

**Willamette Water Supply System Commission
Board Meeting Agenda
Thursday, June 4, 2020 | 12:00 – 2:00 PM**

Microsoft Teams Dial-in Conference

To slow the spread of COVID-19, this meeting is dial-in only. It will not be held at a physical location.

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- If you wish to attend via conference call and need dial-in information, please contact Faye.Branton@tvwd.org or call 503-969-0031. • If you wish to address the Willamette Water Supply System Board, please request the Public Comment Form and return it 48 hours prior to the day of the meeting. • **All testimony is electronically recorded.**
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REGULAR SESSION – 12:00 PM

CALL TO ORDER

1. GENERAL MANAGER'S REPORT – Dave Kraska

(Brief presentation on current activities relative to the WWSS Commission)

2. PUBLIC COMMENT

(This time is set aside for persons wishing to address the Board on items on the Consent Agenda, as well as matters not on the agenda. Additional public comment will be invited on agenda items as they are presented. Each person is limited to five minutes, unless an extension is granted by the Board. Should three or more people testify on the same topic, each person will be limited to three minutes.)

3. CONSENT AGENDA

(The entire Consent Agenda is normally considered in a single motion. Any Commissioner may request that an item be removed for separate consideration.)

- A. Approve the May 7, 2020 meeting minutes.

4. BUSINESS AGENDA

- A. Adopt WWSS IGA Exhibit 1 Amendment to Modify Allocation of Reservoir Capacity
– Dave Kraska
- B. Approve Willamette Water Supply Program (WWSP) and Construction Management Services
FY 2021 Annual Work Plan – Dave Kraska
- C. Approve PLW_1.3 Construction Contract – Mike Britch
- D. Adopt Revised Fiscal Year 2020-2021 Annual Work Plan and Budget and WWSP Capital
Improvement Plan (Baseline 5.2) – Dave Kraska
- E. Adopt PLM_4.3 Resolution of Public Necessity – Joelle Bennett
- F. Establish Board Meeting Dates for FY 2021 – Dave Kraska

5. INFORMATION ITEMS

- A. Planned July Business Agenda Items – *Joelle Bennett*
- B. The next Board meeting is scheduled on July 2, 2020, at Tualatin Valley Water District – Board Room or via Conference Call (TBD)

6. COMMUNICATIONS AND NON-AGENDA ITEMS

- A. None scheduled.

ADJOURNMENT

Willamette Water Supply
Our Reliable Water

Safety Minute:

Call 811 Before Digging!

1

It's That Time of Year!



- Landscape and gardening projects beckon!

KNOW WHAT'S BELOW. CALL 811 BEFORE YOU DIG



2

Know what's below before you dig!

- More than **20 million miles** of buried utilities in the U.S.
- **45% of all homeowners** will not call 811 before digging, leading to an underground utility being damaged **every six minutes**.
- Your risk of causing damage is **less than 1%** if you call 811 and have utilities marked before you dig.

KNOW WHAT'S BELOW. CALL 811 BEFORE YOU DIG



3

Know what's below before you dig!

- Avoid injury to yourself and others
- Avoid property damage
- Avoid the cost of utility repairs
- Avoid potential shutdowns for repairs (water, gas, electric, phone, internet)



**½" Natural Gas Line
Only 18" Deep**

KNOW WHAT'S BELOW. CALL 811 BEFORE YOU DIG



4

Prepare to Dig Safely

1. Call 811 before every digging job – planting a tree, putting in fence posts, building a deck, installing a mailbox...
 - 2-10 days before excavation
 - www.callbeforeyoudig.org
 - 1-800-332-2344
2. Wait for the utility markings – usually 2 full business days
3. Dig carefully around the markings

KNOW WHAT'S BELOW. CALL 811 BEFORE YOU DIG



5

Be Safe! Call 811 Before Digging!



