# State of Washington PROJECT REVIEW COMMITTEE (PRC) GC/CM PROJECT APPLICATION

# To Use the General Contractor/Construction Manager (GC/CM) Alternative Contracting Procedure

The PRC will only consider complete applications: Incomplete applications may result in delay of action on your application. Responses to Questions 1-7 and 9 should not exceed 20 pages *(font size 11 or larger)*. Provide no more than six sketches, diagrams or drawings under Question 8.

## **Identification of Applicant**

- a) Legal name of Public Body (your organization): King County: Department of Natural Resources and Parks, Wastewater Treatment Division (KCWTD)
- b) Mailing Address: 201 S Jackson St, Seattle WA 98104
- c) Contact Person Name: Melissa Jordan on behalf of Meredith Redmon Title: Contract Specialist III – Construction / WTD Project Manager
- d) Phone Number: (206) 263-4005 E-mail: mejordan@kingcounty.gov

# 1. Brief Description of Proposed Project

- a) Name of Project: Heavy Civil GC/CM Services for Sammamish Plateau Diversion
- b) County of Project Location: King County Please describe the project in no more than two short paragraphs. (See Example on Project Description)

The primary objective of the Sammamish Plateau Diversion Project is to address regional conveyance system capacity needs. Flow will be diverted out of the South Lake Sammamish Planning Area north by designing and constructing a conveyance line capable of diverting up to 7.31 million gallons per day (MGD) of flow from the Southwest Lake Sammamish area north and upgrading KCWTD's York Pump Station and Diversion Structure. Diverting flows northward will alleviate capacity needs at several conveyance facilities between KCWTD's Issaquah Interceptor Section 1 and Eastside Interceptor. This project will further benefit the Sammamish Plateau Water and Sewer District by diverting much of their sanitary flow north and away from local collection system conveyance needs to the south.

 c) Applying for permission to utilize Alternative Subcontractor Selection with this application? (*if no*, applicant must apply separately at a later date utilizing Supplement B) No.

# 2. Projected Total Cost for the Project:

#### A. Project Budget

Costs for Professional Services (A/E, Legal etc.)	\$44,125,879.0 <b>0</b>
Estimated project construction costs (including construction contingencies):	\$221,521,274.00
Equipment and furnishing costs	\$ <mark>0</mark>
Off-site costs	\$ <mark>0</mark>
Contract administration costs (owner, cm etc.)	\$
Contingencies (design & owner)	\$83,695,203
Other related project costs (briefly describe)	\$ <mark>0</mark>
Alternative Subcontractor Selection costs	\$ <mark>0</mark>
Sales Tax	\$19,406,449.0 <b>0</b>
Total	\$376,382,000.00

# B. Funding Status

Please describe the funding status for the whole project. <u>Note</u>: If funding is not available, please explain how and when funding is anticipated

Funding for this project is not dependent on future grants, bonds, or other non-ratepayer funds. King County follows a biennial budget process. Appropriation authorizing spending is made through the budget process. Funding was appropriated for preconstruction in recent budget cycles Additional appropriation is being requested for the upcoming biennium in the current and future budget cycles for remaining funds. It is expected that additional funds will be appropriated after the selection of the GC/CM and well before the completion of design and commencement of construction. The project has received SRF funding from WA Ecology for planning and design phases of work.

# 3. Anticipated Project Design and Construction Schedule

Please provide:

The anticipated project design and construction schedule, including:

- a) Procurement; (including the use of alternative subcontractor selection, if applicable)
- b) Hiring consultants if not already hired; and
- c) Employing staff or hiring consultants to manage the project if not already employed or hired. (See Example on Design & Construction Schedule)
- d) Provide an updated schedule to include Alternative Subcontractor Selection Procurement process. *(If applicable)*

The anticipated procurement timeline for the GC/CM contract is detailed in Figure 1 – estimated project and procurement schedule.

A team led by Brown and Caldwell has been retained and is under contract to provide Owner Advisor/Construction Management services for the General Contractor/Construction Manager (GC/CM) project. HDR Engineering has been contracted to perform design of the project, including alternatives evaluation and analysis, geotechnical analysis and report, permitting support, construction cost estimating, survey, and community involvement support. The project team will collaborate with the GC/CM to determine if alternative subcontracts would be beneficial and, if needed, will request approval to procure alternative subcontracts based on the recommendations of the GC/CM.

The figure below summarizes the preliminary project and procurement schedule.



# 4. Why the GC/CM Contracting Procedure is Appropriate for this Project

Please provide a detailed explanation of why use of the contracting procedure is appropriate for the proposed project. Please address the following, as appropriate:

In May 2021, KCWTD established an Alternative Delivery Committee (ADC). The ADC adopted a two-step process to screen capital projects to determine if projects are suitable for DB or GC/CM delivery methods. Step 1 determines whether a given project is suitable for either the DB or GC/CM delivery method. Step 2 is a "type selection" process to determine the best or optimal delivery method.

The Sammamish Plateau Diversion project went through this two-step process. Step 1 determined that the project was suitable for alternative delivery, and Step 2 determined that the GC/CM method would be the best method for achieving the project goals, consistent with the criteria identified in RCW 39.10 for the use of GC/CM, based on the key project attributes described below.

 If implementation of the project involves complex scheduling, phasing, or coordination, what are the complexities?

The project presents significant complexities due to the extensive construction planned within approximately four miles of arterial roadway, situated near numerous residential properties. This will require substantial coordination to manage traffic flow and maintain access throughout the construction period. Environmental challenges include securing permits related to fish passage enhancements and working near the sensitive ecosystems of Lake Sammamish. Additional permitting constraints may involve limitations on road closures and allowable work hours, which could impact the overall construction schedule. The GC/CM contractor will be able to provide early input regarding phasing, sequencing, and constraints to mitigate impacts to the public and WTD operations, and needed coordination with other WTD stakeholders, Cities of Redmond and Sammamish, and Federal and State permitting agencies.

**Constructability:** The pipeline's design and construction must account for horizontal and vertical changes in the Right of Way (ROW), other critical utilities within the same corridor, and environmental impacts related to creek crossings and critical areas. The spatial constraints posed by gravity sewer

installations necessitate a hybrid approach, incorporating both replacement in-place and parallel pipe installations. This strategy minimizes the need for temporary bypasses, reducing associated risks and costs, while maintaining flexibility to protect existing utility infrastructure along the project alignment. Incorporating contractor constructability input during the design phase will help mitigate these conflicts and minimize changes during construction.

**Trenchless Construction:** The construction of a new gravity sewer using trenchless technologies present significant challenges and involving the contractor in developing the trenchless installation approach is crucial to identifying the most viable methods for each crossing. A risk register will be collaboratively developed with the contractor to identify potential risks for each crossing and to formulate mitigation strategies, including alternate trenchless methods, if necessary.

**Protection of Surface and Ground Water:** Surface and ground water resources identified in the project area include wetlands, streams and lakes, floodplains, and critical aquifer recharge areas (CARAs). Many small tributaries flow downslope generally to the west along narrow ravines between dense residential development. The majority of these tributaries have been diverted into culverts that flow under East Lake Sammamish Parkway NE and other smaller roads, and under the East Lake Sammamish Trail. Lake Sammamish outlets to the Sammamish River, which flows north and west for approximately 12 miles before discharging to Lake Washington. Collaborative engagement with the contractor during design will be critical to implementing methods that can avoid, minimize, and mitigate impacts to surface and groundwater.

