



King County

Department of Natural
Resources & Parks
Wastewater Treatment
Division

Eastside Interceptor Section 8 Project

Project Review Committee Presentation

Progressive-Design Build Application

January 26, 2023

Agenda

- 1 Team Introductions
- 2 Project Overview
- 3 Benefits of PDB
- 4 Owner Team Qualifications
- 5 Equity and Social Justice
- 6 RCW 39.10 Compliance
- 7 PRC Questions
- 8 Closing



Project Team



Presenters

**King County WTD
Definition/Delivery Board**
Governing Board



**Ann Fowler, P.E., PMP,
Assoc. DBIA**
King County Capital Project Manager

**Alternative Delivery
Committee**
Committee

King County Project Team

Bob Isaac

Lining Program Manager

Diane Navarro, Assoc. DBIA

Contract Administration



Doug Jones, P.E., DBIA

Project Engineer

Melissa Jordan, Assoc. DBIA

PDB Procurement Specialist

Tony Robinson

Project Representative (CM)

Progressive Design Builder

(TBD)

Brown and Caldwell

Owner Advisor



Pat Tangora

Owner Advisor



Patrick Weber, P.E., PMP, DBIA

Owner Advisor Project Manager

**Specialty Lining
Subcontractor**

(TBD)

Specialty Subconsultants

Aquanti: Risk

Contract Land Staffing: Easements

Enviroissues: Public Outreach

ESA: Permitting

Kennedy Jenks: Construction Management

Ott-Sakai: Scheduling/Constructability

Tanner Pacific: Owner Advisor/Cost Estimating

Specialty Support Functions

Legal

Procurement



Laura Preftes

Contract Specialist



Joe Baca

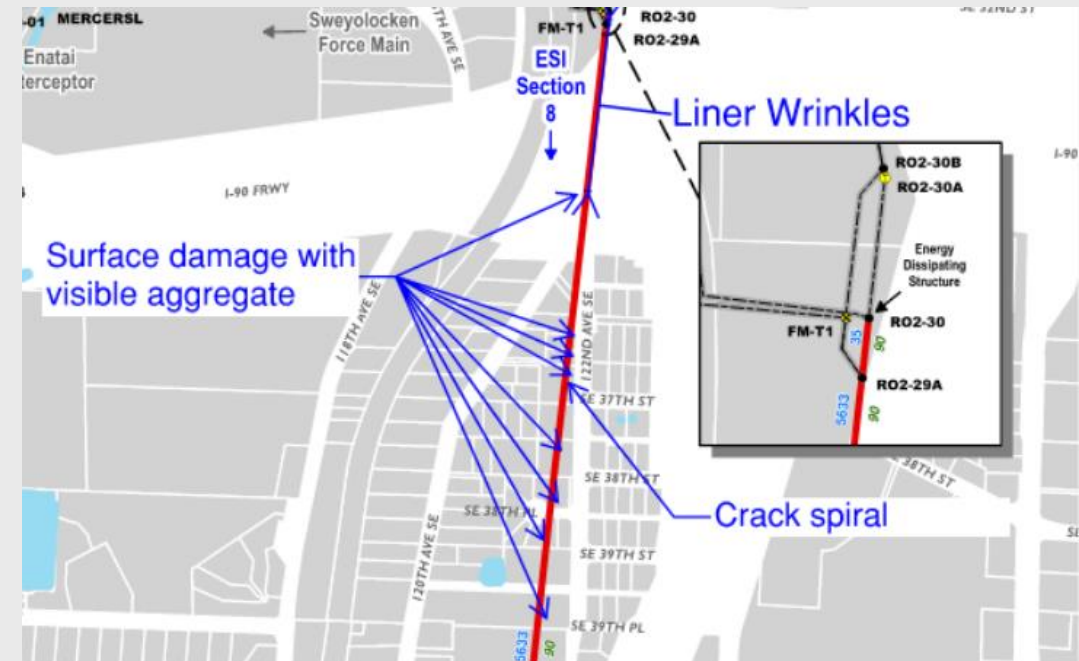
CWA Administrator

Project Overview

Eastside Interceptor Section 8

Project Overview

- Rehabilitation of 4,800 LF of 90"-96" concrete sewer tunnel
- Ongoing diversion of approx. 55 MGD
- Short construction windows
 - Low flow season (May-Oct)
- Tunnel access planning during lining activities
 - Tunnel access is limited to either end
 - Safety considerations critical