KNOW WHAT'S BELOW. CALL 811 BEFORE YOU DIG



6

Willamette Water Supply System Commission

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MEMO

Date: June 4, 2020

To: Willamette Water Supply System Board of Commissioners

From: David Kraska, P.E., General Manager

Re: Willamette Water Supply System (WWSS) General Manager's Report

The following items will be covered during the report by the General Manager (GM):

1. Remote Meetings Etiquette:

- a. Please mute your microphone when you are not talking to prevent adding echoes and background noise to the sound of the meeting.
- b. Please identify yourself before speaking for proper acknowledgement on the record.
- c. If someone other than a Board member would like to ask a question or make a comment, please use the chat feature to let the General Manager know and wait to be acknowledged.

2. Safety Minute – David Kraska will present today's safety minute.

3. Approvals and Procurements Forecast – Attached to this GM report is the approvals and procurements forecast (Forecast) for May through July 2020. The Forecast presents a view of WWSP activities that have recently been approved or are scheduled for approval over the next two months by either the WWSP Director, WWSS Committees, or the WWSS Board.

The Forecast shows that we anticipate having various business items on the July Board meeting agenda that pertain to WWSP real estate activities, employing the construction manager/general contractor (CM/GC) approach to the RES_1.0/PLM_5.3 project, and adding a Beaverton ancillary project to the WWSP workload. Joelle Bennett will present a staff report later in this meeting on these anticipated July business agenda items.

The forecast also lists other real estate activities and intergovernmental agreements that are in process, and contracts that are being negotiated. These items are largely the same as they were presented last month.

4. Projects Planning, Permitting, and Communications Updates – With the on-going COVID-19 pandemic, every agency has had to modify its practices including closing many public buildings and switching to remote work. This transition has not

GM Report to the WWSS Board of Commissioners

June 4, 2020

Page 2

impacted our ability to get needed permits on time, and we anticipate that to continue to be the case as many of these agencies work toward reopening their operations.

Over the past month, we received several more permits for both the RWF_1.0 project and the PLW_1.3 project, both of which will begin construction very soon. Additional permit applications are being submitted for seven other WWSP projects (PLM_1.2, PLM_1.3, PLM_4.2, PLM_5.3, MPE_1.0, PLW_1.2, and PLW_2.0). We do not anticipate any delays on these permit applications.

- 5. Projects Design Status Updates** – Work continues on multiple design projects, including nine pipeline projects, the Water Treatment Plant (WTP_1.0), the Distributed Controls System (DCS_1.0), and the Terminal Storage project (RES_1.0). The next project that we anticipate advertising for bidding is the PLM_4.1 project, which is our pipeline crossing of Highway 99 in Sherwood that we are completing in partnership with Washington County. That project is scheduled to bid during the fourth quarter of 2020.

- 6. Projects Construction Status Updates** – There are four projects actively under construction:
 1. PLM_1.1 – our raw water pipeline project in Wilsonville that extends from our RWF_1.0 project to Wilsonville Road,
 2. PLM_1.2 – another raw water pipeline project being completed in partnership with the City of Wilsonville’s Garden Acres Road project,
 3. PLM_5.1 – a finished water pipeline project being completed in partnership with Washington County’s Roy Rogers Road project, and
 4. PLM_5.2 – a finished water pipeline project along SW Scholls Ferry and SW Tile Flat roads that we are working to complete in advance of development work in the area.

Two more projects will soon be added to this list: Phase 1 of the RWF_1.0 project for which the contractor currently has limited notice to proceed, and the PLW_1.3 pipeline project that is included on the Board business agenda for the current meeting. All projects remain on track and are progressing according to plan, and all contractors are remaining in compliance with the Governor’s Executive Order No. 20-12 regarding hygiene and social distancing.