**Agency Engagement**: This project impacts several agency stakeholders, including the City of Sammamish, City of Redmond, Ecology, WSDOT, and various environmental regulatory agencies. Early communication and contractor engagement with each of these agencies during the design phase aims to eliminate unanticipated permits or permit mitigation requirements. Contractor input during the design phase will help to identify planned construction means and methods so the permitting process can proceed based on confirmed construction routes, work areas, and impacts.

**Traffic Impacts:** The alignment is in a heavily traveled arterial roadway and obtaining Contractor input is essential for planning and mitigating traffic impacts, street closures, transit stop closures, detour routes, parking and loading restrictions, noise and odor control, driveway restrictions, utility service interruptions, night and weekend work and ensuring the safety of pedestrians and bicyclists.

• If the project involves construction at an existing facility that must continue to operate during construction, what are the operational impacts on occupants that must be addressed?

**Note:** Please identify functions within the existing facility which require relocation during construction and how construction sequencing will affect them. As part of your response, you may refer to the drawings or sketches that you provide under Question 8.

The York Pump Station and Forcemain discharge structure and associated sewer conveyance system must stay operational during infrastructure upgrades. This will be achieved by operating a temporary pump station during the upgrade of the existing station.

• If involvement of the GC/CM is critical during the design phase, why is this involvement critical?

The GC/CM model will provide design efficiencies and cost savings by giving the GC the opportunity to help make decisions that can affect the procurement of long lead materials and equipment, the efficient execution of the work, particularly in providing input on deep excavations in poor soils and control of expected groundwater, and proper sequencing of the work. The project is in the early phases of decision making where the GC/CM will have the ability to have significant impact on design to improve constructability and cost.

The involvement of a GC/CM contractor offers efficiencies that will be key to the schedule success of the project, including:

- Early contractor engagement for technical and permitting challenges.
- Early development of construction sequencing and impacts to inform traffic control plans, permitting processes, stakeholder engagement, and groundwater mitigation.
- Enhanced collaboration throughout the design phase, reducing the risk of changes and delays.
- The potential for early works packages to procure long-lead items or conduct early construction activities.

Design documents may be broken into packages to support the advancement of the permitting processes and potential early works packages before the completion of the full project construction documents.

The ability to engage the contractor early in the process allows the project team to incorporate the expertise and innovation of the contractor before, and concurrently with permitting submittals. This allows the project team to align the permit packages with the construction sequencing to allow for a more efficient permitting process.

- If the project encompasses a complex or technical work environment, what is this environment? Construction challenges include deep excavations within a heavily trafficked arterial roadway, with excavation depths ranging from 5 to 35 feet, with challenging, variable soils. The combination of these conditions and the presence of groundwater at various locations will create a highly complex work environment, necessitating detailed planning both prior to and throughout the construction process.
- If the project requires specialized work on a building that has historical significance, why is the building of historical significance and what is the specialized work that must be done?

There are no designated landmarks or historically significant structures related to this project.

• If the project is declared heavy civil and the public body elects to procure the project as heavy civil, why is the GC/CM heavy civil contracting procedure appropriate for the proposed project?

Using the Heavy Civil GC/CM approach for the Sammamish Plateau Diversion project is appropriate because the project is sewer infrastructure work and will involve a mix of heavy civil construction methods to install a new collection system, including trenchless installation, open-cut trench pipe installation, and pump station upgrades. Having the prime contractor lead significant, key portions of the work is likely to add efficiency and minimize potential disruption.

# 5. Public Benefit

In addition to the above information, please provide information on how use of the GC/CM contracting procedure will serve the public interest (*For Public Benefit related only to Alternative Subcontractor Selection, use Supplement A or Supplement B, if your organization decides to use this selection process. Refer to Question No. 11 of this application for guidance*). For example, your description must address, but is not limited to:

- How this contracting method provides a substantial fiscal benefit; or GC/CM delivery will provide substantial financial benefits:
  - Reduce overall project risk through early contractor input/involvement, providing more cost transparency and certainty, decreasing the incidence of change orders, and coordinating schedule impacts through construction team input in the design and early construction planning.
  - Additional schedule certainty from early contractor construction planning and sequencing, providing confidence that the work can be completed in the required timeframes, a key factor in controlling project costs.
- How the use of the traditional method of awarding contracts in a lump sum is not practical for meeting desired quality standards or delivery schedules.

King County has considered the possibility of using DBB on this project. However, it was determined that GC/CM would be the best option for construction planning and risk reduction due to the benefits of having early contractor input in design to plan for and mitigate identified construction challenges, including groundwater dewatering, trenchless crossings, outside agency coordination, and impacts to traffic and the public.

• In the case of heavy civil GC/CM, why the heavy civil contracting procedure serves the public interest.

The project qualifies as Heavy Civil GC/CM given; nature of infrastructure improvement, the location of the project, the amount of work within major arterial roadways, limited and constrained space onsite for staging, laydown, and performing the construction activities; and there is heavy community interest/ involvement and possibly resistance that is anticipated. With the proximity to Lake Sammamish, environmental protection/permitting will require significant planning and coordination. Because of these site constraints, and the construction activities to be performed by the GC/CM, heavy civil authority is an appropriate delivery method for the project. The heavy civil contracting procedure encompasses controlling risk via the GC/CM's negotiated self-performance of construction. The critical nature of this work leads this project to be high risk, with a need for tight control, self-performance and control of interfaces, and the ability to create flexible work plans that can adapt to an emergency, if needed.

## 6. Public Body Qualifications

Please provide:

• A description of your organization's qualifications to use the GC/CM contracting procedure.

KCWTD has extensive experience delivering large capital projects, and key staff have relevant alternative delivery experience and will be supported throughout the life of the project by an Owner Advisor consultant team with decades of alternative delivery experience.

**Alternative Delivery Committee (ADC):** The ADC is dedicated to seeking increased efficiencies, improved project throughput, and better leveraging of internal resources by advocating for and overseeing the decision process for use of the GC/CM and PDB alternative delivery methods. ADC is also to support the development of a structure that can be replicated for selecting and implementing optimal alternative delivery methods in the future.

**Owner Advisor (OA):** WTD has procured the services of Brown and Caldwell (BC) as Owner Advisor (OA) for the project. OA Lead John Nottingham and SMEs Patrick Weber and Josh Thomas will support the project team. The OA team has extensive experience supporting owners with procurement, delivery, and oversight of GC/CM projects, and is currently assisting WTD with delivery of two ongoing alternative delivery (PDB) sewer projects. The OA team includes independent cost estimators who specialize in developing independent cost estimates, reviewing contractor estimates, and supporting price negotiations for alternative delivery projects. KC's owner advisor will bring a full construction management team with experience in the GC/CM delivery method to support KCWTD in the delivery of the Sammamish Plateau Diversion project.

