



APPLICATION
FOR CITY OF
TACOMA
CERTIFICATION
IN USE OF
DESIGN-BUILD



AGENDA



- Introductions
- Process of determining Design Build appropriate projects
- Design Build project delivery knowledge and experience
- Recently completed/ current projects
 - Fishing Wars Memorial Bridge Replacement Phase I (completed)
 - Alder Unit 11 Rebuild (completed) & Cushman Rebuild Project (underway)
 - Jefferson and Hood Street Surface Water Interceptor (completed) and Puyallup Avenue Sewer Utility Project (underway)
- Equity in Contracting Program
- Questions



INTRODUCTION OF ADDITIONAL CITY STAFF



Patsy Best, CPPO, Purchasing Division Manager

Chuck Blankenship, Financial & Procurement Services Manager

Martha Lantz, Deputy City Attorney

Jack Niehuser, PE, Public Works Division Manager

Kristy Beardemphl, PE, DBIA, Engineering Manager, Environmental Services

Ram Veeraraghavan, PE, Senior Manager Power Utility



EXPERIENCE & QUALIFICATIONS FOR DETERMINING PROJECTS ARE APPROPRIATE FOR DESIGN-BUILD



- City has a Process for Determining Appropriate Contracting Method
- Follow Criteria per RCW 39.10.300
 - Total project cost over \$2 million
 - Design and construction is highly specialized
 - Opportunities for greater innovation or efficiencies between the designer and the builder
 - Significant savings in project delivery time.



PROJECT DELIVERY KNOWLEDGE & EXPERIENCE



- Capital Projects Delivery
 - Managing complex projects for a half century.
- Most Projects Completed using DBB
- Demonstrated Success in DB Projects
 - Fishing Wars Memorial Bridge \$32M
 - Jefferson & Hood Street Stormwater Interceptor \$38M
 - Central Treatment Plant Energy Mgmt. Improve., \$13M
 - Alder Unit 11 Rebuild \$12M



● ● ● PERSONNEL WITH CONSTRUCTION EXPERIENCE USING DB

- Project Engineers, Project/Construction Managers, and Inspectors with DB experience
- 4 staff with DBIA certifications; 11 pending
- Continuing education for future projects
- Staff participation in DBIA
- City of Tacoma Lunch/Learn Series

FISHING WARS MEMORIAL BRIDGE REPLACEMENT



- Project Background
- Project Goals
- Lessons Learned Phase I
- Future Phase II Replacement
 - Project Complexities
 - Project Risk



Chris Storey P.E. – City Project Manager
Project Web Site – [Capital Projects - City of Tacoma](#)