Approvals and Procurement Forecast: May 2020 through July 2020

This report provides a three-month projection of (1) forthcoming actions under the WWSS Management Authority Matrix and (2) ongoing and forthcoming procurements.

a = Actual date
e = Email approval
FC = Finance Committee
LCRB = Local Contract Review Board
MC = Management Committee
N/A = Not applicable
OC = Operations Committee

Rec. = Recommendation
t = Tentative date
TBD = To be determined; sufficient information not available to project a date
Note: Dates in **red text** indicate meetings needed outside the normal meeting schedule

Type	Description	Projected Action	Body/Position (projected action date)		
			Program Director	WWSS Committees	WWSS Board
Program Baseline or Related Plans	1. WWSP 2020 Rebaseline Schedule and Budget; FY 2021 Revised WWSS Budget	Approve	N/A	MC: 5/21/2020 t	6/4/2020 t
		Execute	N/A	N/A	N/A
Real Estate	2. PLM_4.3 Resolution of Need	Approve	N/A	MC: 5/21/2020 t	6/4/2020 t
	3. PLM_5.3 Resolution of Need	Approve	N/A	MC: 6/18/2020 t	7/2/2020 t
IGAs, MOUs, Permit Commitments, & Similar Agreements	4. PLW_1.2 WCLUT Design IGA Amendment 1	Approve	N/A	MC: 10/16/2019 a	12/5/2019 a
		Execute	6/16/2020 t	N/A	N/A
	5. RES_1.0 Emergency Responder (Sheriff) Training Exercise Agreement	Approve	N/A	MC: 4/23/2020 a	5/7/2020 a
		Execute	5/12/2020 a	N/A	N/A
	6. WWSS IGA Exhibit 1 Amendment • Modify allocation of Reservoir Capacity • Add a City of Beaverton Turnout on Grabhorn Road • Make minor housekeeping edit	Approve	N/A	MC: 5/21/2020 t	6/4/2020 t
		Execute	6/5/2020 t	N/A	N/A
	7. WWSS IGA Exhibit 1 to modify Allocation of Reservoir Capacity	Approve	N/A	MC: 5/21/2020 t	6/4/2020 t
		Execute	6/5/2020 t	N/A	N/A
8. COB_1.0 Design IGA Amendment 1 to add a City of Beaverton Hall Boulevard 16-inch pipeline to COB_1.0	Approve	N/A	MC: 6/18/2020 t	7/2/2020 t	
	Execute	7/3/2020 t	N/A	N/A	
Contracts	9. PLW_1.3 Construction Contract • Goal: Construction Contractor for waterline construction from Farmington to Kinnaman • Approximate value: \$29 M • Contractor: Tapani • Publish Request for Proposals: 2/21/2020 a • Proposal Due Date: 4/16/2020 a • Rec. of Award: 4/23/2020 a • Notice of Intent to Award: 4/27/2020 a • Limited Notice to Proceed: 6/5/2020 t • Notice to Proceed: 8/6/2020 t	Approve	N/A	MC: 5/21/2020 t	6/4/2020 t
		Execute	6/5/2020 t	N/A	N/A

Type	Description	Projected Action	Body/Position (projected action date)		
			Program Director	WWSS Committees	WWSS Commission Board
Contract Amendments and Change Orders (above Program Director's Authority)	10. WTP_1.0 Design Amendment for Scope Modifications	Approve	N/A	MC: 4/23/2020 a	5/7/2020 a
		Execute	5/12/2020 t	N/A	N/A
	<ul style="list-style-type: none"> Goal: Amend contract for design services related to additional engineering services Value: \$885,133 Engineer: CDM Smith 				
	11. RWF_1.0 Contract Amendment for Guaranteed Maximum Price (GMP) for Phase 1 Construction	Approve	N/A	MC: 4/23/2020 a	5/7/2020 a
		Execute	5/13/2020 a	N/A	N/A
	<ul style="list-style-type: none"> Goal: Amend contract to include GMP for phase 1 construction Value: \$49M Contractor: Kiewit 				
12. WWSP Program and Construction Management Services FY 2021 Annual Work Plan	Approve	N/A	MC: 5/21/2020 t	6/4/2020 t	
	Execute	6/5/2020 t	N/A	N/A	
<ul style="list-style-type: none"> Goal: Approve scope, staffing, and fee for program and construction management services for FY 2021 Value: \$13M Contractor: Stantec 					
Local Contract Review Board (LCRB) Actions	13. Findings for Exemption from Competitive Bidding for RES_1.0, PLM_5.3	Approve	N/A	MC: 4/23/2020 a	7/2/2020 t
		Execute	N/A	N/A	N/A
<ul style="list-style-type: none"> Board approval to initiate public comment 5/7/2020 a 					

