



New Fennel Creek Pump Station

APPLICATION FOR APPROVAL TO USE THE DESIGN-BUILD
(DB) ALTERNATIVE CONTRACTING PROCEDURE

March 28, 2024 PRESENTATION

Safety Customer-driven Employee invested Stewardship Adaptability

Agenda

Introductions

Tacoma Water

The Program

The Project

Diversity, Equity and Inclusion

Why Design Build

Public Body Qualifications

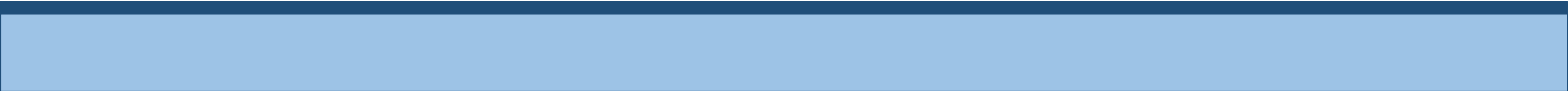
Project Organization Chart

Project Team and Project Experience

Summary



Introductions



The Project Team: Presenting Today

Tacoma Water

- Terry Forslund, Engineering Manager/Project Sponsor
- Ali Poldá, Principal Engineer/Program Manager
- Alicia Flatt, Project Manager

Brown and Caldwell

- Patrick Weber, PDB Owner's Advisor



The Project Team: Not Presenting Today

Tacoma Water

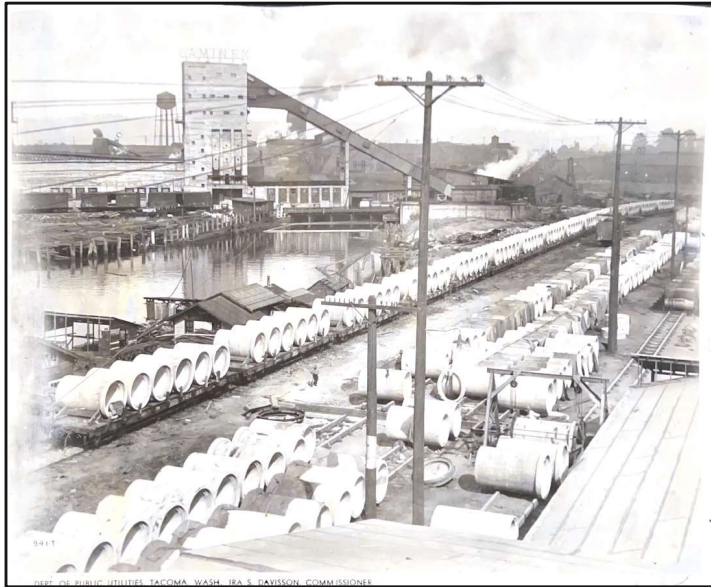
- Jessica Knickerbocker, Planning & Engineering Manager/Project Executive Sponsor
- Phill Ringrose, Construction Manager
- Doreen Klaaskate, Engineering Procurement Coordinator
- Martha Lantz, Deputy City Attorney