• A *Project* organizational chart, showing all existing or planned staff and consultant roles. *Note:* The organizational chart must show the level of involvement and main responsibilities anticipated for each position throughout the project (for example, full-time project manager). If acronyms are used, a key should be provided. (See Example on Project Organizational Chart)

Please see Attachment A, Organization Chart

• Staff and consultant short biographies (not complete résumés).

**Meredith Redmon, Project Manager, King County WTD** Meredith has twenty years of professional experience in public service and private consulting. She independently manages planning, design, implementation, and close-out of multiple capital projects including large scale facility construction projects, distributed control system upgrades, asset management projects, and Local Public Agency coordination projects.

**Tony Robinson, Project Representative (construction management), King County WTD** Tony is a Construction Management Project Representative with over 20 years experience in construction management. Tony has provided construction oversight on similar sewer project for WTD.

#### Hannah Lindquist, Project Control Engineer, King County WTD

Hannah is a Project Controls Engineer (PCE) with King County's WTD and has over 5 years of experience in private and public works cost control and will be supported through the project by KCWTD's Project Control Group. Hannah will be supported by other experience PCE team members to guide through the process.

#### Todd Keithahn, Project Engineer, King County WTD

Todd is a civil engineer PE with over 35 years of experience in sewer conveyance projects.

#### Alexis Surprenant, Operations and Maintenance Lead, King County WTD

Alexis is a King County WTD Project Coordinator representing East Offsite Operations. She is the operations representative for all capital projects on East Offsite. She has 8 years operations experience and 3 years in the Capital Project Coordinator Position for East Offsite.

#### Melissa Jordan, Associate DBIA, CPPB, Procurement Lead, King County Procurement and Payables

Melissa has over 8 years of Alternative Public Work Experience and 18 years of public procurement experience. The majority of her experience was spent in Public Work and Capital Project procurement, contract administration, and close outs. Melissa holds a Bachelor's in Business Management, Certified Professional Public Buyer (CPPB) and an Associate DBIA. Melissa has conducted multiple procurements for alternative delivery projects under RCW 39.10.

# Trisha Roth, BSBA, MSTM, Associate DBIA, CPPB, Procurement Support and Contract Administration, King County WTD

Trisha brings more than 20 years of experience in both public and private sector with a firm background in project management and contract administration, particularly for capital projects. Trisha holds a Master of Science in Transportation Management, Associate DBIA and Certified Professional Public Buyer (CPPB) certifications. Trisha has direct GC/CM experience working on the West Point Treatment Plant GC/CM Electrical Improvement Project and Elliott West Wet Weather Treatment Station.

### John Nottingham, P.E., OA Project Manager, Brown and Caldwell

John has a breadth of experienced as a Professional Engineer with a background in the planning, design, and construction management of water and wastewater projects. His background includes over 26 years of experience in project management with 12 years as a Consulting Engineer and 14 years as an Owner in the public sector. John serves as an Owner Advisor providing procurement and preconstruction services for alternative delivery projects. Additional experience includes the management of three complex City of Everett projects including one GC/CM and two PDB projects.

### Patrick Weber, P.E., PMP, DBIA, OA SME, Brown and Caldwell

Patrick has 18 years of engineering experience in planning, design, and oversight of water and wastewater projects. Patrick provides Owner's Advisor services for delivery method evaluation, procurement, design oversight, and construction oversight of alternative delivery projects around the country, including GC/CM and design-build projects. Patrick has provided alternative delivery OA services for more than 11 alternative delivery projects in Washington. He has experience applying alternative delivery principles to the particular challenges of utility conveyance projects.

### Josh Thomas, P.E., OA SME, Brown and Caldwell

Josh is a full-time Owner Advisor for alternative delivery projects and has 11 years of experience in planning and scheduling, contracts and project oversight, design development, construction management, and engineering design software. As an Owner Advisor, Josh provides procurement and pre-construction services on alternative delivery projects, including GC/CM, progressive design-build, and fixed-price design-build. Josh has served as Owner Advisor on more than 10 projects with negotiated construction pricing (GC/CM, PDB).

## Edith Hadler, Consultant PM, HDR

Edith's 33-year career has been built on working with clients to develop feasible, implementable, successful solutions to complex wastewater management challenges. She is skilled at collaboration, team and agency engagement, and balancing the technical and non-technical considerations that go into complex alternatives analyses. She has worked on multiple major sewer projects including Brightwater Conveyance and Lake Hills Trunk Sewer projects. Edith's vast design and management experience includes the planning and design of collection system storage and pipelines with a combined construction cost of over \$1 billion. Edith has designed over 120 miles of pipelines including wastewater gravity and force mains and pump stations. She has planned and designed over 30 miles of sewers ranging from 24-inch diameter up to 25-foot diameter using trenchless technologies including micro tunneling, tunneling, and bore and jack techniques.

Edith has worked on four GC/CM projects as an engineer including: Genesee, Henderson and Windermere CSO Storage Tank Projects and the Mouth of the Duwamish Project that includes a wet weather treatment station, conveyance, and Chelan CSO storage tank

#### Carrie Murillo-Oaks, Consultant Deputy PM, HDR

Carrie is a senior wastewater engineer and project manager with 21 years of experience in planning, design, and construction of wastewater and combined sewer overflow control projects. She routinely works on large, multidisciplinary capital projects for King County, including large regional sewer design projects such as the Kent/Auburn Conveyance System Improvements project, North Creek Interceptor Improvements project, North Lake Sammamish Flow Diversion project, and Georgetown Wet Weather Treatment Station. Carrie has led the design and engineering services during construction for multiple King County projects that included the design-bid-build project delivery method, including the North Beach CSO Control and Kent/Auburn Conveyance System Improvements projects.

#### Laura Nolan, Consultant Civil Engineer, HDR

Laura is a professional engineer with 20 years of experience executing large-scale civil and environmental engineering projects. Her approach to project delivery is proactive and inclusive, encompassing planning, design, and construction phases. Laura has designed more than 20 miles of new and rehabilitated pipelines ranging up to 120-inch diameter. Laura understands the challenges of designing and constructing infrastructure in urban environments, utilizing proactive investigations to inform design and minimize construction impacts

Laura is a DBIA-certified Associate Design-Build Professional, demonstrating a detailed understanding of the collaborative delivery process. As project manager for the design of a major wastewater treatment plant upgrade being delivered through GC/CM, Laura understands the importance of selecting the right contracting method, obtaining CPARB approval, and facilitating a collaborative preconstruction environment.

#### Jon Rogers, Collaborative Delivery Lead, HDR

Jon is a collaborative project delivery leader with 18 years' experience in delivering complex projects utilizing collaborative delivery. Jon recently joined HDR after working for a contracting organization for most of his career. In his current role, Jon supports collaboratively delivered projects by providing guidance and education to Owner and delivery teams in preparation for and execution of projects in addition to fostering positive relationships with contracting organizations that HDR partners with. Jon's most recent experience utilizing collaborative delivery while at HDR includes the Goshen/Ft. Laramie GC/CM project involving delivery of 2 >2000' 18' diameter tunnels, the Paradise Sewer System PDB involved a local sewer collection system and 18 mile main, and the Carlsbad Screens Replacement PDB project involving a screening facility for an ocean water intake system. Prior to joining HDR, Jon was responsible for team formation, risk management, and contract negotiations for West Coast water collaborative delivery projects, including GC/CM and PDB.