**Willamette Water Supply System Commission
Board Meeting Minutes
Thursday, May 7, 2020**

Commissioners present:

Tualatin Valley Water District (TVWD): Jim Duggan
Hillsboro: David Judah
Beaverton: Denny Doyle

Committee Members present:

TVWD: Tom Hickmann, Management Committee
Justin Carlton, Finance Committee
Carrie Pak, Operations Committee
Hillsboro: Niki Iverson, Management Committee
Lee Lindsey, Finance Committee
Beaverton: Chad Lynn, Management Committee
David Winship, Operations Committee

Managing Agency Administrative Staff present:

Dave Kraska, Willamette Water Supply Program (WWSP) Director; WWSS Commission General Manager
Bill Van Derveer, WWSP Program Manager
Lisa Houghton, WWSP Finance Manager
Clark Balfour, TVWD General Counsel
Faye Branton, WWSP Administrative Assistant; WWSS Commission Recorder

Other Attendees:

Mike Britch, WWSP Engineering and Construction Manager
Lisa Houghton, WWSP Finance Manager
Christina Walter, WWSP Permitting and Outreach Manager
Joel Cary, TVWD Water Resources Division Manager

No members of the public were present.

CALL TO ORDER

Chairman Duggan called the regular Willamette Water Supply System (WWSS) Commission meeting to order at 12:00 p.m.

ROLL CALL

Ms. Branton administered the roll call and noted attendance.

1. GENERAL MANAGER'S REPORT

Mr. Kraska presented a safety moment on hand sanitizer safety. ([See presentation.](#))

The General Manager's report included an overview of etiquette for remote meetings; the Approvals and Procurement Forecast for April through June 2020; updates on projects planning, permitting, and communications; and status updates on the design and construction of projects.

2. PUBLIC COMMENT

There were no public comments.

3. CONSENT AGENDA

- A.** Approve the April 2, 2020 meeting minutes.

Motion was made by Judah seconded by Doyle, to approve the consent agenda as presented. The motion passed unanimously with Doyle, Duggan, and Judah voting in favor.

4. BUSINESS AGENDA

- A.** Consider approving an amendment to Kiewit Infrastructure West, Co. (Kiewit) CM/GC Contract No. 2018-013 for Guaranteed Maximum Price (GMP) in the amount of \$49,026,130.00 for phase 1 of construction of the Raw Water Facilities (RWF_1.0) Project of the Willamette Water Supply Program (WWSP). *Staff Report – Mike Britch*

Mr. Britch presented the staff report requesting the Board's approval of an amendment to the Kiewit Construction Management/General Contractor (CM/GC) contract for a GMP for phase 1 of construction of the WWSP RWF_1.0 project. (*See presentation.*)

In response to Commissioner's question, staff replied that this is one of the WWSP's most challenging projects from a technical standpoint. The last official baseline budget (Baseline 4.1) reflects our understanding of the RWF_1.0 project in the fourth quarter of 2018. There have been a number of scope modifications to the project since that time. Many factors, including project complexity, city requirements, market capacity at the time, and level of difficulty in construction of this pipeline contributed to the cost. This is the first construction project on the Program that has come in over staff estimates. Market conditions will be closely monitored and factored into future construction procurements.

Motion was made by Doyle seconded by Judah to approve the Kiewit CM/GC contract amendment for GMP in the amount of \$49,026,130.00 for phase 1 of construction of the Raw Water Facilities (RWF_1.0) Project of the Willamette Water Supply Program (WWSP). The motion passed unanimously with Doyle, Duggan, and Judah voting in favor.

- B.** Consider approving an amendment in the amount of \$885,133.00 (with no contract term extension) to the CDM Smith contract No. 2018-014 to provide additional design services for the water treatment plant (WTP_1.0) project of the Willamette Water Supply Program. *Staff Report – Mike Britch*

Mr. Britch presented the staff report requesting the Board's approval of an amendment in the amount of \$885,133.00 (with no contract term extension) to the CDM Smith contract No. 2018-014 to provide additional design services for the WWSSP water treatment plant (WTP_1.0) project. (*See presentation.*)

Motion was made by Judah seconded by Doyle, to approve an amendment in the amount of \$885,133.00 (with no contract term extension) to the CDM Smith contract No. 2018-014 to provide additional design services for the water treatment plant (WTP_1.0) project of the Willamette Water Supply Program. The motion passed unanimously with Doyle, Duggan, and Judah voting in favor.

