Board Work Session Minutes
March 3, 2020

WORK SESSION – 7:17 PM

CALL TO ORDER

Commissioners Present: Bernice Bagnall; Jim Doane, PE; Jim Duggan, PE; Todd Sanders
Commissioner Absent: Dick Schmidt

Staff Present: Tom Hickmann, PE, Chief Executive Officer; Carrie Pak, PE, Chief Engineer; Paul Matthews, Chief Financial Officer; Clark Balfour, General Counsel; Andrew Barrett, PE, Senior Project Engineer; Mike Britch, PE, Principal Engineer; Robert Whitham, Emergency Program Coordinator; Nick Augustus, PE, Engineering Division Manager; Andrea Watson, Communications and Public Affairs Supervisor; Debbie Carper, District Recorder

ANNOUNCEMENTS

Mr. Hickmann said staff has been reviewing policies that relate to the recent coronavirus outbreak and provided updates on his schedule (see attached memo). In response to a question, Mr. Whitham said staff is updating the District’s pandemic flu response plan.

Mr. Hickmann also announced the headquarters lobby remodel will continue through the end of May. In response to questions, staff said the April Willamette Water Supply System (WWSS) Commission meeting will be held in Hillsboro, and the May meeting location is still being determined. Staff has not received any notable customer comments regarding the remodel.

Mr. Hickmann concluded his announcements by reviewing the policy on Board Communication Devices (see attached presentation).

1. DISCUSSION ITEMS

   A. Willamette Water Supply System Commission Update. **Staff Report – Mike Britch**

Mr. Britch reviewed the March WWSS Commission Board meeting agenda, described the current approvals and procurements forecast and gave updates on water supply integration and current construction projects (see attached presentation).
In response to a question, staff said the $1.56 million cost for the MPE_1.0 design amendment will be funded by the City of Beaverton. The project includes work on Scholls Ferry Road and Western Avenue.

B. Alternative Delivery Final Report: Findings for an Exemption from Competitive Bidding – Post Construction Report for the Grabhorn Reservoir Replacement Project. Staff Report – Andrew Barrett

Mr. Barrett reviewed the District’s reason for considering an alternative delivery method for the Grabhorn Reservoir Replacement Project, the choice of progressive-design build, the challenges of the project site and the results of the project and use of the selected delivery method (see attached presentation).

ADJOURNMENT

There being no further business, President Bagnall adjourned the meeting at 7:58 p.m.

__________________________________________  ______________________________________
Bernice Bagnall, President                        Todd Sanders, Secretary
MEMO

Date: March 3, 2020
To: TVWD Board of Commissioners
From: Tom Hickmann, CEO
Re: CEO Announcements

I will cover the following items during the CEO’s Announcements at the work session:

1. **Be Sure to Use Microphones** – Just a reminder to please be sure to use your microphone whenever you are speaking during the work session this evening. Also, please be sure to turn off your microphone when you are not speaking.

2. **Corona Virus Update** – We have been engaged in reviewing our policies regarding the Corona Virus outbreak. What we know at this point is that the same concepts to reduce the flu virus are the same for this, which is washing hands, sneezing or coughing into your arm and wiping down surfaces that we touch. This virus has a higher infectious rate than flu, but the mortality rate is still a bit unclear. Its high estimate is just over 2% but is expected to drop as more people seek treatment early and greater resources are made available to respond. What is clear at this point is that this virus is more lethal to those over the age of 65 with underlying health issues. We continue to monitor closely the changing situation and are prepared to take immediate actions to reduce exposures here at the workplace. This may include allowing more people to work remotely and reducing public meetings depending on how widespread it becomes. We may want to consider allowing Board meetings to be attended remotely should this become a greater concern.

3. **CEO’s Schedule** – I will be out of the office the majority of the day Thursday, March 12 and Friday, March 13 (regularly scheduled day off), attending Rogue Water’s in-person planning session. As a reminder, Rogue Water is a not-for-profit organization revolutionizing water industry communications. Chief Engineer, Carrie Pak, will serve as acting in capacity (AIC) March 12.

4. **Board Communications Log** – There were no updates to the Board communications log this month.