External Legal Counsel

- Robynne Thaxton, Thaxton Parkinson

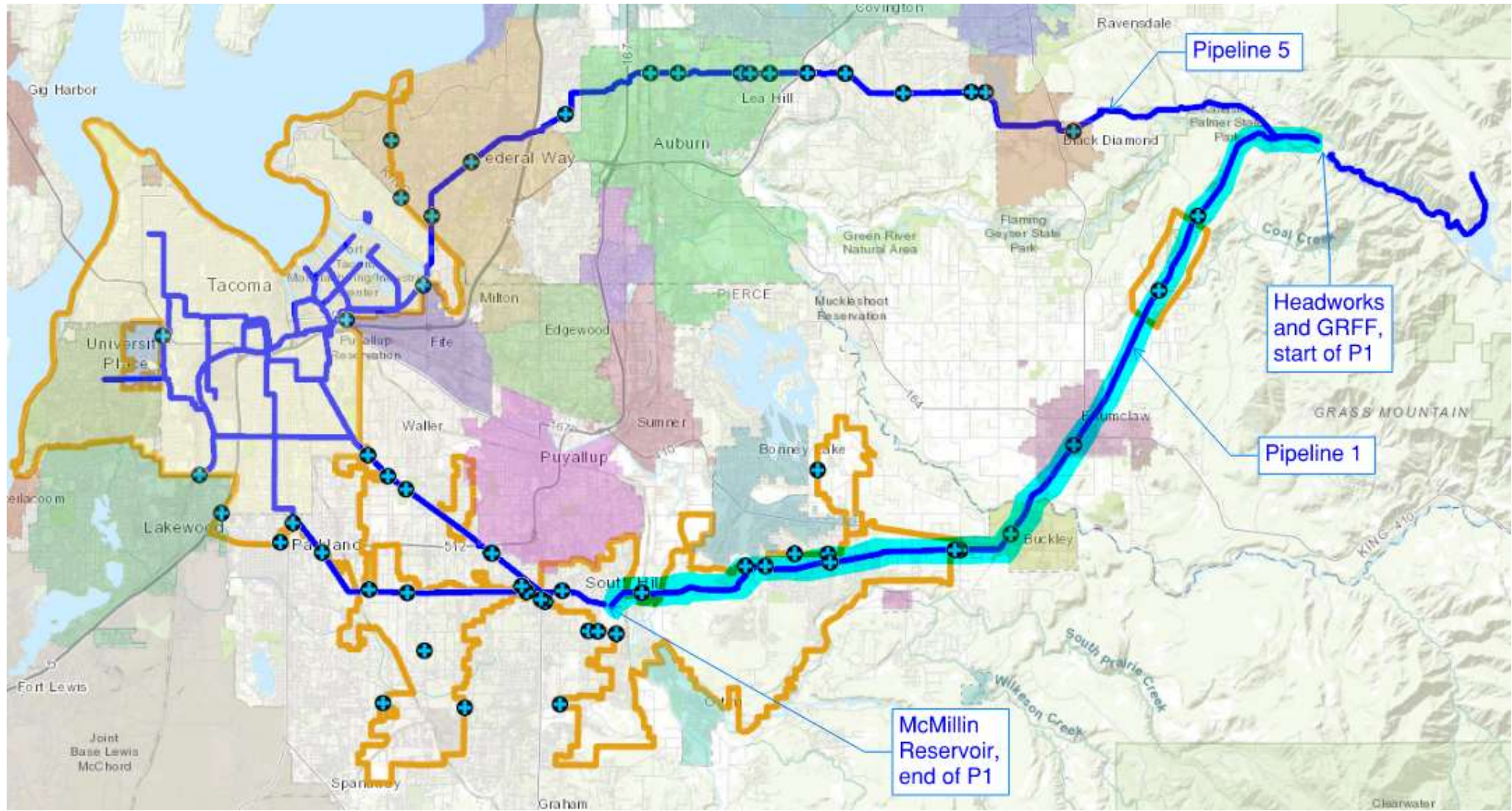


Tacoma Water



- Founded in 1884, Tacoma Water is one of the oldest public water utilities in the country.
- Tacoma Water provides direct service to 102,000 residential customers and 7,000 commercial customers.
- There are 119 square miles of service area and 1,450 miles of water mains
- 300 employees
- Average annual water use per household is 64,418 gallons
- Water Supply
 - Up to 150 million gallon per day from the Green River
 - 40 million gallons per day from local wells
- Financial
 - Value of fixed assets: \$908 million
 - Bond ratings: Standard & Poor's AA+

