# Heavy Civil GC/CM Services for Mouth of Duwamish Combined Sewer Overflow (MDCSO)

# Influent Conveyance, Effluent Conveyance, and Outfall

July 24, 2025



Department of
Natural Resources and Parks
Wastewater Treatment
Division



### Agenda

- Program Overview
- Project Background
- GC/CM Delivery Method Validation
  - Meets Applicable Criteria
  - Management Plan
- Equity & Social Justice
- Diverse Business & Utilization
- Master Community Workforce Agreement
- Public Benefits
- Summary



# **King County Wastewater Treatment Division**

#### **Mission**

We protect public health and the environment by collecting and cleaning wastewater while recovering valuable resources for a healthy and thriving Puget Sound Region.

#### **Service**

24/7/365 essential wastewater service to almost 2 million people and businesses in King County, plus portions of Pierce and Snohomish counties.

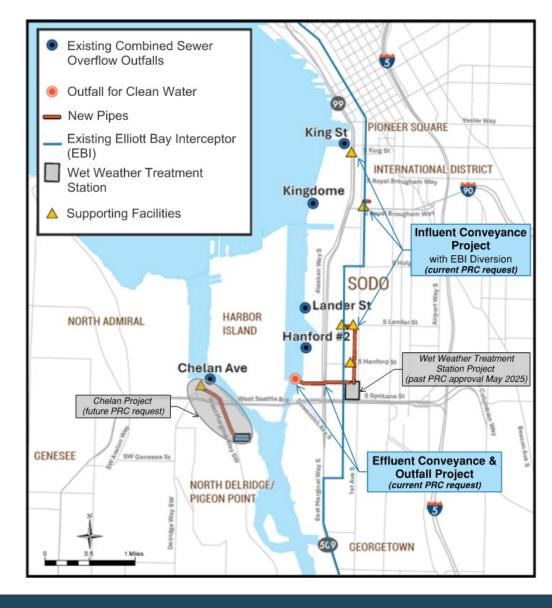


King County Wastewater Treatment
Division Service Area

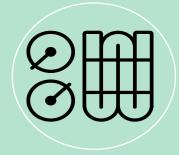


### **Program Overview**

- Deliver facilities to control sewer overflows during wet weather in the Duwamish River.
- Governed by a consent decree between King County, the EPA, and Ecology that set specific project requirements and deadlines of substantial completion in 2034 for this program.
- Achieve regulatory compliance per RCW 90.48 and WAC 173-245.
- Manage multiple projects in a coordinated way, with benefits that could not occur if the projects were handled separately.



# **MDCSO Program**



### **Wet Weather Treatment Station Project**

- Pumping
- Screening
- Sedimentation
- •EQ
- •UV Disinfection
- Solids Storage
- Electrical Systems

PRC Approved May 2025



### **Influent Conveyance Project**

- •EBI to WWTS Conveyance
- Hanford to WWTS Conveyance
- •Improvements for each HLKK Regulator Station
- •EBI Diversion Structure
- Lander and Hanford Diversion
   Structures



### Effluent Conveyance & Outfall Project

- •Effluent Conveyance to the WWTS Outfall (open cut & trenchless)
- •WWTS Effluent Outfall and Diffuser



#### **Chelan CSO Project**

- •Chelan Storage Tank
- Chelan Conveyance
- Chelan Diversion Structure
- •Chelan Regulator Station Improvements

Future PRC Approval

Project Requesting Approval by PRC

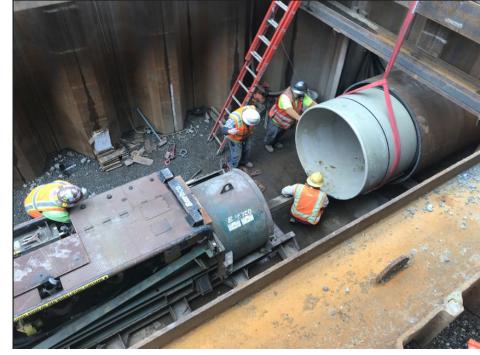
# **Project Background**

# **Project Overview**

### **Influent Conveyance**

The Influent Conveyance portion of the project includes construction of conveyance systems and structures to direct flow from multiple locations **into** the Wet Weather Treatment Station (WWTS) (separate project approved by PRC in May 2025). Work includes:

- Influent piping conveyance using open cut and trenchless methods
- Capacity improvements to the King and Kingdome regulators
- New diversion structures at Hanford, Lander and Elliott Bay Interceptor
- Surface demolition and restoration along conveyance route
- Installation of above-grade building services at regulator and diversion structures



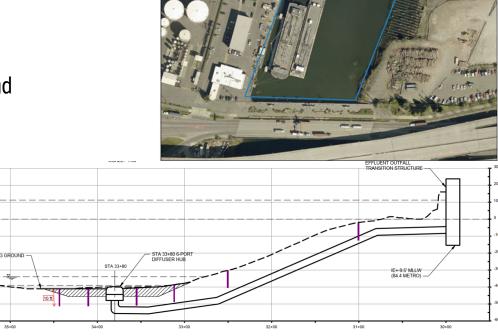
**Conveyance Construction** 

# **Project Overview**

### **Effluent Conveyance and Outfall**

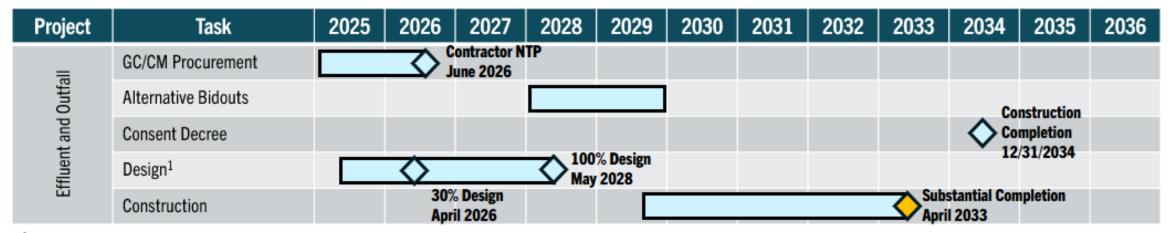
The Effluent Conveyance and Outfall portion of the project includes construction of conveyance systems and structures to direct treated water **discharging from** the WWTS into the Duwamish Waterway. Work includes:

- Open-cut and trenchless conveyance, in-water outfall pipe and diffuser installed within a sheeted trench, fish habitat surface layer restoration in outfall trench, and anchored barges for excavation
- New pump station to support effluent discharge
- Modifications & relocation of existing utilities; surface restoration
- Marine dredging and contaminated sediment removal
- Installation of soldier piles at below-grade structures and bearing piles stabilization.

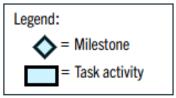




### **Key Schedule Milestones**



<sup>&</sup>lt;sup>1</sup> Design duration is 30% Design through Final Design.



RFP Advertisement Date is scheduled for October 2025

# GC/CM Delivery Method Validation

Meets Applicable Criteria

### **GC/CM Criteria**

- ✓ Complex scheduling, phasing, and coordination
- ✓ GC/CM involvement during design is critical
- ✓ Complex technical work environment
- ✓ Heavy Civil

X Historical Significance – N/A



# **Complex Scheduling/Phasing**

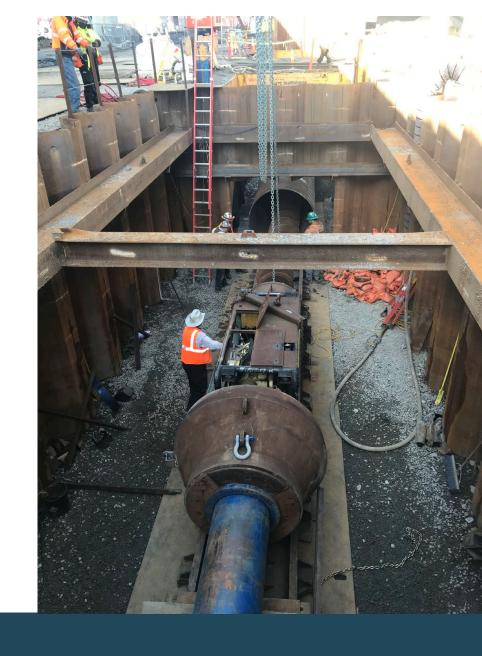
Accelerated schedule is critical to meet Consent Decree milestones