 Provide the experience and role on previous GC/CM projects delivered under RCW 39.10 or equivalent experience for each staff member or consultant in key positions on the proposed project. (See Example Staff\Contractor Project Experience and Role. The applicant shall use the abbreviations as identified in the example in the attachment.)

See Attachment B, Project Experience and Role, for each staff member in key positions in the proposed project.

• The qualifications of the existing or planned project manager and consultants.

The County's Project Manager, Meredith Redmon, has over 18 years of project management experience covering traditional design-bid-build contracts. She has managed multiple large scale complex capital improvement projects including pump station upgrades, conveyance improvement projects, distributed control system upgrades, and large facility construction projects. Meredith is currently leading WTD's first linear alternative delivery (PDB) project.

The County's OA team, including John Nottingham, Patrick Weber, Josh Thomas, and additional OA support staff, have extensive experience supporting owners through GC/CM and other alternative delivery projects. John and team are committed to overseeing the project and working closely with the County team to execute the work. Brown and Caldwell is currently under contract with the County to support procurement and preconstruction phases of the project, and the County's intent is to continue OA services through the construction phase to project completion.

• If the project manager is interim until your organization has employed staff or hired a consultant as the project manager, indicate whether sufficient funds are available for this purpose and how long it is anticipated the interim project manager will serve.

#### Not Applicable

 A brief summary of the construction experience of your organization's project management team that is relevant to the project.

KCWTD is responsible for planning and delivering more than one and one-half billion dollars of capital projects. Those projects include construction, repair, or rehabilitation of conveyance systems similar to the Sammamish Plateau Diversion project.

Meredith Redmon has significant project management and construction oversight experience with KCWTD, including for conveyance projects, and is backed by the experience, depth, and senior leadership of KCWTD's Capital Projects Group. Meredith will report to KCWTD's Definition and Delivery Board, which is responsible for oversight of capital projects. KCWTD and this project team are focusing on alternative project delivery to allow for an integrated team to continue our long history of successfully completing large and complex construction projects.

KCWTD's Owner Advisor team will bring extensive experience overseeing DB procurement, contracting, design implementation, pricing negotiations, and construction. The OA team will provide full construction management support, including staff from KBA and Brown and Caldwell with extensive

background in the PDB delivery method to support KCWTD in the delivery of the Sammamish Plateau Diversion project.

Please also see Attachment B, Project Experience and Role, and Attachment C, Construction History for more details.

 A description of the controls your organization will have in place to ensure that the project is adequately managed.

KCWTD has a long history of successfully managing large capital projects with delivery totaling about \$320M annually. The agency has established and implemented mature project controls, project management, and construction management processes. These processes are built on the standard capital project management procedures used by the KCWTD. These procedures include roles and responsibilities; issue, decision and change management; risk management; quality management; communications; interface management; governance and authority; document management; project controls and reporting; construction management; and project closeout.

**Governance Oversight and Controls** – KCWTD has an established governance process that institutionally manages and controls scope, schedule, and budget considerations of capital projects. The Offsite Facilities Program (OFP) has established the Program Leadership Advisory Team, consisting of managers and supervisors within the organization (including active members of Governance Boards), as an oversight and steering committee to facilitate capital project governance and controls. This committee seeks to facilitate the governance process and ensure appropriate capital project controls in terms of cost/budget, schedule, and scope tracking, reporting, and management.

**Authority and Governance** – KCWTD existing authority structures will be used for reviewing and approving any contract changes, including changes to scope, schedule, and/or budget. KCWTD, with the assistance of the OA, will lead Contact Price (CP) negotiations with the GC/CM in a transparent and open-book manner and will work to ensure that claimed labor rates and costs are aligned with the contract, and can be reasonably reviewed and audited. Audits are planned at the beginning to set rates and expectations, at the middle to ensure compliance and possible refinements, and at final completion.

**Scope Control and Reporting** – KCWTD in conjunction with OA has established a scope management matrix tool for the tracking of scope evolution throughout the project development and delivery process. Any additions/deducts and/or modifications to scope to the SPD project that may arise will be documented, tracked, and reported on in terms of any cost and/or schedule changes that it may trigger to the project and within the overall OFP

**Cost and Schedule Control and Reporting** – Monthly the project manager submits an updated project schedule to the OFP. The OFP consolidates this information into an integrated master OFP program schedule and reports for monitoring project performance, managing project interfaces, and providing transparent reporting to KCWTD leadership. Cost/budget tracking and reporting is conducted monthly using KCWTD's Project Reporting and Information System Management (PRISM) project management platform. Cost and schedule data tracked in PRISM are also integrated with trend logs of any forecasted and implemented changes to cost and/or schedule that may arise through delivery of the project. Quarterly the project manager submits a report which identifies progress, including any issues/decisions/changes that may impact scope, schedule, and budget. The GC/CM will be required to provide information to KCWTD, and as needed participate in meetings and project audits.

**Risk Management, Decision and Change Management** – A risk register, and an Issue, Decision, and Change (IDC) Management log are developed for the project; these will continue to be maintained to help identify critical decisions, mitigate risks, document decisions and track changes. The risk register is reviewed by the project team monthly and will be used in the future to help manage contingencies. In addition, OFP Program risk management, including conducting of qualitative and quantitative risk analyses to support risk identification, risk mitigation planning, and proper risk allocation between KCWTD and the GC/CM on the SPD project will be conducted.

**Procurement** – During procurement of the GC/CM, procedures will be implemented by King County procurement with support from the OA and project team to ensure that procurement processes, criteria, and project requirements comply with RCW 39.10. Industry outreach will be conducted in advance of the procurement to incorporate feedback from industry to ensure that the procurement aligns to industry standards and expectations and remains in compliance with RCW 39.10.

**Quality Management** – Design reviews, including independent reviews, are conducted at the 30%, 60%, and 90% design stages. The GC/CM will participate in design reviews for constructability,

sequencing, scheduling, and cost. KCWTD will be the primary party responsible for reviewing preconstruction work provided by the GC/CM, and for stakeholder integration for GC/CM engineering deliverables. During construction, field quality control will be the responsibility of the GC/CM; and field quality assurance will be provided by both KCWTD and the OA.

**Document Controls** – KCWTD document control processes will be used by the GC/CM. These processes include standardized file storage and naming conventions, and tools required for fostering collaboration between KCWTD, the Engineer, and OA for tracking submittal information, RFI, design clarifications, work notifications, and change requests.

**Closeout** – At the completion of the project BC will prepare a close-out report which will capture all pertinent project data and lessons learned.

• A brief description of your planned GC/CM procurement process.