Tacoma Water





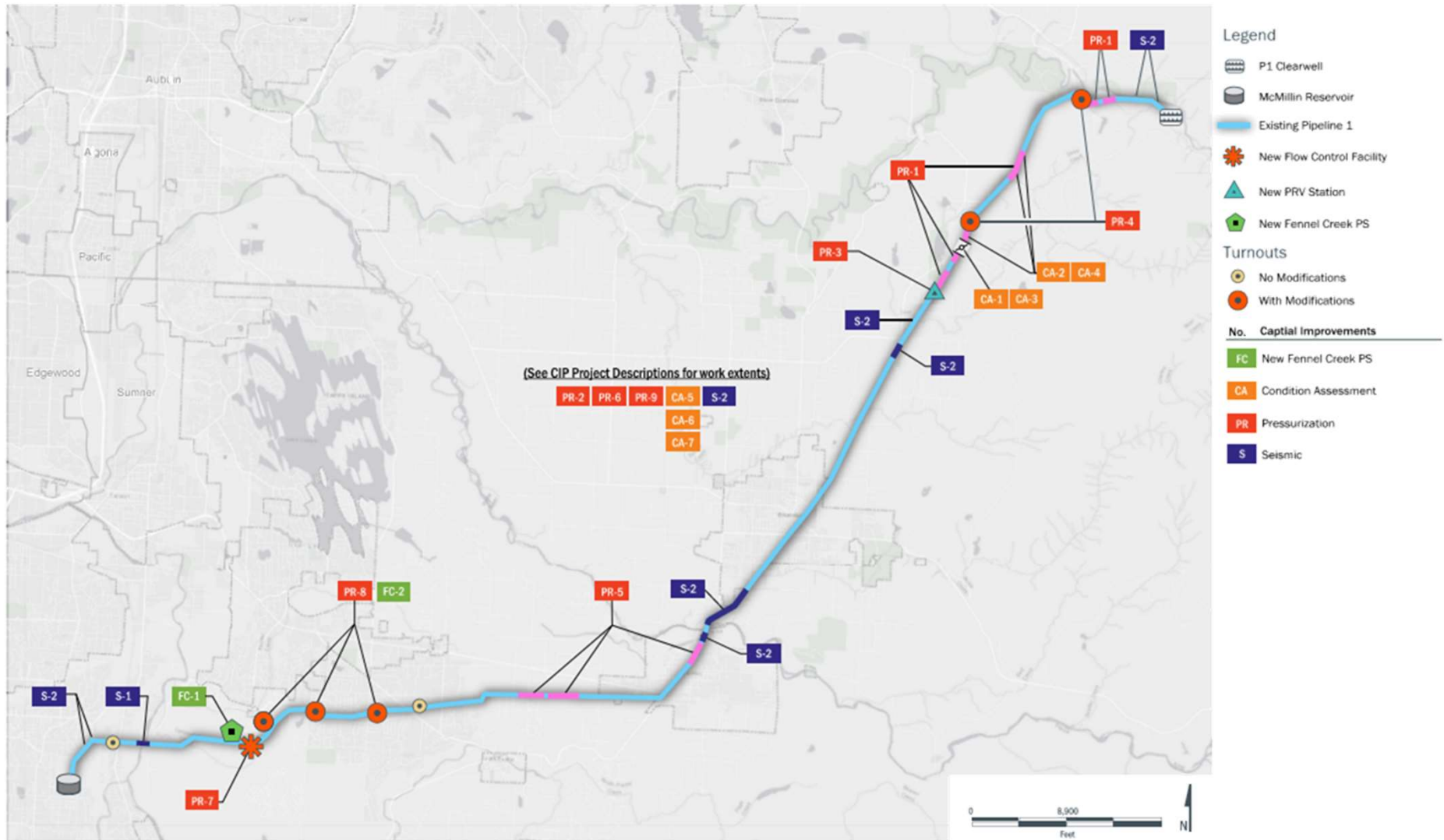
Program Overview

Pipeline 1 (P1) Program Overview



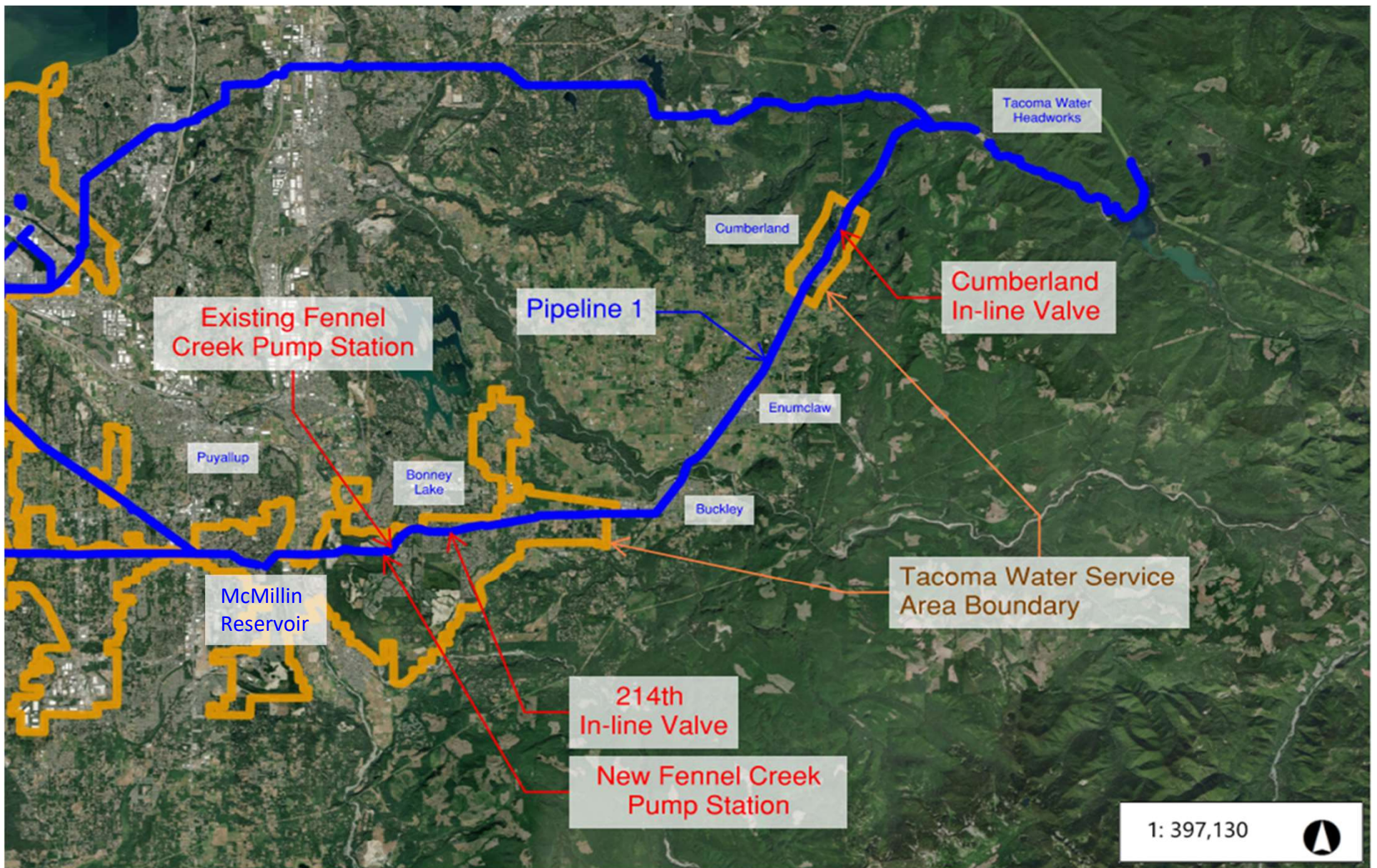
- 27-mile transmission pipeline, one of the primary water supply pipelines for Tacoma Water customers.
- Through a regulatory-compliance agreement with the Washington State Department of Health, P1 is required to be fully-pressurized by the year 2051.
- Pressurizing P1 requires significant capital investment, 20+ improvement projects and studies identified, including the construction of hydraulic facilities, pump stations, and pipeline replacement.