5. **Safety Minute** – I will present tonight’s safety/policy minute.
Board Policy Minute
Board Communication Devices

Tom Hickmann, Chief Executive Officer
March 3, 2020

Chapter 10 of the Board Policies manual describes Board computing device policies.
Ownership and Use

- “The device remains the property of the District and information stored on the device is District property.”
- “Commissioners have no right or expectation of privacy on the device. Information on the device may be considered public records.”
- “Software applications, music, video files or other content will not be downloaded without consent of the Chief Executive Officer.”
- “The device will not be used for personal use except for emergencies and therefore such use is restricted to being brief and infrequent.”

Training and Support

- “Staff will provide Commissioners basic training on the use of the device, and will provide technical support for the care and maintenance of the hardware and software.”
Costs

- “The District will be responsible for the cost of the maintenance or replacement of any defective equipment or software. If the device is damaged because of a negligent or intentional act, or other act for which the Commissioner is responsible, the Commissioner will be responsible for replacement costs.”

Device Decommissioning

- “At the end of a Commissioner’s term, or when the device is deemed by the CEO to no longer be useful to the District, the Commissioner may either purchase the device or return it to the District within 30 days. If the Commissioner elects to purchase the device, it will be sold at the District’s depreciated cost of purchase.”
Willamette Water Supply Commission Update
TVWD Board Work Session

March 3, 2020

Outline

Review March WWSS Commission Board Meeting Agenda

Review Approvals and Procurements Forecast

Update on WWSP Activities
Willamette Water Supply System
March 5, 2020 Board Meeting Agenda

1. General Manager’s Report
2. Public Comment
3. Consent Agenda
   A. February 6, 2020 meeting minutes
4. Business Agenda
   A. Adopt FY 2021 WWSS Annual Work Plan and Budget
   B. Approve PLM_5.3 Design Contract Amendment
5. Information Items
   A. Planned April Business Agenda items
# REVIEW APPROVALS AND PROCUREMENTS FORECAST

## Approvals and Procurement Forecast for February 2020 – April 2020

### Program Baseline or Related Plans

<table>
<thead>
<tr>
<th>Description</th>
<th>Program Director</th>
<th>WWSS Management Committee</th>
<th>WWSS Commission Board</th>
</tr>
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<tbody>
<tr>
<td>WWSP FY 2020 – 21 Budget</td>
<td>NA</td>
<td>2/22/2020</td>
<td>3/5/2020</td>
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<tr>
<td>WWSP Annual Rebaseline</td>
<td>NA</td>
<td>4/23/2020</td>
<td>5/7/2020</td>
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Approvals and Procurement Forecast for February 2020 – April 2020

**Real Estate**

<table>
<thead>
<tr>
<th>Description</th>
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<th>WWSS Management Committee</th>
<th>WWSS Commission Board</th>
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<tr>
<td>PLW_1.3 Resolution of Need</td>
<td>NA</td>
<td>1/23/2020</td>
<td>2/6/2020</td>
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<tr>
<td>MPE_1.0 Resolution of Need</td>
<td>NA</td>
<td>3/19/2020</td>
<td>4/2/2020</td>
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<tr>
<td>PLM_4.3 Resolution of Need</td>
<td>NA</td>
<td>4/23/2020</td>
<td>5/7/2020</td>
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</tbody>
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**IGAs, MOUs, Permit Commitments**

**Metzger Pipeline East Pipeline (MPE_1.0)**
- Project agreement for COB_1.0 – under additional discussion with COB

**South Hillsboro Area Pipeline (PLW_1.3)**
- Hagg Lane (Butternut Creek) Agreement Amendment (Dec)

**Washington County Land Use & Trans.**
- Various IGA amendments (Dec)
  - PLM_4.1 Design
  - PLM_4.2 Design
  - PLW_1.2 Design

**Scholls Ferry Area Pipeline (PLM_5.2)**
- Metropolitan Land Group Developer Agreement
## Approvals and Procurement Forecast for February 2020 – April 2020

### Contracts

<table>
<thead>
<tr>
<th>Title</th>
<th>Goal</th>
<th>Value</th>
<th>Key Dates</th>
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<tbody>
<tr>
<td>RES_1.0 Design, Bidding and Services During Construction</td>
<td>Procure the design consultant for the WWSS reservoirs project</td>
<td>$6.2M</td>
<td>WWSS Board Approval: 2/6/2020 Notice to Proceed: 2/7/2020</td>
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<td>PLW_1.3 Construction Contract</td>
<td>Procure construction contractor for waterline construction from Farmington to Kinnaman</td>
<td>TBD</td>
<td>WWSS Board Approval: 5/7/2020 Notice to Proceed: 5/8/2020</td>
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### Contract Amendments and Change Orders*