Benefits of Progressive Design Build

PRC Panel Project Evaluation Criteria A and B

Benefits of Progressive Design Build

PRC Project Evaluation Criteria A

Delivery Schedule

- PDB provides faster procurement than Traditional DBB or GC/CM
 - DBB or GC/CM is not practical within the project schedule
 - Delay would preclude the use of the ERC for bypass
- PDB allows for early work packages
 - Sewer Diversion Piping and Crossing I-405
 - Prep for tunnel access and rehabilitation
 - Ventilation and Odor Control
 - Force Main relocation

Fiscal Benefit

- Enhanced collaboration throughout the design and construction process
- Risk sharing approach reduces change orders and claims
- Use of the ERC for bypass minimizes project costs and schedule
 - ERC availability ends Dec 2025
 - Alternate routes would significantly increase cost and schedule

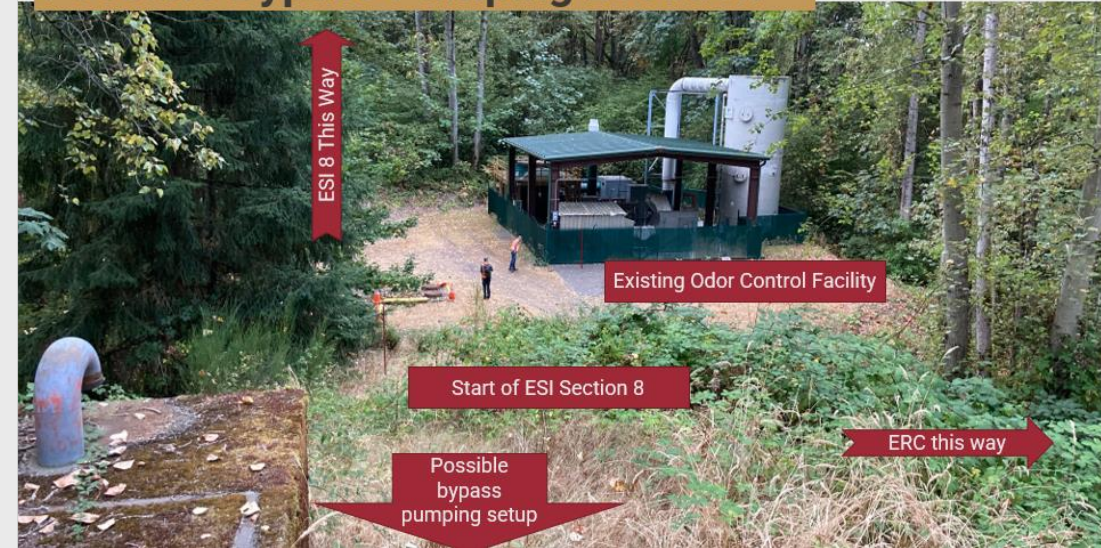


Benefits of Progressive Design Build

PRC Project Evaluation Criteria B

- Greater Innovation and Efficiencies
 - DB knowledge and innovation critical to success
 - Early Specialty Lining Subcontractor involvement for lining selection
 - Sewer Diversion Route planning
 - Coordination with agencies and projects (WSDOT, KC Parks, Bellevue Parks, and others)

Possible Bypass Pumping Location



South Bypass Exit Location from ERC



Benefits of Progressive Design Build

PRC Project Evaluation Criteria B



Faster procurement and project delivery than traditional DBB or GC/CM



Leveraging industry resources throughout design and construction



Efficiencies in design and sequencing reduce the overall project schedule



King County

Eastside Interceptor Section 8 Project



Project Meets all Three Evaluation Criteria B

Owner Team Qualifications

PRC Panel Project Evaluation Criteria C

King County Alternative Delivery Experience

Bob Isaac (Lining Program Manager)
(1) Brightwater Marine Outfall (DB)