- Critical path for program delivery, must be operational for WWTS to function
- Connections / integration with WWTS must be completed during dry season (May 1 September 30)
- Complex environmental permitting requirements, including the relationship between design and permitting across multiple packages



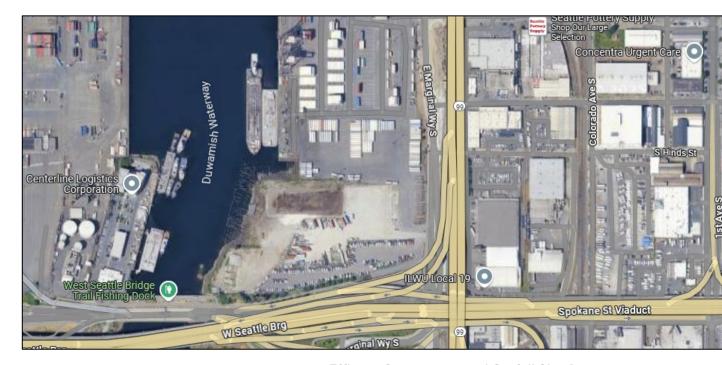
### **GC/CM Involvement is Critical**

- Develop and refine sequencing of the work to meet consent decree schedule requirements
- Initiate critical early work
- Value engineering and constructability reviews
- Improved cost estimating
- Collaborative risk management
- Engage local contracting community through subcontracting



# **Complex & Technical Environment**

- Contamination exists in a portion of the proposed site, extent and nature of mitigation is unknown
- Site location is within the historic Duwamish estuary, potential for seismically induced lateral spread and liquified soil
- Site borders multiple rail lines requiring complex permitting
- Tight urban site with constrained access and phased laydown/staging



Effluent Conveyance and Outfall Site Area

### **Heavy Civil**

- Work is primarily infrastructure
- GC/CM control of critical path (early work packages, procurements, etc.)
- Increased self performance threshold improves schedule certainty
- Technical complexity and Consent Decree deadline require flexible and responsive delivery

Supportive contractor feedback through industry outreach including tactical RFIs



# GC/CM Delivery Method Validation

Management Plan

### **Org Chart**

WTD Definition/Delivery Board Definition and Delivery Board will be advised of progress GC/CM Procurement - As Needed GC/CM Oversight Design - N/A GC/CM Oversight Construction - N/A Program Management Leadership Stan Hummel, PE Steve Tolzman, PMP Ron Gillenardo Program Mgmt responsible WTD CSO Delivery Manager WTD PM Supervisor **Facilities Supervisor** for Escalated Strategic Decisions and Issues GC/CM Procurement - 10% GC/CM Procurement - 10% GC/CM Procurement - 25% Design Oversight - 10% Design Oversight - 10% Design Oversight - 10% Construction Oversight - 10% Construction Oversight - 10% **Project Core Team** Dan Johnson Shannon Phipps WTD Capital Project Manager CM Project Representative GC/CM Procurement - 100% GC/CM Procurement - 10% Design Oversight - 100% Design Oversight - 10% Construction Oversight - 50% Construction Oversight - 50% Core Team responsible Michelle Reuss Engineering Team PM for Daily Management Consultant PM and Decisions GC/CM Procurement - 0% GC/CM Procurement - 25% GC/CM Procurement - N/A Design Oversight - 50% Design Oversight - 100% Design Oversight - 100% Construction Oversight - 50% Construction Oversight - 100% Construction Oversight - 10%

Legend King County Greg Brink, Parametrix Consultant - Owner Advisor Program Manager Consultant - Engineer