King County plans to use a multi-phased GC/CM procurement approach:

- Public outreach including a Request for Information by interested firms.
- Request for Proposals (RFP Phase 1) with a focus on relevant experience, proposed team, and approach. The RFP phase will shortlist three to four firms.
- Request for Fee Proposals (RFFP Phase 2) will focus on the fee and rates for Phase 1 (preconstruction/design) in order to establish the total price proposal. Short-listed firms will be invited to interviews and proprietary meetings which may include site tours during the RFFP phase.
- King County uses a two agreement approach for GC/CM. the first agreement will be specific to preconstruction tasks. The highest ranked firm will be asked to provide a fee and estimated price for preconstruction services.
- Any early work packages will trigger execution of the second GC/CM construction services contract. Additional early work packages, or the full Maximum Allowable Construction Cost (MACC) will be added to the contract via change order. It is possible that both agreements will run simultaneously until the MACC change order is executed.

KC has a well-established procurement office/staff that is supported by the KC Prosecuting Attorney's Office and contract specialists. Utilizing lessons learned from the previous projects, the documents are continuing to be examined and improved. The contract terms comply with RCW 39.10 and will provide the County with the flexibility to perform early construction work while managing the maximum cost of the Project. Our goal is to have RFP and Contract Documents in place and ready for public solicitation by 3<sup>rd</sup> quarter 2025, with execution by 2<sup>nd</sup> quarter 2026.

 Verification that your organization has already developed (or provide your plan to develop) specific GC/CM or heavy civil GC/CM contract terms.
KC WTD developed boilerplate documents in collaboration with the King County Prosecuting Attorney's Office. The boilerplate documents are continuing to be improved as they are implemented on WTD and

#### 7. Owner Readiness (To be answered by the Owner)

other King County projects.

a) What have you done as an Owner to prepare yourself and your staff for this GC/CM project?

The County has been actively engaged in undertaking steps of organizational readiness. This includes participation in professional organization trainings, including the Association for General Contractors (AGC) GC/CM training, Design Build Institute of America (DBIA), Water Collaborative Delivery Association (WCDA), and multiple planning workshops with the team. Planning workshops facilitated by the owner's advisor included capturing and applying lessons learned from other GC/CM projects the County and its team members have undertaken, as well as planning and preparing for engagement in alternative public works with a contractor. Key topics of preparation include project governance, budgetary planning, coordination/communication, cost estimating and mini-MACC negotiations, project controls, change management, contract compliance, tracking/reporting, and engagement in preconstruction and construction phases of the project.

i. How have you communicated with other public owners to understand the organizational alignment and administrative time needed to manage an alternative delivery project?

KC WTD staff conducted industry outreach with peer agencies, including Sound Transit, Pierce County, Port of Seattle, City of Tacoma, and Seattle Public Utilities, and industry leaders to understand the current market, best practices, and receive information on lessons learned. The County actively engaged peer agencies involved in alternative public works starting in 2021 and has maintained contact and coordination to further its learning process and improve

organizational readiness of staff. The agency has learned and now understands that administratively it takes a dedicated, focused core team to align the organization to alternative public works. The County understands this core team is necessary to focus on the day-to-day management and administration of alternative public works projects. The County continues to refine its internal processes and procurement documents based on industry feedback, lesson learned, and specific project needs.

ii. What training have you as an Owner and your staff taken?

The County recognizes there is limited training available specifically for GC/CM; however, several actions have been undertaken to train and prepare staff. Staff has participated in the AGC's GC/CM training to better understand the process and how to administer the preconstruction and construction contracts. Staff has attended organizational readiness workshops, led by the owner advisor, to prepare for engaging in all aspects and phases of collaborative delivery and to understand specific nuances of delivering a GC/CM project in the WA state. Staff have also participated in formal training provided by the Water Collaborative Delivery Association (WCDA) and the Design-Build Institute of America (DBIA) to better understand collaborative delivery processes and tools that may be applied to GC/CM delivery. KC WTD has retained an owner advisor to support training and assist in development of internal processes and tools needed to implement Alternative Public Works projects and institutionalize collaborative delivery within the broader organization.

iii. How have you considered the differences in alternative delivery vs Design Bid Build with regards to contract requirements around risk allocation, attitudes towards contract changes, disputes, etc.?

The County has considered the differences in alternative delivery and use of alternative public works relative to Design Bid Build. In particular, the County has adapted its risk register and further developed a risk allocation matrix tool to provide transparent and clear understanding of owner-controlled vs. contractor-controlled contingency associated with allocated risks. County staff have undertaken training and are currently sharing lessons learned from the two active GC/CM projects already in administration within the agency, along with staff and team members' experience implementing GC/CM for other public agencies. This has ensured that staff better understand the nature of contract changes in alternative public works and recognize that changes during design from contractor input provide a benefit to delivery in calibrating the designer's intent with contractor means and methods. Further, County staff are recognizing that changes are a collaborative problem-solving effort between the integrated team as opposed to a more traditional adversarial approach that may be experienced using Design Bid Build. The County has formulated a core team approach to delivering GC/CM projects between the County, owner's advisor, Engineer of Record, and GC/CM contractor that seeks to foster collaboration throughout the delivery process. In terms of potential disputes, the County has a dispute resolution process as part of its governance approach that includes an escalation ladder to the Change Review Board, as well as the Agency Governance Boards that seek to facilitate decision-making and mediate any potential disputes between the agency and contractor in order to arrive at a mutually agreeable outcome in the interest of the project. Lastly, as part of evaluating the goodness of fit and optimal delivery method type for a project, KC WTD's Alternative Delivery Committee (ADC) has institutionalized a process where Design Bid Build is the baseline delivery case that is considered and compared to Alternative Public Works delivery methods.

b) How does your organization ensure that knowledge is passed down to your staff and project team?

The County, and more specifically KC WTD, maintains an active lessons learned database tool that tracks information and is readily available to all staff. This program captures learned lessons on projects that are broadly shared and communicated to staff throughout the agency. Recently, the County has ensured particular emphasis in the sharing of lessons learned on alternative public works projects, inclusive of the two active GC/CM projects that are already undergoing delivery within the agency. Surveys have been conducted amongst KC WTD staff to capture information on elements that are working well, aspects that could use improvement, areas of opportunity to refine/improve delivery, and challenges that may disrupt the delivery process. Project teams, including owner's advisors and Engineer of Record, from the active GC/CM projects are conducting knowledge sharing as part of organizational readiness efforts for this GC/CM project through a series of interactive, scenario-based workshops focused on ensuring staff are prepared. Overall, KC WTD is cross training team members through lessons learned, collaboration with project team members on existing projects, and internal training efforts including a library of past projects. Standards are being established with project

SharePoint site documentation, and procedural manuals, all of which are in a state of continuous improvement.

- c) How have you familiarized yourself and your staff with GC/CM Best Practices?
  - The County, and more specifically KC WTD, has invested significantly in orienting to and understanding industry best and effective management and delivery practices in alternative public works, collaborative delivery, and more specifically GC/CM, per RCW 39.10. KC WTD currently has two active GC/CM projects underway and is applying a lean continuous improvement methodology in efforts to continue to tailor agency practices to industry best practices. For each of the current active GC/CM projects, KC WTD (with support from its owner advisor) have developed a GC/CM Management Plan to provide overarching guidance and lays out how the agency will manage and deliver using the GC/CM delivery method. The GC/CM Management Plan draws upon industry best practices in collaborative delivery during preconstruction and construction phases and ensures alignment to and compliance with RCW 39.10. In addition, KC WTD has owner advisor consultants with experience in GC/CM delivery guiding the process and ensuring that the County is seeking to employ best practices. Lastly, a "best practices" document has been published on the County's global Capital Project Management Work Group (CPMWG) to inform teams from all County agencies.
- d) What is your role in monitoring GC/CM Subcontractor Bid Packaging, and do you have staff allocated to provide oversight in Prime contractor's bidding and subcontract terms?