P1 Program Overview

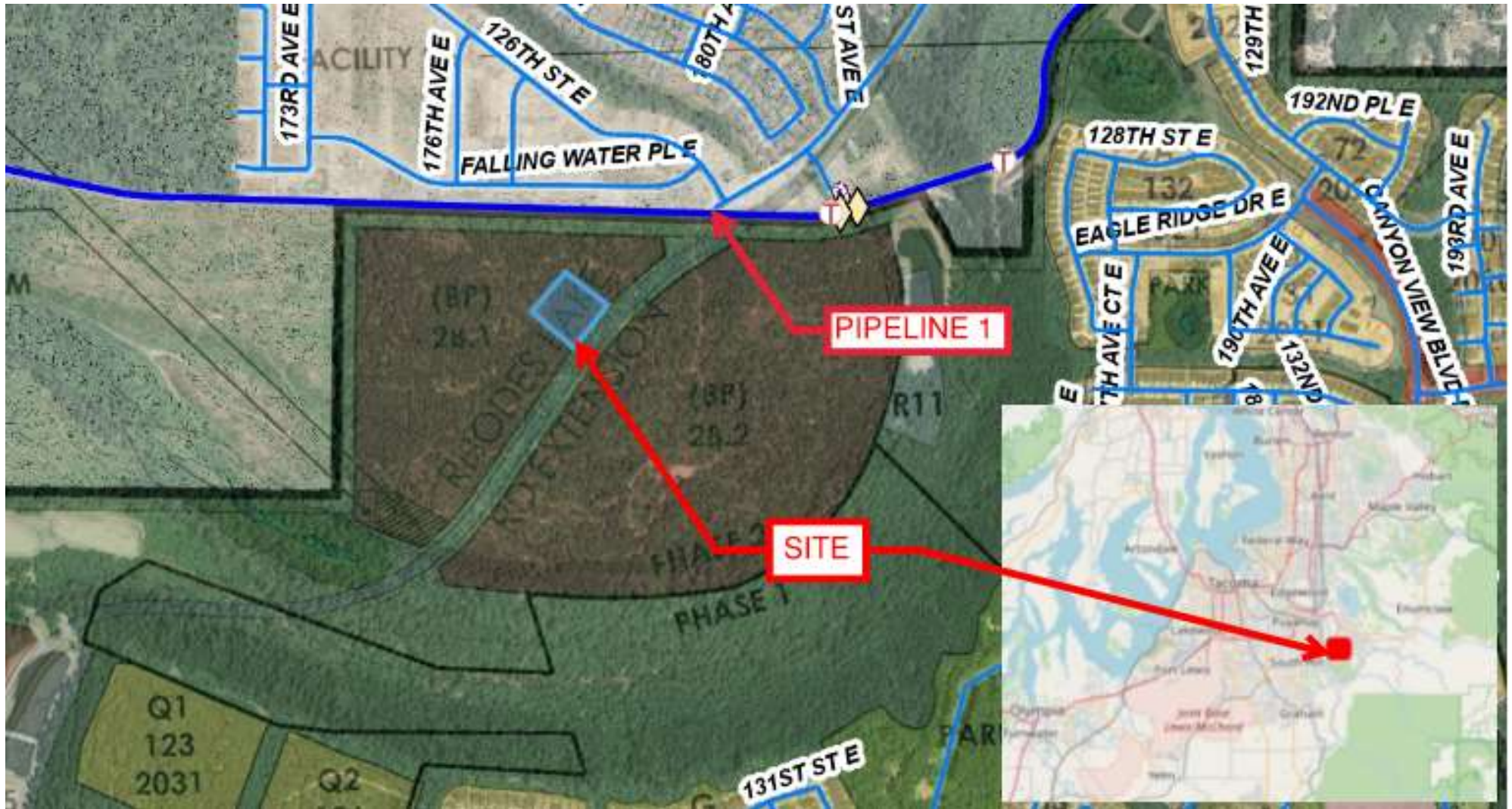




The Project



Map of Improvements Included in the Project



Surrounding Area and Project Site Aerial

*Site selection confirmation pending

New Fennel Creek Pump Station (NFCPS)