Diane Navarro (Contract Administrator)
(5) Seattle Public Schools - Multiple (GC/CM)

Doug Jones (Project Engineer)
(1) Positive Train Control for Commuter Rail Fleet (DB)

Melissa Jordan (Procurement Specialist)
(4) Sound Transit - Multiple (GC/CM)
(1) Sound Transit Puyallup Station Access Improvements DB

Tony Robinson (Construction Manager – Project Representative)
(1) Edward C. Little Water Recycling Facility (DB)



Owner Advisor Alternative Delivery Experience

Pat Tangora (Brown and Caldwell)

- (1) Biosolids Dewater (PDB)
- (1) Brightwater Treatment Plant (GC/CM/DB/DBB)
- (1) Groundwater Treatment Plants (FPDB)
- (1) Jefferson and Hood Street Surface Water Interceptor (PDB)
- (1) Reservoir 6 Roof Replacement (FPDB)
- (1) Santa Fe Buckman Direct Diversion (DB)
- (2) Seattle Public Utilities Water Treatment Plants (DBO)
- (1) Silicon Valley Clean Water (PDB)
- (1) Tacoma Central Treatment Plant Expansion (DB)
- (1) Water Treatment Plant (PDB)

Patrick Weber (Brown and Caldwell)

- (1) Coyote Pumping Plant Electrical Upgrades (PDB)
- (1) CSO Storage Basin PDB
- (1) Jefferson and Hood Street surface Water Interceptor (PDB)
- (1) Lakeside Redirect Conveyance Improvements (PDB)
- (1) Little Miami WWTP Solids and Odor Improvements (PDB)
- (1) Mill Creek WWTP Diversion Chamber (PDB)
- (1) Pure Water Soquel Program (PDB, OMAR)
- (1) Reservoir 6 Roof Replacement (FPDB)

Adam Wirthlin (Tanner Pacific)

- (3) Silicon Valley Clean Water (PDB)
- (1) Soquel Creek Water District (DB)
- (1) Sound Transit (DB)
- (1) Sound Transit (GC/CM)



Owner and Advisor Team Experience

PRC Project Evaluation Criteria C.1

Project Delivery Experience

- Strong Capital Project Delivery History
- 35 alternative delivery projects by the project team
 - 13 completed by King County project team members
 - 22 completed by the Owner Advisor project team members

DBIA Certified Training Program

- 34 KCWTD staff participated in DBIA training in the past year
- 5 KCWTD staff obtained DBIA or Assoc. DBIA Certifications

Documented DB Processes

- Alternative Delivery Committee and Pilot Program est. 2021
- Internal processes and control systems to efficiently plan and execute the work
- Utilizing DBIA templates for PDB Agreement and Terms and Conditions with modifications



Contract Administration and Project Management

PRC Project Evaluation Criteria C.2

- Contract Administration
 - PM holds Assoc. DBIA Certification
 - PE holds DBIA Certification
 - PR/CM has completed DBIA Training and has been approved to take the DBIA exam
 - Contract Admin holds Assoc. DBIA Certification
 - Brown and Caldwell hired as owner advisor to support throughout procurement, design, and construction



Contract Administration and Project Management

PRC Project Evaluation Criteria C.3

King County Project Management

- Well-established project oversight procedures and governance structure, including managing scope, schedule, budget, and quality:
 - Documented change management processes
 - Designated change approval authority to the project team
- Standard processes outlined in County Manuals and Guides:
 - Project Management Manual
 - Project Control Engineer Manual
 - Project Engineering Manual
 - Construction Management Manual
 - Alternative Public Works Guide

Change Approval Authority

Kamuron Gurol
WTD Division Director
Change Authority (via Definition/Delivery Board)
>10% Base Contract
\$1M individual changes

Lisa Taylor, PMP
WTD Section Manager
Change Authority
<10% Base Contract
<\$1M per change

Tony Robinson
Project Representative (CM)
Change Authority
<\$250,000 aggregate

Ann Fowler, P.E., PMP, Assoc. DBIA
King County Capital Project Manager
Change Authority
<\$500,000 aggregate

Progressive Design Builder

(TBD)



Anticipated Project Schedule

PRC Project Evaluation Criteria C.4

Phase 1: Interested firms submit a statement of qualifications.