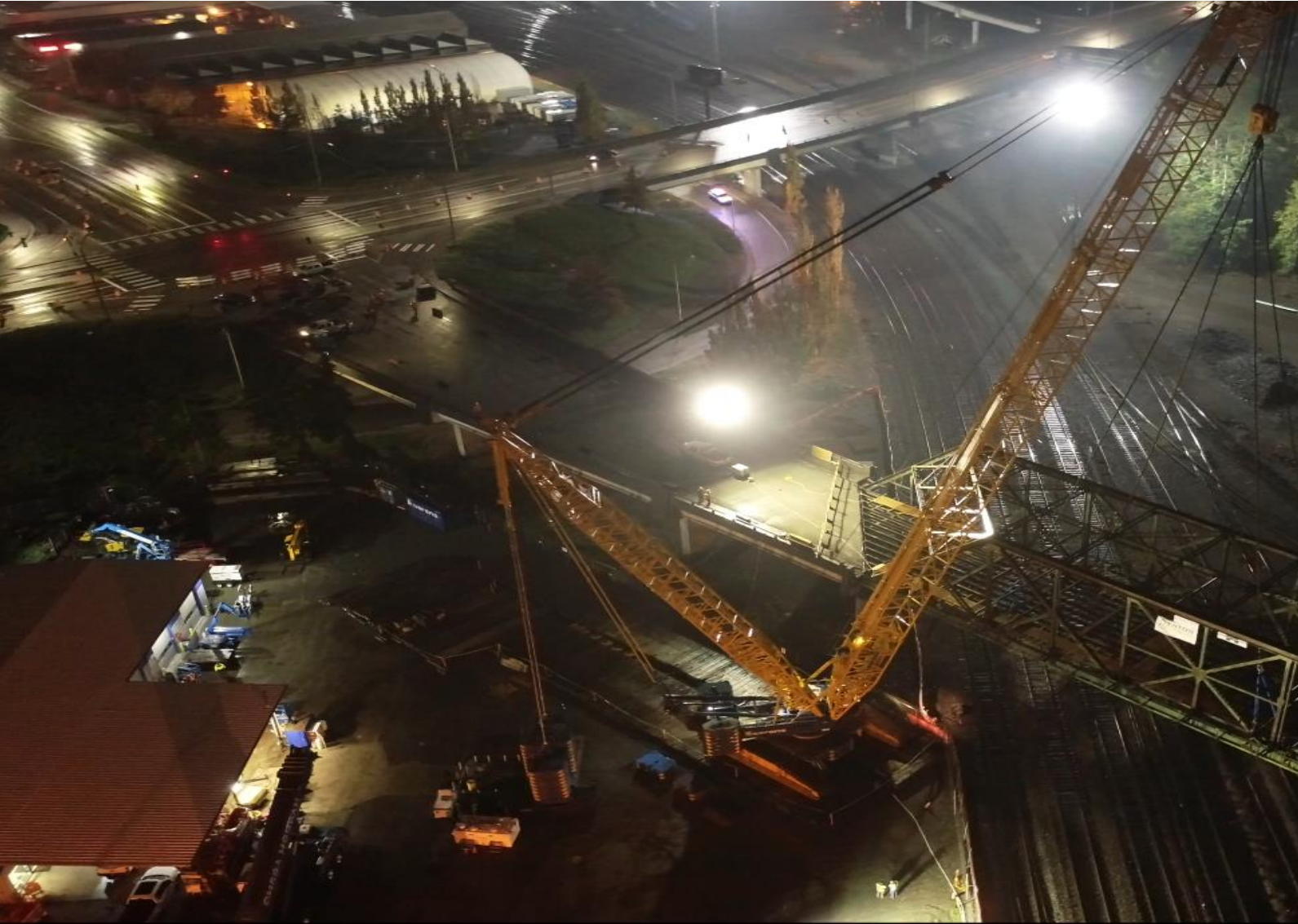


PROJECT BACKGROUND

- Aging Bridge Built in 1926
- Successfully built the first phase using DB 2019
- Complicated Site



DB DELIVERY METHOD GOALS



- Contract with a First Class Delivery Team
- Ensure a High Quality Project
- Keep Project within Funding
- Schedule
- Aesthetic
- DBE Goals



● ● ● LESSONS LEARNED

- Start ROW Process Sooner, Anticipate Delay
- Railroads Do Not Contemplate DB
- Strong Team Can Overcome Difficulties



FWMB PHASE II PROJECT RISKS & COMPLEXITIES



- Business' adjacent to structure
- Railroads
- Over water work
- Confined site

- Utilities
- Tribal Property
- In water work
- Funding complexities



ALDER UNIT 11 REBUILD

- Project Background
- Project Goals
- Project Complexities
- Lessons learned



David Wagner, P.E. – City Project Manager
Ram Veeraraghavan, P.E. – Rebuild Program Manager/ Group Manager



DESIGN & MANUFACTURING DELAYS



- Learning to communicate and partner virtually
- DB Resource constraints
- Manufacturing supply chain issues
- Resulted in a construction delay.