- Part of City's larger P1 Pressurization Program
 - Critical path for completing other work in the Program
- Will enable supply of drinking water to the Prairie Ridge, Tehaleh, and Cumberland services areas, as well as provide capacity for growth and improved fire flow.
- Enable rehabilitation of up to 15 miles of the middle section of P1
- Constructed at or near existing Fennel Creek 705 Pump Station
- Estimated capacity of 6,300 gpm initially, expandable to 8,500 gpm
- Corresponding remote-site improvements (pressure reducing valves, inline valves)
- Inform further P1 Pressurization Program improvements

NFCPS Estimated Budget

Category	Budget
Costs for Professional Services (A/E, Legal, etc.)	\$ 1,340,000
Estimated project construction costs (including DB Contingency @ 5%)	\$6,600,000
Contract Administration Costs (owner, cm etc.)	\$990,000
Contingencies (Owner Project Contingency @ 5% of GMP)	\$345,000
Other related project costs**	\$50,000
Sales Tax (@ 10.3% of A/E + Construction costs)	\$781,770
Total	\$10,100,000*

***Anticipated budget range is between \$8M and \$15M**

NFCPS Project Funding

- Project is fully funded using a combination of bonds, low-interest loans, capital and operating reserves.
- The initial A/E Design, DB advisory services, project management services and the DB preconstruction services for this project will be funded with capital reserves.
- The remaining, post-GMP costs of DB advisory services, project manager/construction manager services, A/E design services and construction of the project will be funded by a combination of anticipated revenue bonds and cash reserves.
- Portion of the project construction is funded through a Public Works Board Construction loan with requirements: constructing within 5-years of loan execution, competitive bidding for construction, and quarterly reporting.

NFCPS Project Schedule

	Start	Finish	Duration
<u>PRC Process</u>	Jan 2024	April 2024	11 weeks
<u>PDB Procurement</u>	April 2024	Jan 2025	9 months
Develop RFQ Document	April 2024	June 2024	2 months
RFQ Submittal Deadline (DB SOQ)		July 2024	
Develop and Issue RFP Document	April 2024	Aug 2024	4 months
RFP Submittal Deadline (Contractor Proposal and Price Factors)		Oct 2024	
DB Contract and Pre-GMP Fee Negotiations	Nov 2024	Dec 2024	1 month
DB Agreement w/ Phase 1 Services Executed and NTP Issued (on or before)		Jan 2025	
<u>Pre-GMP Design (0-60% Design)</u>	Jan 2025	Dec 2025	12 months
Programming/Schematic Design (0-30% Design)	Jan 2025	June 2025	6 months
Design Development (30-60% Design)	Jul 2025	Oct 2025	4 months
Negotiate GMP Amendment	Nov 2025	Nov 2025	1 month
GMP Amendment Executed		Dec 2025	
<u>Final Design, Permitting, & Construction</u>	Jan 2026	Sept 2027	21 months
Phase 2 Design (60-100% Design)	Nov 2025	Apr 2026	6 months
Construction	Feb 2026	Sept 2027	20 months
Substantial Completion		Sept 2027	

Diversity, Equity and Inclusion

City of Tacoma Equity in Contracting Historical Development

- 1990 Created an MWBE program
- 1993 Established MWBE goals: 14% for MBE's and 8% for WBE's
- 2000 Ordinance 26726: Established race-neutral/gender-neutral Historically Underutilized Business (HUB) program with a 20% goal
- 2009 Renamed the HUB program to Small Business Enterprise (SBE) program
- 2013 Established overall SBE goal at 22% - varies from project to project
- 2018 Resolution 40124: Created the Community Workforce Task Force – conducted a Disparity Study on SBE performance
- 2020 Ordinance 28625: Renamed SBE program to Equity in Contracting (EIC)
- 2022 Resolution 39527: Established the EIC Advisory Committee
- 2023 Reviewed the EIC program performance and reporting
- 2024 Received Diversity & Inclusion Award from PNW-AWWA

Diversity, Equity and Inclusion

- The City of Tacoma Equity in Contracting (EIC) Policy makes provisions for historically underutilized business enterprises to have **equitable contracting opportunity** with the City
- Tacoma Water will work with the selected DB contractor to **set project specific participation goals** for this project
- Tacoma Water will require DB contractor **past performance** in utilization of disadvantaged business enterprises as part of the SOQ evaluation criteria
- Tacoma Water will require the Proposal evaluation criteria include proposers' inclusion plan for small business entities and disadvantaged business enterprises
- The RFQ and RFP documents will require the DB contractor to include utilization performance on past projects and a project specific outreach and inclusion plan as part of their Proposal for this project
- For this DB project, Tacoma Water will establish and report on a project specific basis MWBE goals and performance.
- Tacoma Water strives to meet or exceed 20% MWBE participation on projects.