- 3 highest ranked firms will be invited to submit proposals.

Phase 2: Firms invited to submit proposals will be eligible for honorarium.

- Interactive Proprietary Meetings held with each firm
- Proposal pricing will be based on design development through 60%

Description	Start	Finish
PDB Procurement		
Phase 1: Request for Qualifications/Shortlisting	February 2023	May 2023
Phase 2: Request for Proposals/Evaluation and Selection	April 2023	September 2023
Preconstruction Phase <i>(pending DB input)</i>		
Design through development of GMP	September 2023	June 2024
Construction <i>(pending DB input)</i>		
Final Design/Permitting/Construction	June 2024	December 2025
Closeout Phase	January 2026	June 2026



Project Team Experience

PRC Project Evaluation Criteria C.5

Ann Fowler	Over 15 years of project management experience and is certified as an Assoc. DBIA professional .
Doug Jones	Over 30 years of experience in public works engineering and is certified as a DBIA professional .
Tony Robinson	Over 20 years of experience in construction management and has completed the County's DBIA Certification Training Program
Melissa Jordan	Over 6 years of Alternative Public Work Experience and 15 years of public procurement experience and is certified as an Associate DBIA professional .
Diane Navarro	Over 10 years in public and private procurement and is certified as an Assoc. DBIA professional .
Pat Tangora	Over 30 years of experience as an owner advisor
Patrick Weber	Over 10 years of experience providing OA services for alternative delivery projects and is certified as a DBIA professional



Project Budget

PRC Project Evaluation Criteria C.4 and C.6

**Total Project budget:
\$82.9M**

- Funding for the project has been appropriated and approved by the King County Council to support the planning, preliminary and final design, and construction of the project as part of the King County Capital Project Budget.
- King County may pursue WIFIA funding for this project, but the project is not contingent on the receipt of grant funding.

Breakdown of Project Budget

Description	Amount
PDB Contract	
Design	\$8M
Construction	\$27.3M
PDB Contract Contingencies	\$35.3M
Construction Change Order Contingency (10%)	\$2.73M
Construction Contingency (25%)	\$6.83M
PDB Contract Contingencies	\$9.6M
Total PDB Contract, including contingencies	\$45M
Contract administration costs (owner, cm etc.)	\$8.9M
Owner Project Contingency (25%)	\$15.8M
Other related project costs (briefly describe)*	\$8.8M
Sales Tax	\$4.5M
Total Project Budget	\$82.9M

*Other related project costs include permitting, right-of-way, sustainability, and escalation.



Project Management Plan

PRC Project Evaluation Criteria C.4, C.5, and C.6



Necessary and appropriate funding, project schedule, and resources have been allocated to the project.



Project team has the necessary project experience and the appropriate training to administer the project utilizing the progressive design-build approach



The project budget is based on a Class V estimate and includes \$10M in construction contingency and an additional \$15M in owner project contingency for a total of \$25M (approx. 30%)