GC/CM Procurement - 10%

Design Oversight - 10%

Construction Oversight - 10%

Owner Advisor Specialty Consultants

OA Support: Tanner Pacific CM/Cost: Kennedy Jenks, Parametrix Scheduling: Parametrix Risk Management: Aquanti, Parametrix Constructability/Cost: Ott-Sakai Project Controls Support: AMP, Parametrix ESJ Support: Greenprint

Sustainability: Aguario, Parametrix

Advisory Support responsible for specific support as needed directed by Core Team

Trisha Roth, Assoc. DBIA Contract Administrator

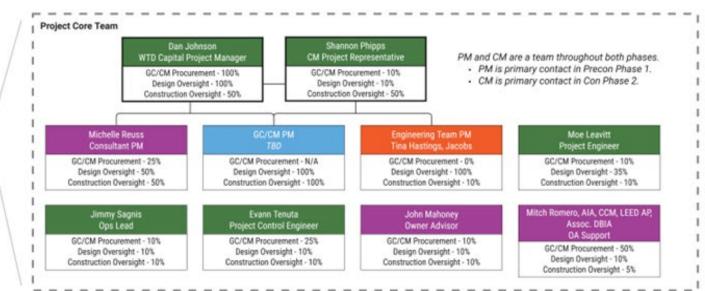
GC/CM Procurement - 10% Design Oversight - 10% Construction Oversight - 25%

Melissa Jordan, Assoc. DBIA Procurement Lead

GC/CM Procurement - 10% Design Oversight - 0% Construction Oversight - 0%

Contract Support responsible for contract actions and oversight as needed directed by Core Team

1 Parks ment





### **Qualified Team**

- Stan Hummel (CSO Delivery Manager) 33 yrs, 3 GC/CM projects
- Steve Tolzman (Program Manager) 20+ yrs project management
- Daniel Johnson (Project Manager) 36 yrs, 1 IDAC project (USACE form of GC/CM)
- Moe Leavitt (Project Engineer) 19 yrs, 1 GC/CM project
- Shannon Phipps (Construction Manager) 33 yrs, 1 GC/CM project
- Melissa Jordan (Procurement Lead) -18 yrs public procurement experience, 4 GC/CM projects
- Trisha Roth (Contract Administrator) 20 yrs, 4 GC/CM projects
- Greg Brink (Program Manager) 20 yrs, 5 GC/CM projects
- Michelle Reuss (Consultant Project Manager) 25 yrs, 2 GC/CM projects
- John Mahoney (Owner Advisor) 25 yrs, 2 GC/CM projects
- Mitch Romero (Owner Advisor Support) 30 yrs, 13 GC/CM projects
- Anne Timmermans (Construction Manager) 21 yrs, 7 GC/CM projects
- Nicki Pozos (Program Equity Manager) 20 yrs, 5 GC/CM projects

# **Budget & Funding**

- Current Proposed Budget \$556.4M
- Total GC/CM Budget \$324.4M
  - Includes preconstruction services and sales tax
- Project will be funded by King County Wastewater utility rates
- King County is pursuing potential funding through EPA State Revolving Fund and Water Infrastructure Finance Innovation Act (WIFIA) funding

### MDCSO-Influent Conveyance, Effluent Conveyance, and Outfall: AACE Class V Cost Estimate

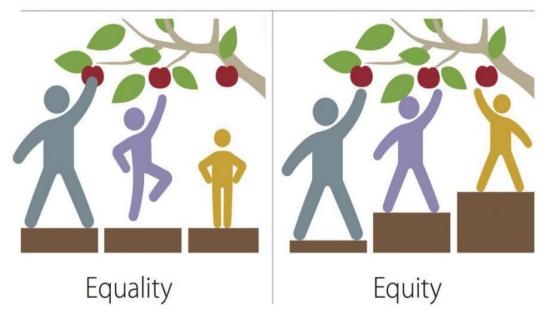
Construction Costs	\$325.0M
Non-Construction Costs	\$92.4M
Right-of-Way	\$5.5M
Contingency	\$131.9M
Initiatives	\$1.6M
Total 1,2	\$556.4M