Why DB Delivery Method for the New Fennel Creek Pump Station

RCW 39.10.300 DB Statutory Compliance

- Construction activities are highly specialized, and a DB approach is critical in developing the construction methodology
- **Project provides opportunity for greater innovation and efficiencies between the designer and builder**
- **Significant savings in project delivery time would be realized**

Advantages to PDB Delivery for the NFCPS

- Plan for work on a **live transmission main**, and coordinate between construction and outages for various improvements under the Project.
- Manage project complexity: improvements will need to be carefully modeled and configured to **fit with the existing system**
- Plan for constructability, to minimize the risk of unexpected or longer than necessary outages to critical drinking water infrastructure
- Provide contractor input for **novel approaches** to commissioning, construction sequencing, etc.
- Provide contractor input for design of the Cumberland valve, which is **specialty work** and contractor input will be beneficial to developing plans
- Early contractor input will **reduce risk** for the NFCPS Project, which also provides risk mitigation for other projects in the P1 Program that are dependent on timely NFCPS completion.

Overall Advantages to PDB Delivery

- Single contract for the City to manage
- Contractor hires the design team reducing the owner's risk of claims from errors/omissions.
- Allows the Contractor to inform the owner and the design team of forecasted market materials and labor conditions and allows for the team to plan and design to avoid potential cost/schedule impacts.
- Encourages collaboration and innovation between City and Design/Builder during programming, design, bidding and construction.
- Allows City and Design/Builder to explore and confirm existing conditions.
- Potential for shorter design period, quicker construction start and earlier completion
- PDB offers the opportunity for early procurement/bid/construction packages
- Ability to get to cost certainty (GMP) quicker than other delivery methods

Public Benefit

- PDB allows Tacoma Water to set a construction budget and program requirements for the project and then require the **DB team to provide a design solution that aligns with the available budget.**
- PDB allows Tacoma Water and the DB to come to an **early certainty on cost of construction** much earlier than either GC/CM or traditional D/B/B delivery methods.
- PDB **reduces Tacoma Water's risk of added cost from change orders.**
- PDB allows Tacoma Water and the design team to **work collaboratively and transparently** with the Contractor to make educated/informed decisions on materials and systems based on cost effectiveness, durability and availability.
- **Streamlining of programming and design time** could result in a reduction of as much as three months in the design schedule.
- In utilizing PDB delivery, there may be opportunity for **greater efficiencies of project management and administrative costs** over the life of the project.