<table>
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<th>Title</th>
<th>Goal</th>
<th>Value</th>
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<td>MPE_1.0 Design Amendment</td>
<td>Add final design and services during construction for the COB_1.0 project</td>
<td>$1.56M</td>
<td>8/21/2019 approval by WWSS MC (delegated by the WWSS Board)</td>
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<td>PLM_1.2 Construction Contract Change Order</td>
<td>Amend contract to add Day Road crossing</td>
<td>$2M</td>
<td>3/24/2020 approval by WWSS MC</td>
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<td>PLM_5.3 Design Amendment</td>
<td>Amend contract for final design and services during construction to reflect realignment north of Farmington</td>
<td>$1.3M</td>
<td>2/20/2020 approval by WWSS MC</td>
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<td>WTP_1.0 Design Amendment</td>
<td>Amend contract for design services related to added engineering services</td>
<td>TBD</td>
<td>3/19/2020 approval by WWSS MC</td>
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*having values higher than the Program Director’s authority
UPDATE ON WWSP ACTIVITIES

Notable Topic - Water Supply Integration

• Accomplishments:
  – Owners’ hydraulic modeling memos complete
  – Water quality modeling memo finalized
  – Processed amendment for phase 1 of demonstration testing

• Priorities:
  – Begin water bench scale water quality testing
    • Chlorine decay, pH, DBPs for WRWTP and JWC
  – Plan for WSI Blue Ribbon Panel #1
### Project Delivery Progress

<table>
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<tr>
<th>Work Package</th>
<th>Conceptual/ Preliminary</th>
<th>30%/50%</th>
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- **Complete**: Green bar
- **Active Work**: Light green bar

**Construction Update**

Projects currently in construction:

- PLM_5.2 (Scholls Ferry/Tile Flat)
- PLM_5.1 (Roy Rogers Rd)
- PLM_1.2 (Garden Acres Rd)
- PLM_1.1 (S. of Wilsonville Rd)
PLM_1.1

Contractor: James W. Fowler Co.
Designer: HDR

Current and Planned Activities:
• 500 LF of pipe installed
• Trench dam installation
• Erosion and sediment control ongoing

Construction Photos – PLM_1.1

Pipe trench shoring, installation progress, heading south
Construction Photos – PLM_1.1

Installing trench cutoff wall around pipe

Mag particle testing of joint welds
PLM_1.1 Notable Topics

- External Coordination
  - Continued coordination with Wilsonville Concrete
- Potential Claims
  - None
- Delivery Challenges
  - Localized roadway ponding on Industrial Way

PLM_1.2

Partner: City of Wilsonville
Contractor: Moore Excavation, Inc.
Designer: HDR

Current and Planned Activities:
- Continued installation of sanitary sewers
- Continued waterline submittals
- First waterline activity scheduled for May 2020
Construction Photos – PLM_1.2

- Installation of sanitary sewer house laterals along Garden Acres Road

Willamette Water Supply
Our Reliable Water

Construction Photos – PLM_1.2

- Installation of sanitary sewers and house laterals along Garden Acres Road

Willamette Water Supply
Our Reliable Water
PLM_1.2 Notable Topics

- Partner Coordination
  - Negotiations of costs for added accessway
  - Discussion of Day Road crossing extension with City

- Potential Claims
  - None

- Delivery Challenges
  - None

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PLM_5.1

Partner: Washington Co.
Contractor: Tapani, Inc.
(Moore Excavation, Inc. – Waterline Sub)
Designer: Jacobs

Current and Planned Activities:
- Tunnel boring and casing installation for trenchless pipe complete
- Carrier pipe and annular space grouting
- Utility relocation and mobilization for open cut pipe installation underway
- Start of open cut installation set for late February
Installation of thrust block in northern shaft prior to flying in tunneling equipment

Setting tunnel boring and jacking equipment in northern shaft
PLM_5.1 Notable Topics

- Partner Coordination
  - Tigard turnout change order in progress
- Potential Claims
  - Request for additional compensation for Frontier fiber cable relocation
- Claims
  - None
- Delivery Challenges
  - None