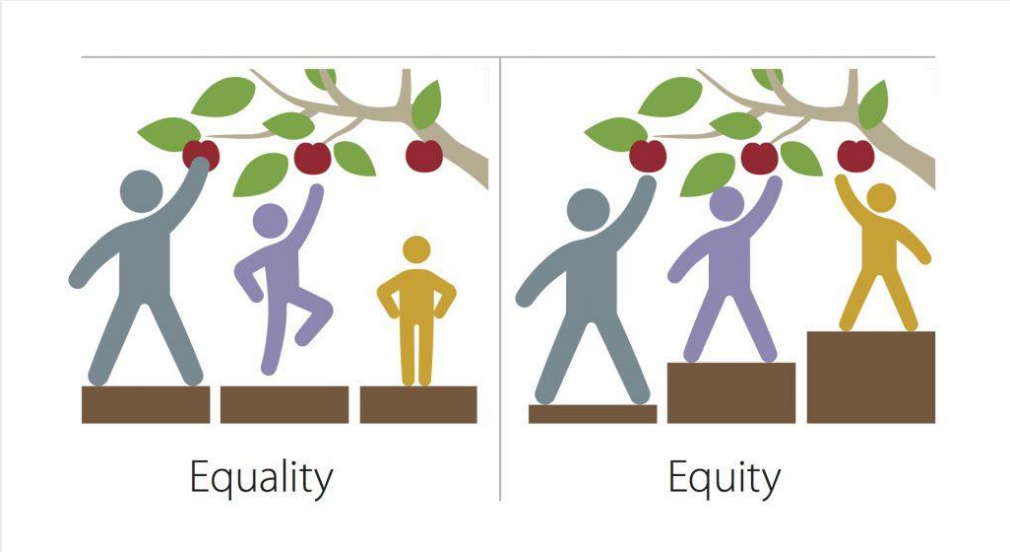


Equity and Social Justice

Eastside Interceptor Section 8

Equity and Social Justice

Diverse Business Participation



Voluntary Utilization Goals



10%

MBE

6%

WBE

The Contract will require the selected design-builder to submit an inclusion plan for Washington State Certified Minority and Women’s Business Enterprises and meet good faith efforts towards meeting the voluntary goals.



Equity and Social Justice

Priority Hire



Addresses construction workforce shortage, diversifies the construction workforce, and provides access to opportunities to disadvantaged communities.

Prioritizes Individuals living in economically distressed areas ([Priority Hire ZIP codes](#)) of King County

Provisions in Priority Hire Ordinance (K.C.C. 12.18A) and Contract Specifications including all terms and conditions of the [Master Community Workforce Agreement \(MCWA\)](#)

Workforce Requirements



Apprentice

15%

of all labor hours

Priority Hire Apprentice

27%

of all apprentice hours

Priority Hire Journey Worker

18%

of all journey hours



Project Meets RCW 39.10

PRC Panel Project Evaluation Criteria D and E

RCW 39.10.280

- Substantial Fiscal Benefit
 - Greater schedule certainty and associated ability to use the Eastside Rail Corridor for bypass before conversion to a recreational trail. Without this, project costs will be substantially higher.
 - Traditional DBB not likely to meet the desired schedule
 - PDB provides greater assurance of quality due to single point of responsibility
- Meets the requirements of RCW 39.10.300 (see following slides)



RCW 39.10.280 (cont.)

- Well qualified project team
 - Strong WTD CM organization, and project CM experienced in administering construction contracts
 - Project delivery knowledge supplemented by strong OA
 - Project organizational structure and management plans
 - Necessary funding and team to carry out the project
 - Dedicated, full-time PM through all phases
 - Sufficient and approved budget through construction
- Personnel and consultants knowledgeable in DB process
- WTD has had no prior audit findings



Satisfies RCW 39.10.300

- 1) Project cost greater than \$2M
- 1a) Highly specialized activities/construction methodology; OR
 - Lining technology selection
 - Sewer diversion and access planning and implementation
- 1b) Opportunity for innovation/efficiencies; OR
 - Location of bypass pipeline
 - Sequencing of planning, permitting, and construction
- 1c) Significant schedule savings
 - Early input from specialty subs for permit and construction planning
 - Avoid a second procurement for DBB or GC/CM contractor



RCW 39.10.330

Looking Ahead to Implementation

- Budget contingency exceeds 5%
- Staff and consultants with DB expertise selected and assigned
- Alternative dispute resolution is being included in contract docs
- Contract docs will require DB, subs and suppliers to submit required project information to support County in its submittal to CPARB
- Contract docs will require DB plans for inclusion of under-utilized subs and suppliers
- County is considering incentive provisions such as shared savings



Responses to PRC Questions

Eastside Interceptor Section 8 Project

PRC Question #1:

- **Regarding Section 2 - Project Total Cost:** Please clarify the Project Budget to clearly demonstrate compliance with RCW 39.10.320, specifically item (a) that states the following, *“Reasonable budget contingencies totaling not less than five percent of the anticipated contract value.”* Please clearly state the contingency amount in relation to the anticipated Progressive DB contract value.