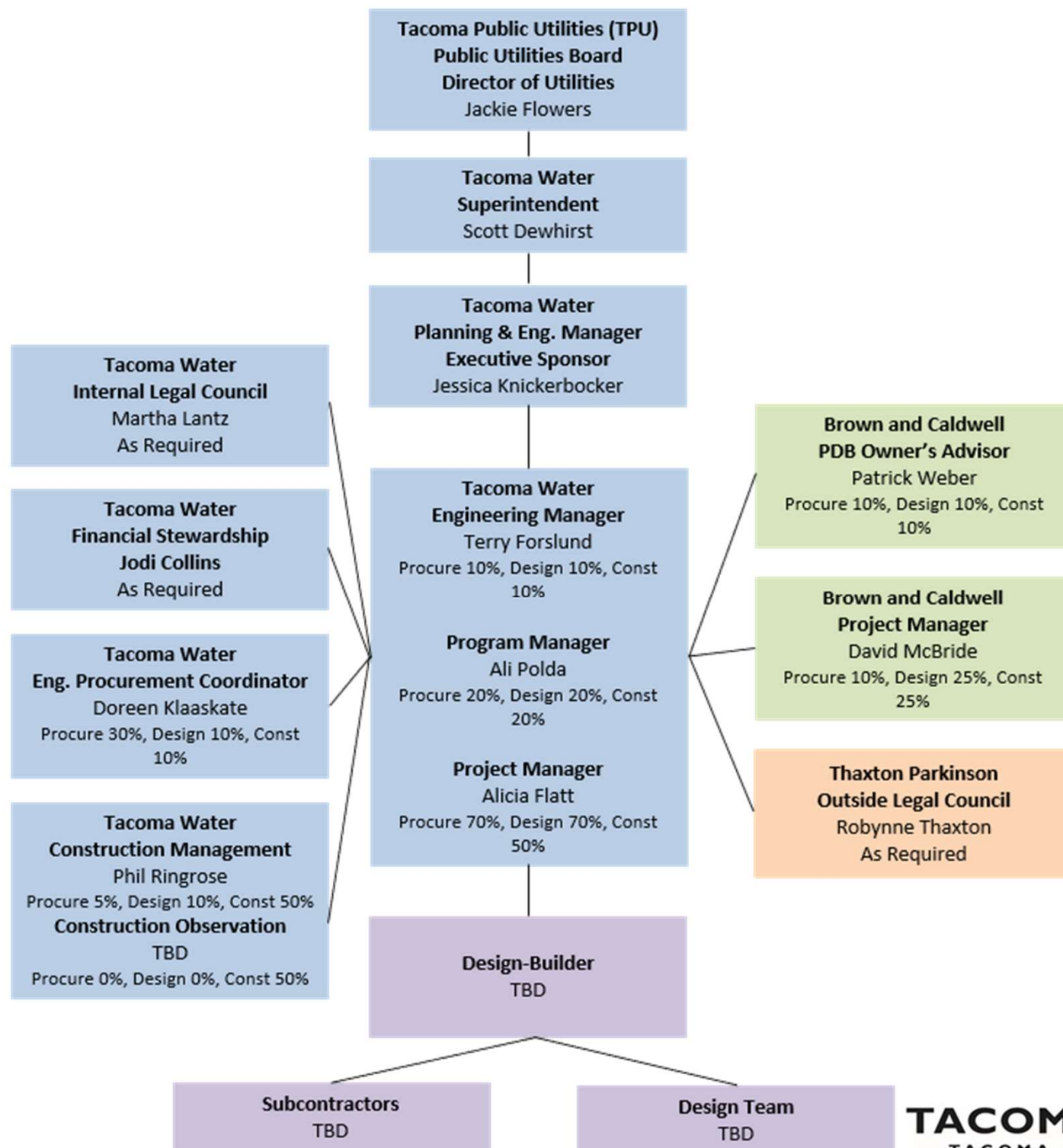
Public Body Qualifications

Tacoma Water
Leadership Team

City of Tacoma



- Tacoma Water has a long and successful history of planning and executing large and small and essential capital projects.
- The Tacoma Water Program Manager, Ali Poldo, has more than 15 years of engineering and project management experience and is a licensed engineer.
- Tacoma Water is newer to the DB method of project delivery but has augmented their staff with Brown and Caldwell as their Owner's Advisor and Procurement Consultant.
- The Brown and Caldwell team will provide advisory services related to DB and RCW 39.10, DB Procurement, and DB PM/CM services for the duration of the project.
- Tacoma Water satisfies the public body qualifications by staff augmentation with consultants experienced in DB delivery and RCW 39.10





Project Team and Project Experience

Name	Experience
<p>Jessica Knickerbocker, P.E. Planning and Engineering Division Manager/Executive Sponsor Tacoma Water</p>	<p>20 yrs. Project Management, Planning and Engineering Experience Previous Project Experience: Cowlitz Falls Barrier Dam Repair Project, Tacoma Power; Kosmos Flats Emergency Interim Remediation, Tacoma Power; 40th Street GSI, Environmental Services; Point Defiance, Regional Storm Water Facility, Environmental Services</p>
<p>Terry Forslund, P.E. Engineering Manager/Project Sponsor Tacoma Water</p>	<p>24 yrs. Engineering and Project Management Experience Previous Project Experience: 1 Previous GC/CM Project University of Washington Tacoma Phase 2B Cherry Parks and Mattress Factory Building; Thea Foss and Wheeler Waterways Superfund Cleanup D/BB; Tacoma Landfill vehicle maintenance and office building; Deputy Building Official City of Tacoma, 2016-2022</p>
<p>Ali Polda, P.E., PMP Principal Engineer/Program Manager Tacoma Water</p>	<p>15 yrs. Project Management and Engineering Experience Previous Project Experience: 2 PDB Projects Jefferson and Hood Street Surface Water Interceptor, City of Tacoma; PepsiCo Industrial Reuse Project; 1 CM/GC Project: Chambers Creek Regional Wastewater Treatment Plant Expansion, Pierce County. Taylor Way Rehabilitation, Tacoma Public Works; Sound Transit Link Extension Water Main Replacement; Oakland Water Main Replacement</p>

Name	Experience
<p>Alicia Flatt Civil Engineer/Project Manager Tacoma Water</p>	<p>12 yrs. Project Management and Engineering Experience Previous Project Experience: 2 CM/GC Projects: Central United Methodist Church – 119 units mixed use development (Arlington, VA); The Trove Apartments – 401 units (Arlington, VA). Various Mixed-Use/Housing Projects in Tacoma and Puyallup; Verizon 5G Tacoma Network; TPS – Downing Elementary; TPS – Hunt Middle School; TPS – 2024 Capital Improvements Bonds (multiple projects)</p>
<p>Phill Ringrose Construction Manager Tacoma Water</p>	<p>27 yrs. Project/Construction Management Experience Previous Project Experience: Seismic Upgrades Project, Tacoma Water; Taylor Way Rehabilitation , Tacoma Public Works; Water Ditch Trail 3 & 4, Tacoma Public Works; ADA Platform Upgrades, AMTRAK</p>
<p>Doreen Klaaskate Engineering Procurement Coordinator Tacoma Water</p>	<p>16 yrs. Procurement Experience – Public Works and City Improvement Projects Previous Project Experience: Tacoma Power – Cushman 2 Unit 31,32 Rebuild Project D/B, Cowlitz Falls Barrier Dam Repair, Public Works – Revitalizing Tacoma’s Brewery District, Taylor Way Rehabilitation, East 64th Street, Phase 1 Pacific to McKinley, Puyallup River Bridge F16A&B Replacement Design Build Project (Fishing Wars Memorial Bridge), Environmental Services – Jefferson & Hood Street Surface Water Interceptor Project</p>