<sup>&</sup>lt;sup>1</sup> Includes escalation

<sup>&</sup>lt;sup>2</sup> Estimate based on ~15% Design

# **Equity & Social Justice**

- Pro-Equity Contracting Goals
- Expand opportunities and maximizing participation for Certified DBE, MBE and WBE firms throughout design and construction
- Mentor Protégé program
- Good Faith Efforts will be monitored throughout the project
- ESJ Coordinator/Manager will be required
- Compliance monitoring in King County's
   Diversity Compliance Management System



"I want to open the doors of opportunity to every single person in King County, Washington. That's why I issued an executive order strengthening pro-equity contracting, so that our minority-and women-owned businesses can substantially increase their participation in County contracts."

- Former King County Executive Dow Constantine

### **Diverse Business & Utilization**

Project Name	Contract Value	Commitment	Achievement	Contract Status
Wastewater Treatment Division Projects				
Georgetown Wet Weather Treatment Station (GWWTS)	\$107,543,926	$\begin{array}{l} \text{MBE} - 4.7\% \\ \text{WBE} - 1.4\% \end{array}$	MBE - 6.7% WBE - 3.0%	100% complete
GWWTS - Conveyance	\$22,362,090	MBE – 10% WBE – 6%	MBE – 17.4% WBE – 7.5%	100% complete
Eastside Interceptor Section 2 Rehab Phase II	\$20,536,847	SCS - 8%	SCS - 11.8%	100% complete
WPTP Primary Sedimentation Area Roof Structure	\$23,006,376	DBE – 0% SCS – 20%	DBE – 3.4% SCS – 19.6%	100% complete

### **Master Community Workforce Agreement**

### **Priority Hire**

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

Prioritizes individuals living in economically distressed King County areas (Priority Hire zip codes)

Provisions in King County Code (KCC 12.18A) and Contract Specifications including all terms and conditions of the Master Community Workforce Agreement (MCWA)

### **Workforce Requirements**

**Apprenticeship:** Apprentices must work a minimum of 15% of the total labor hours.

**Priority Hire Apprenticeship:** Priority Hire Apprentices shall work 27% of all apprenticeship labor hours.

**Priority Hire Journey Workers:** Priority Hire Journey Workers shall work 18% of all journey labor hours.

**Preferred Entry: 20%** 

# **Public Benefits**

### **Public Benefits**

### GC/CM

- Schedule
- Risk management
- Enhanced cost control
- Maintaining level of service

### **Heavy Civil**

- More delivery control
- Improved flexibility in planning and sequencing work
- Improved market attractiveness per industry feedback
- Self perform work increases schedule predictability

# **Alternative Subcontracting**

### **Benefits**

- Secure continued involvement of key staff
- Engagement in planning for constructability
- Early procurement of long lead materials
- Specialized skill requirements
- Supports price and schedule certainty

King County will collaborate with the future GC/CM to identify the alternative subcontracting packages.

Requesting all potential Alternative Subcontracting packages now for project team and GC/CM flexibility.

# **Alternative Subcontracting**

#### **Proposed Alt. Subcontracts**

- Electrical Contractor/Construction Manager (EC/CM)
- Environmental Remediation/ Hazardous Materials Specialist
- Ground Improvement/Specialty Geotech
- Instrumentation/Controls Subcontractor
- Marine subcontractor for in-water work
- Mechanical Contractor/Construction Manager (MC/CM)

- Prefabricated Systems/Equipment Subcontractor
- Site Work Subcontractor
- Specialty Civil Subcontractor
- Specialty Fabrications Subcontractor
- Specialty Structures Subcontractor
- Trenchless Excavation Subcontractor
- Temporary Works/Bypass Systems Subcontractor

Supportive contractor feedback through industry outreach including tactical RFIs

# Summary

# **Summary**

### Meets Qualifying Criteria

- ✓ Complex Schedule
- ✓ Technically Complex
- ✓ GC/CM Involvement During Design is Critical
- ✓ Seeking Heavy Civil Approval
- ✓ Public Benefits: Risk Management, Time, Cost