– *Answer:*

The current project budget includes \$10M in construction contingency and an additional \$15M in owner project contingency, for a total of \$25M, or approximately 30% of the budget dedicated to contingencies. The project budget is based on a Class V estimate. As the project estimates evolve, the budget will include a minimum project contingency of 5% that is separate from the PDB construction contingency



PRC Question #2:

Regarding Section 4 – DB Contracting Appropriateness: The answers to application questions 4 (and 6) explain the establishment of an “Alternative Delivery Committee” (ADC) that both seem to indicate the Committee only considered various Alternative delivery methods and does not provide specifics of the selection process. Please clarify the evaluation criteria or scoring matrix, or methodology used, and how:

a) Traditional Design-Bid-Build was considered?

-Yes, Design-Bid-Build was considered as part of the selection process. The County adopted an evaluation process to determine if projects are suitable for alternative delivery, which includes two-steps. Step 1 determines if alternative delivery is a feasible delivery method for the project. Step 2 evaluates Traditional Design-Bid-Build (DBB), Progressive Design-Build (PDB), and General Contractor/Construction Manager (GC/CM) delivery methods to determine the best or optimal delivery method for the project using the following seven criteria: Project Complexity/Innovation, Project Risk, Level of Design, Project Cost, Staff Experience & Availability, Project Delivery Schedule, and Level of Oversight and Control. PDB was rated more highly in four out of seven of the criteria with a total rating of 6.7 (PDB) over 6.0 (DBB).

a) How Progressive DB to be the best delivery method over GC/CM?

-Utilizing the two-step process noted above, PDB scored more highly than GC/CM in the areas of Project Complexity/Innovation, Project Risk, and Project schedule based on rankings from the County evaluation team. All three of these areas are critical to the successful completion of the ESI 8 project within the available construction schedule. Early involvement of the specialty lining subcontractor for lining selection and the innovation and efficiencies gained by having a single PDB contract allows the design-builder to self-perform work and pre-select key subcontractors early in the process.

Type Selection Evaluation Criteria

	Weight	DBB	GC/CM	PDB
Project Complexity / Innovation	13%	0.6	0.8	1.0
Project Risk	17%	0.9	1.1	1.2
Level of Design	12%	0.6	0.9	0.9
Project Cost	8%	0.6	0.5	0.6
Staff Experience & Availability	11%	0.8	0.7	0.7
Project Delivery Schedule	21%	1.2	1.4	1.4
Level of Oversight and Control	18%	1.4	1.1	0.8
Total		6.0	6.5	6.7



PRC Question #3:

- **Regarding Section 4 – DB Contracting Appropriateness:** In reference to the last paragraph of the response to this Section, where the applicant states, *“We also anticipate that the duration for design will be shorter because documentation will be done to the extent necessary for permitting and construction, ...,”* please respond to the following questions:
 - A) What does the applicant mean by “documentation”?
 - *Documentation refers to design documents (e.g., plans, specifications, reports) that can be used at an interim stage of development or broken into packages to support advancement of permitting processes and potential early works packages (e.g., potential early procurement of materials, installation of bypass piping) prior to completion of the full project construction documents with the input of the design-builder and the specialty lining subcontractor. In a traditional design-bid-build contracting approach, the permitting would be acquired prior to the advertisement of the construction work, thus the details would be determined without the input of the subcontractor completing the work. The ability to engage the subcontractor early in the process allows us to incorporate the expertise and innovation of the subcontractor prior to, and concurrently with permitting submittal. This allows the project team to align the permit packages with the construction sequencing to allow for a more efficient permitting process.*



PRC Question #3:

- **Regarding Section 4 – DB Contracting Appropriateness:** In reference to the last paragraph of the response to this Section, where the applicant states, *“We also anticipate that the duration for design will be shorter because documentation will be done to the extent necessary for permitting and construction, ...,”* please respond to the following questions:
 - B) Have the local permitting authorities been informed with the applicant’s plan to deliver the project via Progressive DB method, and agreed to facilitate the approach accordingly? For example – breaking out design into packages and early packages, starting construction while remaining design is in progress, etc.
 - *WTD is anticipating that permits will be required from at least three agencies: King County, WSDOT, and City of Bellevue. The project team has informed County and WSDOT stakeholders of the planned PDB approach, and begun corresponding about permitting requirements (e.g., WSDOT right-of-way crossings for bypass piping). The City of Bellevue has not been informed of the planned delivery method. The County plans to continue early conversations with each permitting agency once we receive PRC approval, but discussion of specific plans (e.g., details of affected locations and timing) await selection of a PDB team and their input.*



PRC Question #4:

- **Regarding Section 6 – Public Body Qualifications and Organization Chart:** Please clarify the role of the role of the Construction Management firm as part of the OA. Are they to provide advise only or to support the day-to-day execution of the Progressive DB contract?
 - *The specific division of roles and responsibilities between County staff and the OA team are yet to be finalized, but the OA team includes a Resident Engineer to support the County during construction, and at a minimum will be providing oversight and advice during the construction phase. The County has very robust construction management capabilities in-house, and we anticipate that the County will provide CM functions including on-site inspections and oversight, review of pay applications, etc., supported by the OA team where needed.*



PRC Question #5:

- **Regarding Section 6 – Public Body Qualifications and Organization Chart:** Please elaborate Tony Robinson’s role. Project Representative (CM) with 10% design oversight and 100% construction oversight.
 - *WTD has a Construction Management (CM) work group that takes on key tasks of contract management during the implementation of construction contracts. Tony will be the on-site representative of the County responsible for overseeing and monitoring construction by the design-builder. We plan to involve Tony during design (represented by the 10% commitment) so that he can understand the project and provide input, with a transition to full-time during the construction phase. Tony will provide the day-to-day coordination with the CM consultant staff and the design-builder.*



PRC Question #6:

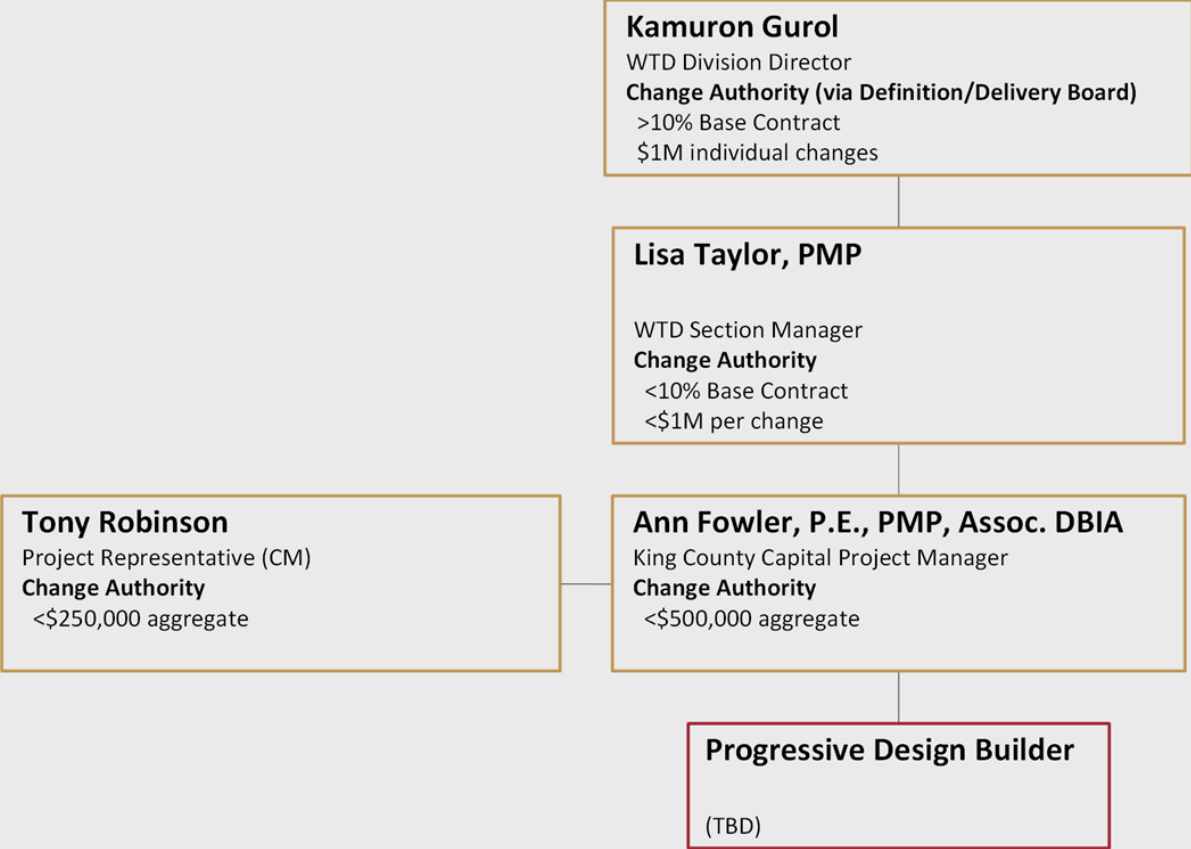
- **Regarding Section 6 – Public Body Qualifications and Organization Chart:** Please explain how KCWTD is going to make sure they provide continuous and consistent management support for the Design-Builder to progress the project - from the start of design all the way to end of construction.
 - *KC has a dedicated project manager assigned to the project, from the beginning of procurement to the end of construction. In addition to the established project management organizational structure within KCWTD, the project team will establish a Project Governance Structure with the PDB to provide defensible and timely decisions that allow the project to move forward expeditiously while ensuring the best interests of KC are being served. The governance structure will be developed at the beginning of the project upon award of the PDB contract and will remain in place throughout the project. The County team will be supported by PDB delivery experts on the OA team, who can help the County and DB work through and resolve management, technical, and contractual questions, and issues as they arise.*



PRC Question #7:

Regarding Section 6 – Public Body Qualifications and Organization Chart: Please explain the decision-making authority within the KCWTD to facilitate timely decision or resolution to issues to support the Design-Builder’s progress.

As the Project Manager, Ann has the authority to authorize decisions of the project team within the scope, budget, and contingencies of the project, as well as change authority up to an aggregate of \$500,000. Changes beyond Ann’s level of authority are approved by upper management through the established change review protocols for construction contracts as outlined in the chart to the right.



PRC Question #8:

- **Regarding Scope/Logistics:** Please describe the plan to protect and secure such a large above ground bypass, running 24/7, over this distance for the project duration. Will crossings of the bypass have to be accommodated?
 - *By limiting tunnel lining work to dry weather months, we anticipate being able to use a sewage diversion pipeline that is substantially smaller than the ESI tunnel, but still sizable. Minimal road crossings are anticipated due to the use of the Eastside Rail Corridor as the diversion route. The diversion alignment is anticipated to be mostly on-grade (e.g., along the Eastside Rail Corridor) and below grade as needed to cross under I-405 in the vicinity of Coal Creek Parkway. The location and details of the diversion piping alignment is an area where DB input is desired. During sewer diversion operations, protection and security for the diversion pipeline will be the responsibility of the DB. The County will require monitoring and inspection of overland piping throughout the construction phase.*





King County

Eastside Interceptor Section 8 Project

Questions?

→ kingcounty.gov



King County

Eastside Interceptor Section 8 Project

Thank you

Ann Fowler, P.E., PMP
Capital Project Manager, Assoc. DBIA
King County Wastewater Treatment Division

206-477-9115
afowler@kingcounty.gov

→ kingcounty.gov



King County

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