Name	Experience
<p>Patrick Weber, P.E., PMP, DBIA PDB Advisor Brown and Caldwell</p>	<p>17 yrs. Planning, Engineering, Design, and Oversight Experience</p> <ul style="list-style-type: none"> • 12 PDB projects including 5 OA in the Puget Sound Region <p>Previous Project Experience: ESI Section 8 Rehabilitation, King County, Washington; M Street Trunk Rehabilitation, King County, Washington; Coyote Pumping Plant Electrical Upgrades, Valley Water, California; CSO Storage Basin Project, Middletown, Ohio; Mill Creek WWTP High-Rate Treatment Pump Station, Metropolitan Sewer District of Greater Cincinnati, Ohio; Little Miami WWTP Solids and Odor Improvements, Metropolitan Sewer District of Greater Cincinnati, Ohio; Jefferson and Hood Street Surface Water Interceptor PDB, City of Tacoma, Washington; Pure Water Soquel Program, Soquel Creek Water District, California; Everett Reservoir 3 Structural Improvements, City of Everett, Washington; Lakeside Redirect Conveyance Improvements, Middletown, Ohio; Mill Creek WWTP Diversion Chamber, Metropolitan Sewer District of Greater Cincinnati, Ohio; Reservoir 6 Roof Replacement, City of Everett, Washington.</p>
<p>David McBride, P.E. Project Manager Brown and Caldwell</p>	<p>30+ yrs. Design and Construction Experience</p> <p>Previous Project Experience: 3 CM/GC Projects: Annacis Island Wastewater Treatment Plant: Stage 5 Phase 2 Expansion Design, Metro Vancouver (Canada); Chambers Creek Regional Wastewater Treatment Plant Expansion Services During Construction, Pierce County, Washington; Chambers Creek Regional WWTP Expansion Side Stream Treatment Facilities Design, Pierce County, Washington. Well 1 Reservoir and Booster Pump Station, City of Orting, Washington; Food Waste Preprocessing and Digestion Demonstration Project, City of Tacoma, Washington</p>
<p>Robynne Thaxton JD, FDBIA External Legal Counsel Thaxton Parkinson, PLLC</p>	<p>24 Yrs. Construction Law and Alternative Procurement Experience</p> <ul style="list-style-type: none"> • DBIA Board of Directors and Executive Committee Member • National DBIA Legal Committee Co-chair <p>Previous Project Experience: Toronto Transit Commission, Bloor-Yonge Subway expansion, WSDOT/Kitsap Fish Passages Project, Pasco Public Facilities District Aquatics Facility, City of Wenatchee Confluence Parkway Project, Wenatchee Valley YMCA, Spokane County Operations Center, City of Spokane Valley City Hall Renovation, Grant PUD Power Delivery Facility, Benton County - Justice Center, Three Rivers Behavior Counseling</p>

Summary

- Requesting PRC approval to utilize DB project delivery.
- DB delivery would result in substantial fiscal benefit.
- Project meets qualifying RCW 39.10 criteria for DB delivery.
- With augmentation of DB consultants, the Tacoma Water team has:
 - DB delivery knowledge and experience
 - Adequate PM/CM personnel with construction experience
 - Project Management Plan is developed and has clear and logical lines of authority
 - Appropriate funding and time to execute the project
 - PM/CM team with experience in project type/scope
 - Necessary and appropriate construction budget
- Project team is knowledgeable and experienced in administration and management of DB projects/contracts.
- Tacoma Water has no unresolved audit findings.
- Project team is prepared and ready to proceed.



Thank you

PRC Questions

- **There are multiple disclaimers in the application stating that the budget, schedule and scope can vary infinitely. Please provide a range for committee review. For example, an evaluation of the project team, experience and time allocated is much different for a \$10M project vs a \$100M project.**
 - Brown and Caldwell is the Owner Advisor for the overall P1 program and helped develop the ~\$10M conceptual budget for this project.
 - The project teams anticipates the range of this budget is between \$8M and \$15M.
 - The City also anticipates that one of the benefits of PDB delivery will be an opportunity to refine project scope and budget based on early cost information, and to obtain early cost certainty through GMP agreement.

- **Does the Owner PM have any project delivery experience as a Project Manager of any delivery type at the Owner Agency (Tacoma Water) or other?**
 - Alicia Flatt has GC/CM project delivery experience as the PM (two projects between 2015-2017) but this will be her first PDB project.
 - Team has been augmented with PDB-experienced consultants: Patrick Weber – PDB Owner Advisor, David McBride – PDB Project Manager, and Robynne Thaxton – External Legal Counsel.