Bundles; 12 to 15 months for each GMP Bundle
- Phase 2 Final Design & Construction; 6 years to complete GMP Bundles

WSDOT Body of Experience

Evaluation Criteria C.5

Continuity of project management team with project type & scope experience

Project Management Team

- Demonstrated DB and Fish Passage DB experience
- PDB Procurement - Tumwater Design Office
 - 4 DB Procurements
 - 2 DB Procurements for Fish Passage Projects
- Established PDB Contract Administration Team
- PDB Administration - Project (Resident) Engineer's office
 - Demonstrated delivery of DB Fish Barrier Removal projects
 - Currently administering PDB Contract for US101, SR109, Grays Harbor/Jefferson/Clallam-Remove Fish Barriers Project

WSDOT Body of Experience

Evaluation Criteria C.6

Necessary & appropriate construction budget

Project Budget

Costs for Professional Services (A/E, Legal etc.)	\$6,800,000
Estimated project construction costs (<i>including construction contingencies</i>):	\$358,000,000
Equipment and furnishing costs	\$n/a
Off-site costs	\$n/a
Contract administration costs (owner, cm etc.)	\$34,000,000
Contingencies (design & owner)	\$24,000,000
Other related project costs (briefly describe)	\$n/a
Sales Tax	\$34,200,000

Total \$457,000,000

Construction Budget

- Construction estimate based on Concept Design Level Estimate and comparison to culvert sites with similar complexity
- Includes 5% (\$17M) construction contingencies
- Includes \$24M preconstruction contingencies for scope definition

✓ ***Project Meets All 6 Criteria***

WSDOT Body of Experience

Evaluation Criteria D

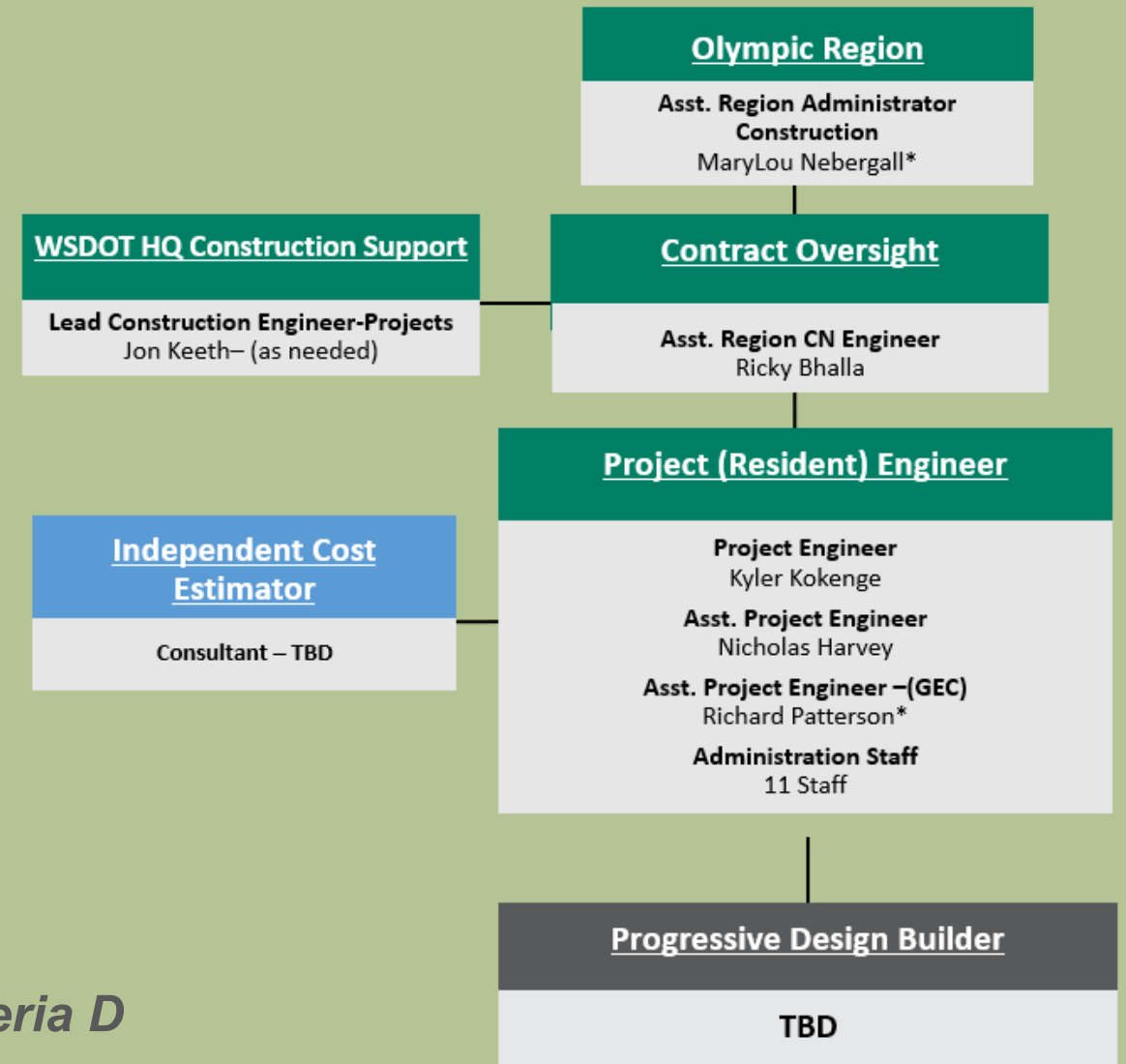
Construction personnel independent of the DB team

Construction Administration

- WSDOT Olympic Region Organizational Structure
 - Ensures independent oversight of contract
- Project (Resident) Engineer's Office Staffing
 - Project Manager + (2) Assistant PMs
 - Dedicated Project Administration Staff
 - Independent Cost Estimator (Consultant)

All knowledgeable and experienced in DB process

✓ *Project Meets Evaluation Criteria D*



Current PDB Lessons Learned

US 101/SR 109 Grays Harbor/Jefferson/Clallam - Remove Fish Barriers Project (Coastal 29)

Lessons Learned

- Contract is well defined and easy to administer through Phase 1
- Phase 1 has been very collaborative between WSDOT/DB
- Increased Phase 1 Scope and Level of Effort
 - NEPA
 - Stream scour & lateral migration
 - Co-manager engagement & expectations
 - Advancing geotechnical engineering
- Low initial cost estimate & inflationary cost increases

SVBE & MWBE Goals

Small and Veteran-Owned Business Enterprises (SVBE)

- Mandatory Contract Goals
- Goals expressed as a percentage of the Design-Builder's total proposal price plus change orders.
- Small Business Enterprises (SBE)
- Veteran-Owned Business (VOB)

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.



Questions ?