The County's project team is directly involved in monitoring GC/CM subcontractor bid packaging. The core team structure that KC WTD is employing involves both the Project Manager / Project Representative of Phase 1 preconstruction services agreement and Construction Manager / Project Representative of the Phase 2 construction services contract who provide direct oversight of the prime contractor's bidding and subcontract terms.

In addition, KC WTD has added additional procurement resources to its Project Control and Contract Management Unit recently to support alternative public works and to support bidding procedures and review / validation of acceptability of subcontract terms. As part of the preconstruction services, the County staff and the core team will work with the prime contractor to determine appropriateness of subcontractor bid packaging, including the process by which alternative subcontractor bids will be administered and conducted in compliance with RCW 39.10. KC WTD Project Representatives are supported by the PMOA, and Trisha Roth who is in KC WTD's Project Control and Contract Management Unit, to provide oversight to the GC/CM subcontractor bid packaging and alternative subcontractors, review of subcontract packages, and public outreach documentation presented prior to release to verify RCW requirements are met, and public opening of the bids are conducted by a County authorized representative.

# 8. Public Body (your organization) Construction History:

Provide a matrix summary of your organization's construction activity for the past six years outlining project data in content and format per the attached sample provided: (See Example Construction History. The applicant shall use the abbreviations as identified in the example in the attachment.)

- Project Number, Name, and Description
- Contracting method used
- Planned start and finish dates
- Actual start and finish dates
- Planned and actual budget amounts
- Reasons for budget or schedule overruns
- Small-, minority-, women-, and veteran-owned business participation planned and actual utilization

Refer to Attachment C, Construction History, which includes King County projects that have used collaborative delivery methods and other WTD pipe rehabilitation and conveyance projects delivered using DBB.

# 9. Preliminary Concepts, sketches or plans depicting the project

To assist the PRC with understanding your proposed project, please provide a combination of up to six concepts, drawings, sketches, diagrams, or plan/section documents which best depict your project. In electronic submissions these documents must be provided in a PDF or JPEG format for easy distribution. (See Example concepts, sketches or plans depicting the project.) At a minimum, please try to include the following:

• An overview site plan (indicating existing structure and new structures)

 Plan or section views which show existing vs. renovation plans particularly for areas that will remain occupied during construction.

Note: Applicant may utilize photos to further depict project issues during their presentation to the PRC.

See Attachment D includes a site map

#### 10. Resolution of Audit Findings on Previous Public Works Projects

If your organization had audit findings on *any* project identified in your response to Question 7, please specify the project, briefly state those findings, and describe how your organization resolved them.

KCWTD has received no audit findings on any of the public works projects listed in response to Question 7.

#### 11. Subcontractor Outreach

Please describe your subcontractor outreach and how the public body will encourage small-, minority-, women-, and veteran-owned business participation.

KCWTD is a national leader in strategic planning that promotes Equity and Social Justice (ESJ) innovations. KCWTD is committed to ensuring that the spending of government dollars is done in a manner that enhances equity outcomes for small businesses certified by OMWBE as minority-owned, women-owned, or veteran -owned.

KCWTD will establish a minimum required level for the participation of Small Business Enterprise (SBE) firms certified by the Washington State Office of Minority and Women Business Enterprises (OMWBE). The requirement will be expressed as a percentage of the total contract value to be performed by SBE firms. To ensure success at meeting the SBE utilization requirement, KCWTD will also require submission of an Equity and Social Justice (ESJ) Innovation Plan. The ESJ innovation plan formalizes the proposer's approach and the specific actions that the proposer will take to maximize SBE participation on the project. The plan includes outreach and engagement strategies, identification of subconsultant and subcontractor work opportunities, potential barriers to small and diverse business participation, technical assistance, mentorship, as well as monitoring and performance measurements to ensure success of the plan. The proposer will be asked to separately address their inclusion strategies for design tasks, construction subcontracting, as well as equipment and supply purchases from SBE firms.

Consistent with the provisions of RCW 39.10.330 (8), KCWTD's contract with the awarded firm will require the firm to track and report to the KCWTD and to the Office of Minority and Women's Business Enterprises (OMWBE) its utilization of OMWBE certified businesses. During contract performance, the awarded firm will be required to submit monthly reports to the project team detailing the ESJ Innovation Plan activities taken over the past month, as well as those activities planned for the coming month. Additionally, the awarded firm will be required to report all subcontract awards, and all subcontractor/subconsultant/supplier payments on a monthly basis into the KCWTD's Diversity Compliance Management System (DCMS). If at any point the awarded firm falls short of the SBE utilization requirement established for the contract, the County may require submittal of a corrective action plan.

## 12. Alternative Subcontractor Selection

- If your organization anticipates using this method of subcontractor selection and the scope of work is anticipated to be over \$3M, please provide a completed Supplement A, Alternative Subcontractor Selection Application document, <u>one per each desired subcontractor/subcontract package</u>.
- If applicability of this method will be determined <u>after</u> the project has been approved for GC/CM alternative contracting or your project is anticipated to be under \$3M, respond with **N/A** to this question.
- If your organization in conjunction with the GC/CM decide to use the alternative subcontractor method in the future and your project is anticipated to be over \$3M, you will then complete the *Supplement B Alternative Subcontractor Selection Application and* submit it to the PRC for consideration at a future meeting.

Use of this method will be determined collaboratively with the GC/CM at a later date and presented to the PRC in an application supplement if necessary.

#### CAUTION TO APPLICANTS

The definition of the project is at the applicant's discretion. The entire project, including all components, must meet the criteria to be approved.

#### SIGNATURE OF AUTHORIZED REPRESENTATIVE

In submitting this application, you, as the authorized representative of your organization, understand that: (1) the PRC may request additional information about your organization, its construction history, and the proposed project; and (2) your organization is required to submit information requested by the PRC. You agree to submit this information in a timely manner and understand that failure to do so may delay action on your application.

If the PRC approves your request to use the GC/CM contracting procedure, you also you also agree to provide additional information if requested. For each GC/CM project, documentation supporting compliance with the limitations on the GC/CM self-performed work will be required. This information may include but is not limited to: a construction management and contracting plan, final subcontracting plan and/or a final TCC/MACC summary with subcontract awards, or similar.

