Reservoir 3 Cover Repair Project Using Progressive Design-Build

Project Review Committee Presentation



Presentation Overview

City of Everett Introductions	John Nottingham
Project Description / Schedule	Randy Loveless
City Reasons for Progressive DB Delivery	John Nottingham
Team Qualifications and Experience	John Nottingham
RCW 39.10 Requirements	Pat Tangora
Closing	John Nottingham

Project Team Introduction

John Nottingham	Senior Project Manager, City of Everett		
Randy Loveless	Project Manager, City of Everett		
Bill Fisher	Construction Inspector, City of Everett		
Tim Benedict	Deputy City Attorney, City of Everett		
Pat Tangora	Design Build Procurement and Contracting Advisor, Brown and Caldwell		
Tadd Giesbrecht	Project Manager, Brown and Caldwell		
Patrick Weber	Design Build Technical Advisor, Brown and Caldwell		

Reservoir 3

- In ground 20-milliongallon concrete reservoir
- Originally constructed in 1920, 4-acre concrete beam and panel roof added in 1987



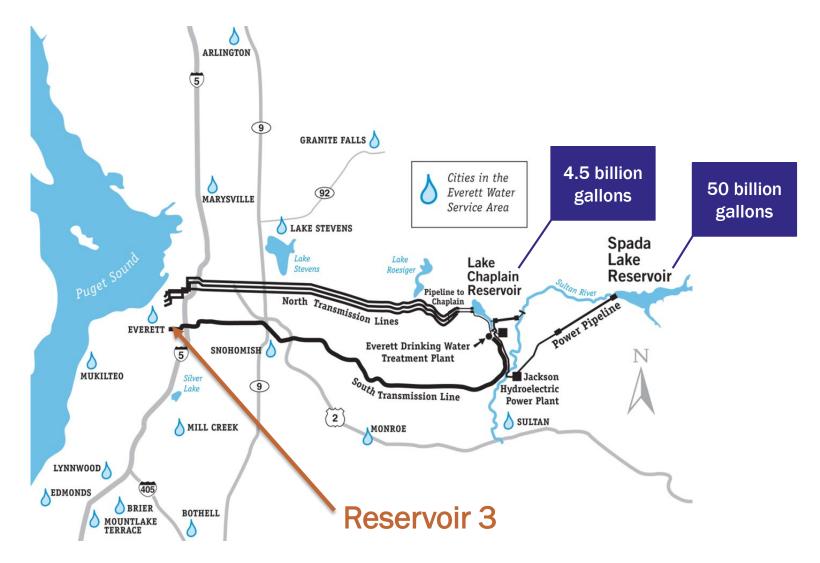
 Central distribution hub that connects critical water system components with 70% of City's in-town water flowing through this hub

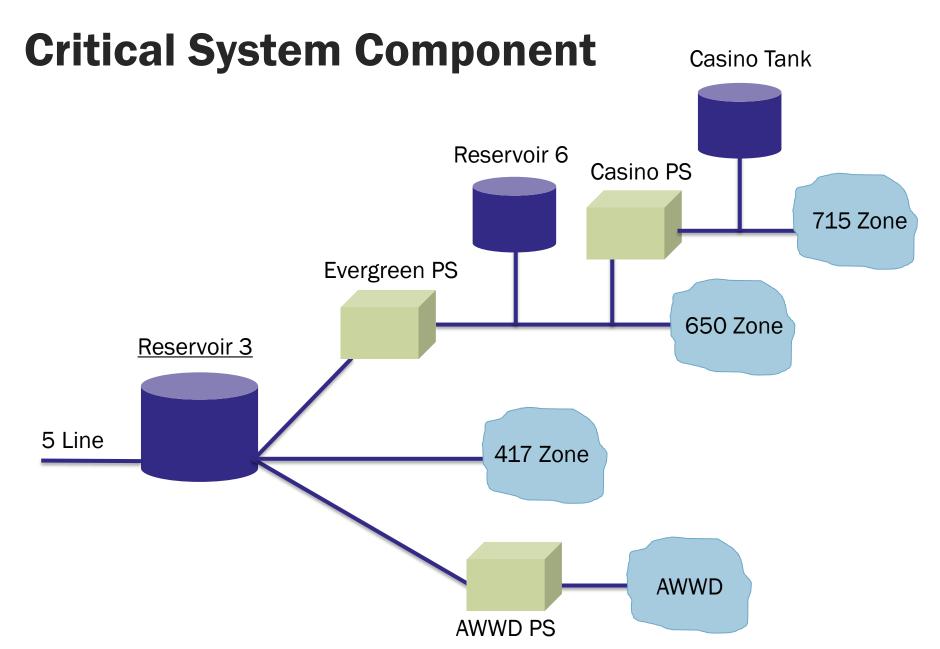
Reservoir 3

- Potable water reservoir no opportunity for additional treatment before water enters the system from the reservoir
- Water passing through the reservoir is supplied to other water purveyors such as the Alderwood Water District, Silver Lake Water and Mukilteo Water District