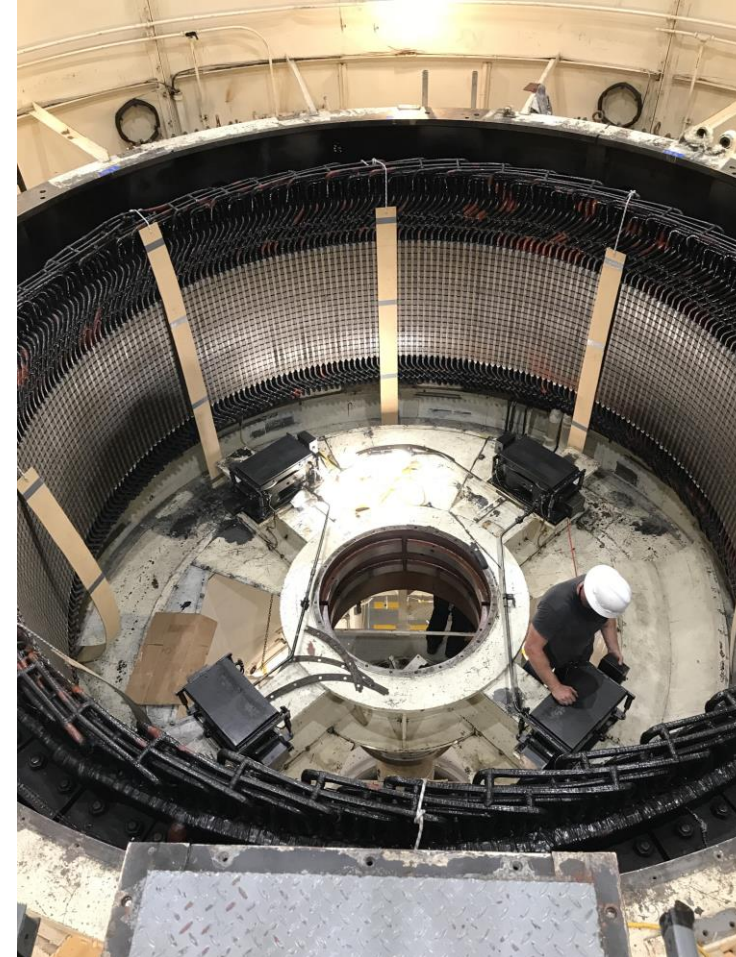
● ● ● CONSTRUCTION



- Turbine Disassembly



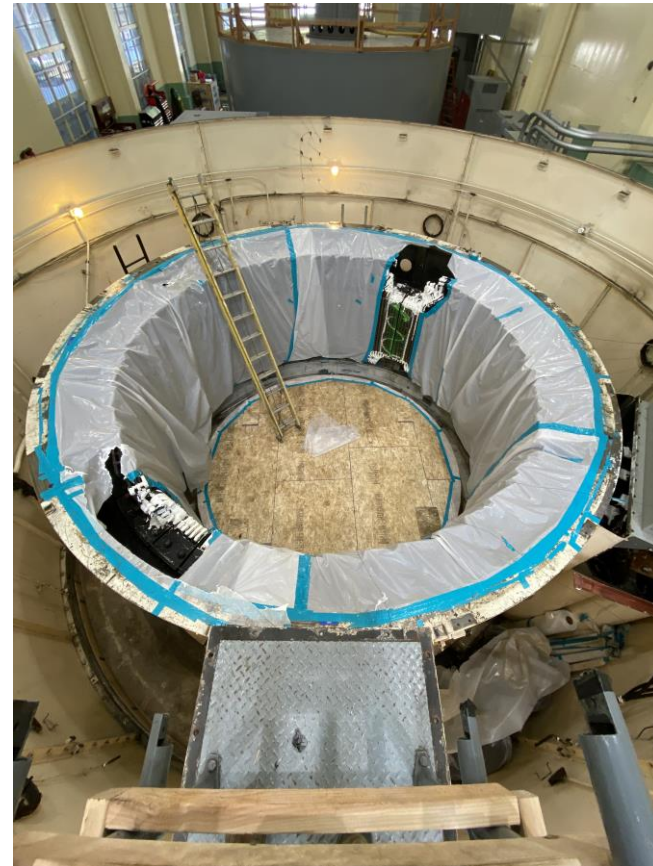
- Generator disassembly



••• CONSTRUCTION



- Empty turbine pit



- Generator core wrapped for asbestos abatement

● ● ● CONSTRUCTION



- Generator frame cut in half



- Empty pit looking up

CONSTRUCTION



- New Generator Frame and Core arrival at site



- Tight squeeze into the powerhouse

● ● ● CONSTRUCTION



- Empty turbine pit



- New generator frame and core installed