Signature:	
Name ( <i>please print</i> ): <u>Meredith Redmon</u>	(public body personnel)
Title: Wastewater Capital Project Manager IV	
Date:	

Attachment A: Organization Chart
Attachment B: Project Role and Experience
Attachment C: Construction History
Attachment D: Site Map



# ATTACHMENT B

# PROJECT EXPERIENCE AND ROLE

KIN	IG COUNTY P	ROJECT EXPERIENCE			Role during Project Phase				
No	Name	Summary of Experience	Project Names	Project Size	Project Type	Planning	Design	Construct.	
1	Meredith Redmon	Program Manager, King County WTD. Meredith has twenty years of professional experience in public service and private	North Mercer Island Interceptor and Enatai Interceptor Upgrade Project	\$180M	DBB	NA	Project Manager	Project Manager	
		consulting. She independently manages planning, design, implementation, and close- out of multiple capital projects including large	LOOP Maintenance Vehicle Facility	\$15M	DBB	NA	Project Manager	Project Manager	
	scale facility construction projects, distributed control system upgrades, asset management projects, and Local Public Agency coordination projects.	M Street Trunk Rehabilitation	\$117M	PDB	Project Manager	Project Manager	Project Manager		
		coordination projects.	Sunset Heathfield Forcemain and Pump Station Upgrade Project	\$91M	DBB	NA	NA	Project Manager	
2	Tony Robinson	Tony is a Construction Management Project Representative with King County's Wastewater Treatment Division with over 20	Edward C. Little Water Recycling Facility, Pasadena, California	\$60M	DB	CM/Super	CM/Super	CM/Super	
		management.	North Mercer Island Interceptor and Enatai Interceptor Upgrade	\$180M	DBB	N/A	N/A	СМ	
3	Meagan Krenzer	Meagan is a Project Controls Engineer (PCE) with King County's WTD and has over 8 years of experience in private and public works cost control.	WPTP PE and RAS Pipe Restoration, King County WTD	\$50M	GC/CM	N/A	PCE	PCE (Future Phase)	
4	Todd Keithahn	Todd is a civil engineer PE with over 35 years of experience in sewer conveyance projects.	Kent/Auburn Phase B Sewer Interceptor, King County WTD	\$25M	DBB	N/A	Project Engineer	Project Engineer	
	His expertise is with underground pipeline construction.		NW Tribal Casino Expansions for Lummi, Suquamish, Chehalis, and Stillaguamish Tribes	\$100M	GC/CM	N/A	Project Engineer	Project Engineer	

KING COUNTY PROJECT EXPERIENCE						Role du	Role during Project Phases			
5	Alexis Surprenant (O&M Lead)	Alexis is a King County WTD Project Coordinator representing East Offsite Operations. She is the operations representative for all capital projects on East Offsite. She has 8 years operations experience and 3 years in the Capital Project Coordinator Position for East Offsite.								
6	Trisha Roth	WTD Contract Specialist / Procurement and Contract Administration Support	Elliott West Wet Weather Treatment Station Project	\$400M	GC/CM	SME	SME	SME		
		20 years of experience in private and public sector, Direct experience with GC/CM projects for KC West Point Treatment Plant, Elliott West Wet Weather Treatment station, and multiple Progressive Design Build projects for WTD, FMD and Metro.	West Point Treatment Plant GC/CM	\$871M	GC/CM	SME	SME	SME		
7	Melissa Jordan	Procurement and Payables (P&P) Contract Specialist / Procurement Support	Elliott West Wet Weather Treatment Station Project	\$400M	GC/CM	SME	SME	SME		
		Over 18 years of experience in public sector procurement with over 8 years of Alternative Public Work Experience including projects prior	West Point Treatment Plant GC/CM	\$871M	GC/CM	SME	SME	SME		
		to joining King County. King County experience with GC/CM projects include KC West Point Treatment Plant, Elliott West Wet Weather Treatment Station, and Progressive Design Build ESI 8 project.	ESI Section 8 Trunk Rehabilitation	\$123M	PDB	SME	SME	SME		

ov	VNERS ADVIS	Role during Project Phases						
No	Name	Summary of Experience	Project Names	Project Size	Project Type	Planning	Design	Construct
1	John Nottingham	John has a breadth of experienced as a Professional Engineer with a background in	WPCF Phase C, City of Everett, Washington	\$21M	GC/CM	Owner	Owner	Owner
	(Brown and Caldwell)	rown and the planning, design, and construction management of municipal water and sewer	Reservoir 3, City of Everett, Washington	\$3M	PDB	Owner	Owner	Owner
	years of experience in project management with 12 years as a Consulting Engineer and 14 years as an Owner in the public sector.	WFP Phase 2, City of Everett, Washington	\$29M	PDB	Owner	Owner	Owner	
2	Josh Thomas (Brown and	Josh has 11 years of experience in planning and scheduling, contracts and project oversight, design development, and	PFAS Treatment Facility, South Adams County Water Sanitation District, Colorado	\$68M	GC/CM	Owner Advisor	Owner Advisor	Owner Advisor
	Caldwell) construction management. As an Owner Advisor, Josh provides procurement and preconstruction services on collaborative delivery projects, including General Contractor / Construction Manager (GC/CM, CM/GC, CMAR), progressive design-build, and fixed-price design-build projects.	Betasso Water Treatment Facility Upgrade Program (6 Projects), Betasso, Colorado	\$20M	GC/CM	Owner Advisor	Owner Advisor	Owner Advisor	
		Timpanogos WWTP Package C, American Fork, Utah	\$350M	GC/CM	Owner Advisor	Owner Advisor	Owner Advisor	
		Recycled Water Program, City of Bosie, Idaho	\$550M	GC/CM	Owner Advisor	Owner Advisor	Owner Advisor	
			WWTP Group G , City of Nampa, Idaho	\$40M	GC/CM	Owner Advisor	Owner Advisor	Owner Advisor
3	Patrick Patrick has 18 years of engineering Weber experience in planning, design, and oversight of water and wastewater projects. Patrick	Mill Creek WTP Slow Sand Filter Improvements, Walla Walla, Washington	\$23M	GC/CM	OA Support	OA Support	OA Support	
	Caldwell) provides OA services for delivery method evaluation, procurement, design oversight, and construction oversight of alternative delivery projects around the country. Patrick		Eastside Interceptor Section 8 (ESI8) Rehabilitation Project, King County WTD, Washington	\$85M	PDB	Owner Advisor	Owner Advisor	Pending

ov	VNERS ADVISOR PROJECT EXPERIENCE	Role during Project Phases					
	has provided OA services for more than 10 alternative delivery projects in the Puget Sound region. He has experience applying	M Street Trunk Rehabilitation, King County WTD, Washington	\$40M	PDB	Owner Advisor	Owner Advisor	Pending
	PDB principles to the particular challenges linear conveyance projects.	Jefferson and Hood Street Surface Water Interceptor, City of Tacoma, Washington	\$30M	PDB	Owner Advisor	Owner Advisor	Owner Advisor

EN		CONSULTANT PROJECT EXPERIENCE	Role duri	Role during Project Phases				
No	Name	Summary of Experience	Project Names	Project Size	Project Type	Planning	Design	Construct
1	Carrie Murillo-	Carrie is a senior wastewater engineer and project manager with 21 years of experience	Kent/Auburn Phase B Sewer Interceptor, King County WTD	\$25M	DBB	N/A	Project Engineer	Project Engineer
	Oaks	in planning, design, and construction of wastewater and combined sewer overflow control projects. She routinely works on large, multidisciplinary capital projects for King County, including large regional sewer design projects such as the Kent/Auburn Conveyance System Improvements project, North Creek Interceptor Improvements	Sammamish Plateau Flow Diversion Project, King County, WTD	\$140M	GC/CM	Project Engineer/Pr oject Manager	Project Manager	Project Manager
			Georgetown Wet Weather Treatment Station, King County WTD	\$152M	DBB	Project Engineer	NA	NA
		project, North Lake Sammamish Flow Diversion project, and Georgetown Wet Weather Treatment Station. Carrie has led the design and engineering services during construction for multiple King County projects that included the design-bid-build project delivery method, including the North Beach CSO Control and Kent/Auburn Conveyance System Improvements projects.	West Duwamish	\$65M	DBB	NA	Project Engineer/ Project Manager	Project Engineer/ Project Manager