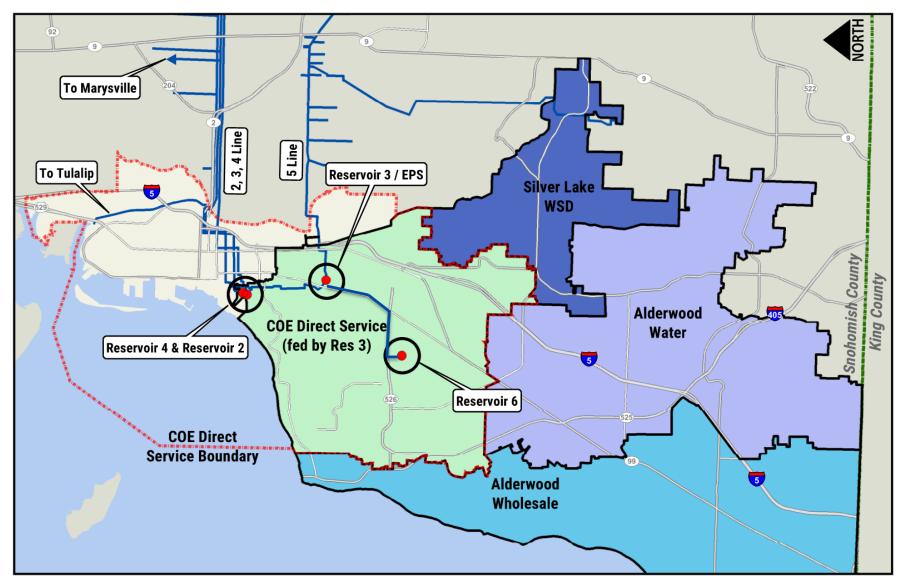


Regional Water System



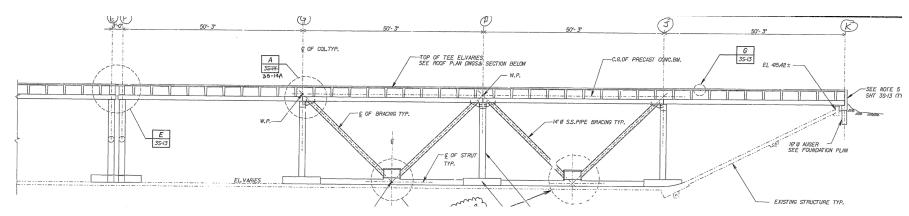


Reservoir 3 Service Area

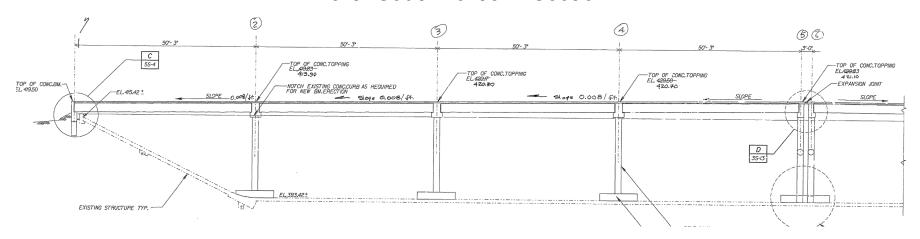


Project Description and Schedule

Reservoir 3 Structural System



North-South Partial X-Section



East-West Partial X-Section

Reservoir 3 Repair Project

- Significant damage to interior concrete structure
- Seismic deficiencies
- Limited access







Reservoir 3 Repair Project



Bidding, Design and Construction Challenges

- Difficult access and limited time window:
 - Limits ability to fully define necessary repairs
 - Limits potential bidders / proposers' ability to fully understand the work and provide a fixed price







Bidding, Design and Construction Challenges

- Waterproof liner integrity must be preserved
- Repair approach (and design) highly dependent on construction methods







Schedule/Limited Construction Window

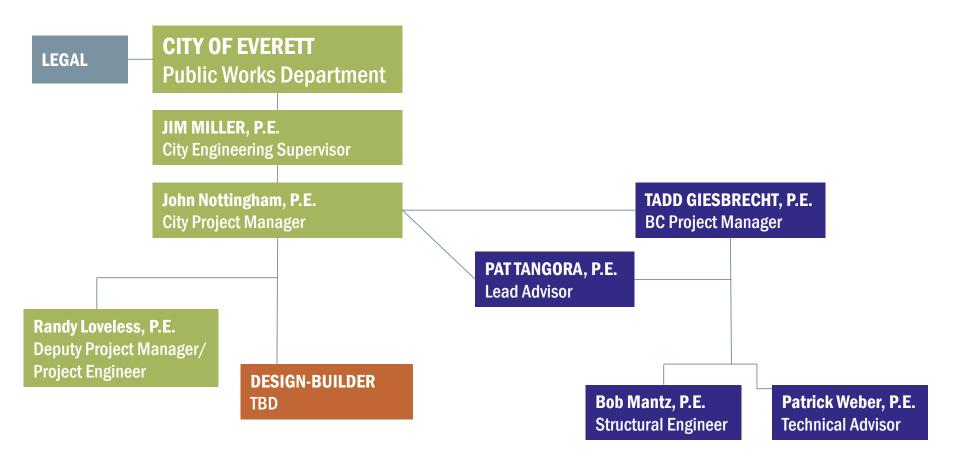
Period Reservoir 3 can be Offline 2020 2021 2022 A M **RFQ** Issued **SOQs Submitted Shortlist RFP** Issued **Proposals Submitted DB Selection Negotiation**, **Approvals, NTP** Design/Mob/ Construct Cleanup/ De-mob