PLM_5.2

Contractor: Emery & Sons
Designer: Jacobs

Current and Planned Activities:
- Real estate acquisition – one property remaining
- 4,700 LF of pipe installed, welded and backfilled
- Second crew continued installing pipe toward the east on Scholls Ferry Road
- Tile Flat Road opened on February 14th
- Site restoration following pipeline installation
- Relocation of three PGE poles (ongoing utility coordination)
Construction Photos – PLM_5.2

Restoration of the work area at the road closure properties

Excavating pipe trench along SW Tile Flat Road
Construction Photos – PLM_5.2

Pipe installation along SW Tile Flat Road

PLM_5.2 Notable Topics

- **External Coordination**
  - PGE and Frontier utilities relocation along Tile Flat Road

- **Potential Claims**
  - None

- **Delivery Challenges**
  - Final easement acquisition
  - Utility relocations
QUESTIONS

Grabhorn Reservoir Replacement Alternative Delivery – Final Report

Andrew Barrett, PE
TVWD Board Work Session
March 3, 2020
Today’s Agenda

- Recap: Why Alternative Delivery? Why a final report?
- Chosen Method
- Recap Grabhorn Challenge / Project Overview
- Project Results
- Questions

Why TVWD Considered Alternative Delivery

- Collaborative approach to delivery
- Best value
- Lessons learned from experience
- Qualified contractors
- Working around critical assets
- Contractor feedback up front
- Schedule and cost certainty earlier in process
- Constructability placement of onsite assets
- ORS 279C.355 requires a final report
Project Delivery in Oregon

- Types of delivery to consider

The Grabhorn Challenge
The Grabhorn Challenge

Project Background
- Original tank constructed in 1971; failed roof supported by scaffolding
- Replace 5 MG buried tank
- Only tank to serve largest pressure zone
- Steep topography, varying rock levels
- Extensive permitting
- Operating complexities and schedule risk
- Site complexities with ASR
- Next door to residential subdivision

Design-Builder or CM/GC Selection

Phase 1
- Request For Qualifications (Evaluated during pre-design – October-December 2016)
  - Evaluate
  - Shortlist

Phase 2
- Request For Proposals (February 2017 – April 2017)
  - Initial Concept Submittal (for DB)
  - Proposal Review and Interviews
  - Negotiate Contract (May 2017)

Award Contract
- Project Design Kickoff (June 2017)

Const.
- Substantial Completion: May 31, 2019
  - Final Completion: Fall 2019
Grabhorn Reservoir Results

- ORS 279C.335 (2)(a)(b) – Cost reporting

<table>
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<tr>
<th>Item</th>
<th>Original Contract Amount</th>
<th>Actual</th>
<th>GMP</th>
<th>Final Price Paid</th>
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<tr>
<td>Phase 1 – Design Services</td>
<td>$881,000</td>
<td>$1,073,273</td>
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<td>Phase 2 Construction Services</td>
<td>$12,574,287</td>
<td>$11,596,732</td>
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<td>$12,035,387</td>
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Costs Continued...

- Amount under GMP: $877,310
- $41,000 (0.3%) in change orders due to scope additions
- Reduced costs: Price reductions designed into project through feedback from Design-Builder approximately $1,260,000
- Approximately $13,930,000 total design, construction, fees and staff time costs.
14 Points – Local Contract Review Board to consider:

1. Number of available bidders
2. Construction budget and operating costs
3. Public benefits
4. Value engineering techniques
5. Specialized expertise
6. Public safety
7. Risk reduction
8. Funding source changes
9. Impact of market conditions and project control
10. Size and technical complexity
11. New or remodel of existing structure
12. Occupied versus unoccupied during construction
13. Single or multi-phase construction
14. Necessary expertise to manage alternative contracting method

WEEKLY Meetings
RAPID Feedback
FULL TEAM Incorporation (operations, safety, engineering, etc.)

IDEA Generation

The SPIRIT of Team

Entire team understands system operational strategies / constraints and is committed to realize goals
• Early fieldwork fuels innovation and cost savings: eliminate shoring; development of concept that uses old tank for shoring (save $585k)
• Drainage pipe / overflow savings ($50k)
• Valve Vault ➤ Valve House ($250k)
• Safety innovations: access bridge in lieu of external ladders