● ● ● CONSTRUCTION



• Refurbished turbine Head Cover

• Turbine Head Cover installed

CONSTRUCTION



- Refurbished turbine runner

- Turbine wicket gates being installed



● ● ● CONSTRUCTION



- Turbine distributor being dialed in

- Flying in the refurbished rotor into the generator frame



JEFFERSON & HOOD STREET SURFACE WATER INTERCEPTOR PROJECT



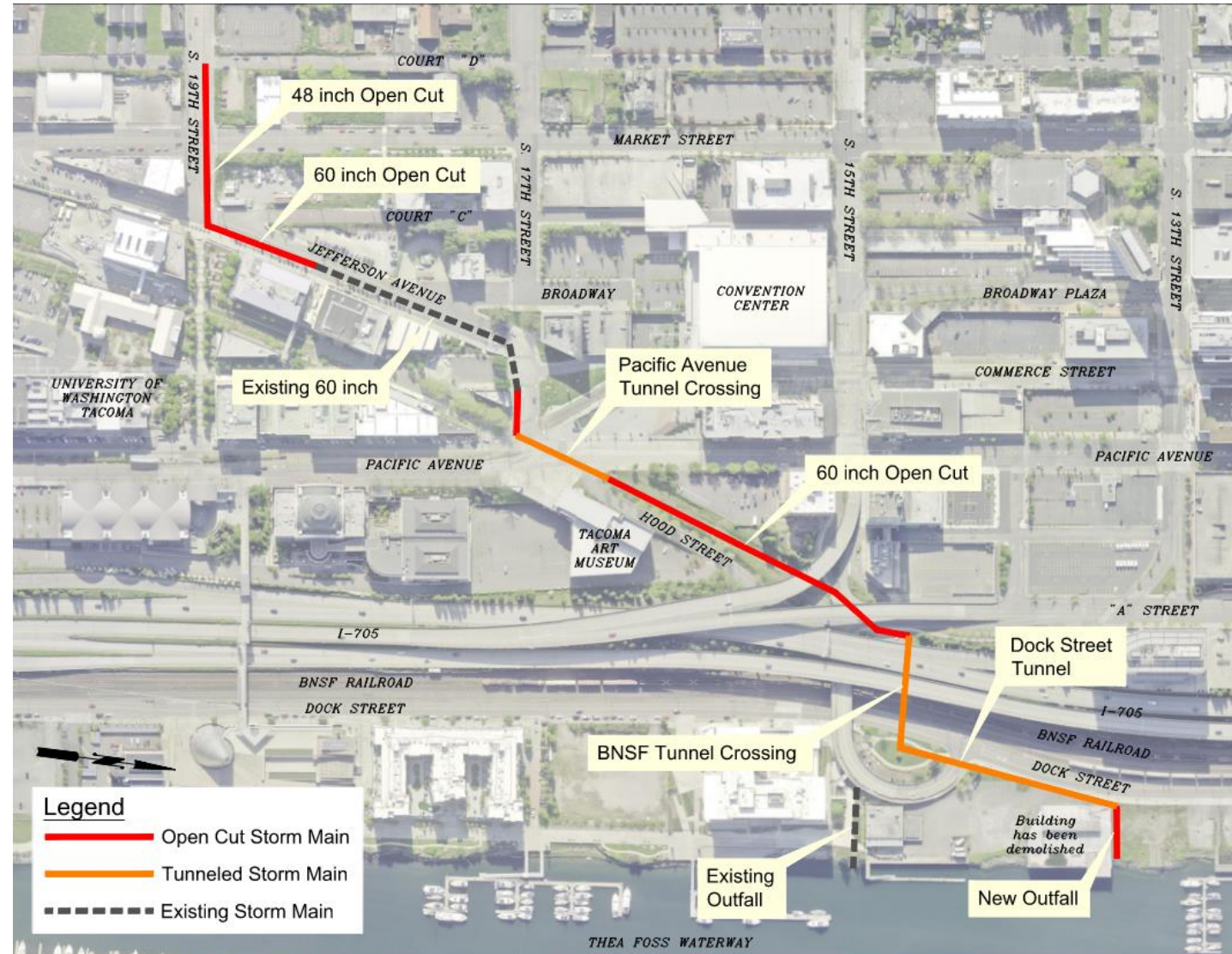
- **Project Location**
- **Background & Delivery Goals**
- **Project Complexities
& Risks**
- **Lessons Learned**