Why Select Progressive DB for this Project?

why Select Progressive DB for this Project?							
Issue	Design-Bid-Build	Fixed Price DB	Progressive DB				
Critical Infrastructure	Elimited consideration of quals	© Thorough consideration of quals	Thorough consideration of quals				
Nature of Work	© Design and construction are segmented	Best solutions are closely related to constructability. Allows for design and construction integration Single point of responsibility for Design & Const Limited City input regarding liner integrity	Best solutions are closely related to constructability. Allows for design and construction integration. Single point of responsibility for Design & Const				
Difficult Access and Limited Window to Take Res 3 Off- line	Makes it difficult and time consuming to fully define the nature of the work for bidders Makes it nearly impossible for bidders to observe the required work to develop fixed price bids	Makes it difficult and time consuming to fully define technical requirements in an RFP Makes it nearly impossible for proposers to observe the required work to develop fixed price proposals	Allows selection primarily on quals, to work closely with City to understand the work, and develop solutions and pricing Allows for "rolling" design, pricing, and construction				
Collaboration	Very limited after low responsive, responsible bidder is selected	Elimited after fixed-price design-builder is selected	Allows for collaboration throughout the design and pricing process				

Team's Relevant Experience

Team Introduction



Team's Experience

		CITY OF EVERETT		BROWN AND CALDWELL		
PROJECT	ТҮРЕ	John Nottingham, PE	Jim Miller, PE	Pat Tangora, PE	Tadd Giesbrecht, PE	Patrick Weber, PE
Everett Clearwell Roof Replacement	FP DB		✓	✓	✓	✓
Everett Reservoir 6 Roof Replacement	FP DB	✓	✓	✓	✓	
Everett WPCF Phase A Expansion	GC/CM		✓	✓	✓	
Everett WPCF Phase C Expansion	GC/CM	✓	✓			
Tacoma Jefferson-Hood St Interceptor	P DB			✓		✓
Tacoma Central TP Expansion	FP DB			\checkmark	\checkmark	
Louisville MSD Southwestern Parkway CSO Basin Project	P DB			✓		
City of Nampa, ID Wastewater Treatment Plant Project Group F	P DB			✓		
City of Lewiston, ID Water Treatment Plant Upgrade	P DB			✓		
Walla Walla WTP Upgrade	GC/CM			\checkmark		\checkmark
Soquel Creek Pure Water, Reclaimed Water	P DB			✓		✓
Greater Cincinnati MSD, Mill Creek WWTP Diversion Project	P DB			✓		✓
SPU Cedar and Tolt WTPs	DB0			✓		

Project Meets RCW 39.10

Satisfies RCW 39.10.300

Total Project cost of \$3.43M exceeds \$2M (RCW 39.10.300 (1))



 Highly specialized construction activities and DB approach critical for developing construction methodology (RCW 39.10.300 (1a))



 Project provides for greater innovation and efficiency between designer and builder (RCW 39.10.300 (1b))



 Significant savings in project delivery time would be realized (RCW 39.10.300 (1c))



- Eliminates two separate procurement processes (for Design-Bid-Build)
- Work packages can be developed on a rolling basis

Satisfies RCW 39.10.280

 Substantial fiscal benefit: less risk, greater opportunities for cost and schedule savings OR DBB not practical for meeting desired quality and schedule objectives (RCW 39.10.280 2a)



 Qualified public body and consultant team with Fixed Price and Progressive DB experience (RCW 39.10.280 2c and 2d)



 Resolved audit findings – Everett has had no audit findings (RCW 39.10.280 2e)



Committee Questions

Questions

- What level of design has taken place to date?
- How will you ensure a level playing field for Progressive DB proposers with one engineering firm having previously completed significant pre-design work?
- Was heavy civil GC/CM considered? The project appears well suited for a substantial level of selfperformance.
- What percentage of the evaluation criteria will be price based?

Closing

 Reservoir 3 repair project is ideal for delivering with Progressive DB

 The City has successfully implemented Fixed Price DB and GC/CM







Closing

- Highly qualified project team with significant Washington State alternative delivery experience and Progressive DB experience
- As demonstrated on past City DB projects, key advisors and team committed to the project through completion





Questions?