ENGINEERING CONSULTANT PROJECT EXPERIENCE							Role during Project Phases		
2	Edith Hadler	Edith's 33-year career has been built on working with clients to develop feasible, implementable, successful solutions to complex wastewater management	Lake Hills and NW Lake Sammamish Interceptor Upgrade, King County WTD	\$200M	DBB	Project Manager	Project Manager	Project Manager	
		challenges. She is skilled at collaboration, team and agency engagement, and balancing the technical and non-technical	Genesee, Windermere, and Henderson CSO, Seattle Public Utilities	\$120M	GC/CM	Project Manager	Project Manager	Project Manager	
		considerations that go into complex alternatives analyses. She has worked on multiple major sewer projects including Brightwater Conveyance and Lake Hills	North Beach CSO, King County WTD	\$10M	DBB	Project Manager	Project Manager	Project Manager	
		Trunk Sewer projects. Edith's vast design and management experience includes the planning and design of collection system storage and pipelines with a combined construction cost of over \$1 billion. Edith has designed over 120 miles of pipelines including wastewater gravity and force mains and pump stations. She has planned and designed over 30 miles of sewers ranging from 24-inch diameter up to 25-foot diameter using trenchless technologies including micro tunneling, tunneling, and bore and jack techniques.							
		Edith has worked on four GC/CM projects as an engineer including: Genesee, Henderson and Windermere CSO Storage Tank Projects and the Mouth of the Duwamish Project that includes a wet weather treatment station, conveyance, and Chelan CSO storage tank							

# ATTACHMENT C CONSTRUCTION HISTORY

King County - C	ng County - Construction History (10 years)									
Project No.	Project Name	Project Description (1-2 sentence description)	Contracting Method	Planned Start (MM/YY)	Planned Finish (MM/YY)	Actual Start (MM/YY)	Actual Finish <mark>(MM/YY)</mark>	Planned Budget <mark>(\$X.XM)</mark>	Actual Budget (\$X.XM)	Reason for Budget or schedule overr
1.	Lake Hills Interceptor Phase 2	The scope of this project included design and implementation of the rehabilitation of approximately 7,200 linear feet of the Lake Hills Interceptor, located in Bellevue.	D-B-B	11/2018	12/2020	11/2018	10/2023	\$29M	\$20.4M	Project encountered design delays due to complexities associated with a new lining technology.
2.	Eastside Interceptor Lining (Section 2)	The scope of this project included design and implementation of the rehabilitation of approximately 3,900 linear feet of the Eastside Interceptor Section 2 (ESI 2), located in Renton.	D-B-B	3/2019	3/2020	3/2019	9/2020	\$28.3M	\$22.6M	Pipe rehabilitation was completed February 2020; the September 2020 finish listed here reflects issuance of final acceptance.
3.	Kent-Auburn Conveyance System Improvements (Phase B)	The scope of this project included the design and construction of the Pacific Pump Station Discharge and Auburn West Interceptor Parallel pipelines. The pipelines totaled about 3 miles in length and include regions of both force main and gravity sewer, ranging in diameter from 16 inches to 48 inches.	D-B-B	1/2017	12/2019	2/2017	1/2020	\$27.4M	\$22.9M	NA
4.	North Creek Interceptor	This project increased the capacity of part of the North Creek Interceptor Sewer serving southwestern Snohomish County. The project involved replacement of 10,000 LF of existing gravity pipe with larger gravity pipes, 36 to 48 inches in diameter. Both trenchless (open face shield tunneling and pipe ramming) and open trench construction methods were used.	D-B-B	3/2014	6/2017	2015	2021	\$39.5M	\$63.0M	The original construction contract was terminated with the initial contractor for inability to complete the work. A project- specific work order was issued under the January 19, 2017, Executive determination of emergency to complete the project. The change in budget and schedule represents increases in both cost and time for construction, consultant, construction management, permitting/easement and staff costs needed to complete the project due to this issue.
5.	Rainier Valley Wet Weather Storage	This scope of this project included the design and construction of a 0.34-million-gallon, off-line storage tank and install conveyance that will divert flows during storm events from the Hanford trunk to the Bayview tunnel.	D-B-B	10/2015	1/2018	5/2016	5/2019	\$20.0M	\$19.6M	Advertisement was delayed due to the Worthington property acquisition (use and possession was granted in August 2015) and Facility Plan approval from the Department of Ecology.

King County - 0	Construction History (1	0 years)								
Project No.	Project Name	Project Description (1-2 sentence description)	Contracting Method	Planned Start <mark>(MM/YY)</mark>	Planned Finish (MM/YY)	Actual Start (MM/YY)	Actual Finish <mark>(MM/YY)</mark>	Planned Budget <mark>(\$X.XM)</mark>	Actual Budget (\$X.XM)	Reason for Budget or schedule overr
6.	GC/CM Services for Elliott West Wet Weather Treatment Station	The Elliott West Wet Weather Treatment Station (EWWTS) Project consists of new and upgraded treatment facilities to treat combined sewer overflows (CSOs) prior to discharge through the existing outfall in Elliott Bay in Seattle. The Project will replace and upgrade the screening facility, complete pump modifications, add ballasted sedimentation technology for solids removal, replace the existing onsite chlorine disinfection system with a new ultraviolet light (UV) disinfection system, complete electrical upgrades, and complete modifications to the operation of the Mercer Street Tunnel for additional equalization.	GC/CM	10/2019	07/2034	10/2019	Current	\$492.9M	\$492.9M Ongoing	
7.	GC/CM Services for West Point Treatment Plant	This project will replace approximately 300 electrical assets, relocate nine electrical assets, and coordinate these efforts with other electrical and asset replacement projects at West Point Treatment Plant (WPTP) in Seattle.	GC/CM	10/2021	10/2032	10/2021	Current	\$409.9M	\$871M Ongoing	The original \$401M identified for the WPTP GC/CM at the time of the PRC application was based on prior estimates by each individual project package, before the addition of scope for the Fire Suppression project. Since then, WTD implemented a new estimating policy, and the OA team updated and developed independent estimates for all projects, resulting in a current estimated programmatic GC/CM delivery cost of \$871M.
8.	Progressive Design- Build Services for M Street Rehabilitation	This project includes the repair of 13,800 LF of severely deteriorated sewer trunk line (18, 24, 30, and 36-inch) and repair of 45 maintenance holes.	PDB	4/2024	1/2028	4/2024	Current	\$40M	Ongoing	

# CPARB Application for Project Approval Sammamish Plateau Diversion Project