Christa Lee, P.E. – City Project Manager
Project Web Site – www.govme.org/es/Jefferson/default.html



Project Vicinity & Alignment

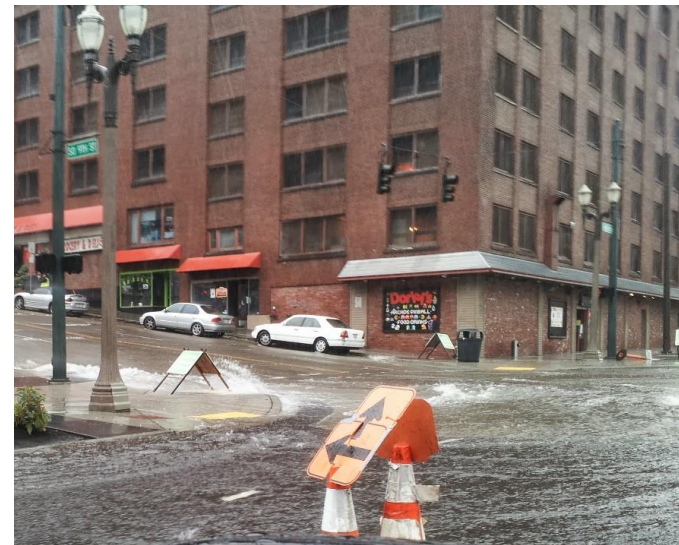




BACKGROUND & GOALS



- Future growth
- \$26 M – GMP
- Stage 1-Preconstruction Services Completed summer of 2021
- Stage 2 – Construction Completed in 2022
- Collaborative relationship





●●● PROJECT COMPLEXITIES & RISKS

- Soil and groundwater contamination
- Regulatory permits/approvals
- New marine outfall into Thea Foss Waterway
- Open cut beneath elevated Federal Interstate
- Tunnel construction beneath Sound Transit and BNSF rail corridors
- Tunnel construction parallel to Thea Foss Waterway





LESSONS LEARNED



- Owner's Advisor on City's team
- DB previous experience in collaborative delivery methods
- City staff-DBIA certification and education
- Early involvement for permitting



PUYALLUP AVE SEWER UTILITY REPLACEMENT PROJECT



- Project Description
- Project Timeline & Budget
- Status To Date





SUBCONTRACTOR OUTREACH

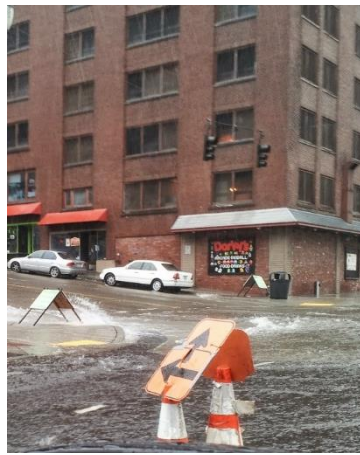


- Equity In Contracting Program
- Program Training and Outreach
 - "How to Do Business with Tacoma" Events
 - Future Workshops
- Project Specific Outreach

● ● ● Questions?



Fishing Wars Memorial Bridge



Jefferson Interceptor



Alder Unit 11 Rebuild



Central Wastewater Treatment Plant Energy Mgmt. Impr.