Staff reiterated that they are making every possible effort to keep project costs within or below budget and expressed appreciation of Commissioners' understanding and support.

- C. Acting as the Local Contract Review Board (LCRB), consider approving a motion to read by title only a draft resolution declaring an exemption from competitive bidding for the RES_1.0 project (combined with the PLM_5.3 project) and approving a Construction Manager/General Contractor (CM/GC) delivery method for construction, receive oral testimony or written comments and direct that the resolution be brought back for a second reading and adoption at the July 2, 2020 Board meeting.

Mr. Britch presented the staff report that explained the process used by the WWSP to select the Construction Manager/General Contractor (CM/GC) delivery method for construction of the combined RES_1.0 / PLM_5.3 project. Included in the presentation was an explanation of how this selection requires action by the LCRB to allow this exemption from traditional competitive bidding, and the required public process to maintain compliance with State statutes. *(See presentation.)*

Acting in capacity as the LCRB, motion was made by Doyle seconded by Judah to approve reading by title only a draft resolution declaring an exemption from competitive bidding for the RES_1.0 project (combined with the PLM_5.3 project) and approving a Construction Manager/General Contractor (CM/GC) delivery method for construction, receive oral testimony or written comments, and directed that the resolution be brought back for a second reading and adoption at the July 2, 2020 Board meeting. The motion passed unanimously with Doyle, Duggan, and Judah voting in favor.

- D. Consider adopting Resolution WWSS-07-20 approving a License Agreement between the Willamette Water Supply System Commission ("Licensor") and the Washington County Sheriff's Office ("Licensee") for Law Enforcement Training at the RES_1.0 property prior to demolition of the existing structures, and authorizing the WWSS General Manager to enter into similar agreements with other local agencies for the use of the RES_1.0 property and its structures until those structures are removed from the property.
– *Staff Report – Christina Walter*

Ms. Walter presented the staff report requesting adoption of Resolution WWSS-07-20.

Motion was made by Judah seconded by Doyle to adopt Resolution WWSS-07-20 approving a License Agreement between the Willamette Water Supply System Commission ("Licensor") and the Washington County Sheriff's Office ("Licensee") for Law Enforcement Training at the RES_1.0 property prior to demolition of the existing structures, and authorizing the WWSS General Manager to enter into similar agreements with other local agencies for the use of the RES_1.0 property and its structures until those structures are removed from the property. The motion passed unanimously with Doyle, Duggan, and Judah voting in favor.

5. INFORMATION ITEMS

A. Planned June Business Agenda items – Staff Report – Joelle Bennett

Ms. Bennett presented an overview of the anticipated business agenda items for the June 4, 2020 WWSS Commission Board meeting. Staff anticipates recommending approval of (1) PLM_4.3 Resolution of Public Necessity; (2) WWSS IGA Exhibit 1 Amendment to Modify Allocation of Reservoir Capacity; (3) WWSS IGA Exhibit 1 Amendment to Add a City of Beaverton Turnout on Grabhorn Road; (4) Adding a City of Beaverton Hall Boulevard 16-inch pipeline to the COB_1.0 project; (5) PLW_1.3 Construction Contract Approval; (6) WWSP Program and Construction Management Services FY 2021 Annual Work Plan; and (7) WWSP 2020 Rebaseline Schedule and Budget.

In response to Commissioner’s question, staff will consult the WWSS IGA re: Board members abstaining from taking action on WWSS business agenda items and report findings to Commissioners prior to the regular June Board meeting.

- B.** The next Board meeting is scheduled on June 4, 2020, at the Hillsboro Civic Center, Room 113B/C, 150 E. Main Street, Hillsboro, OR or via dial-in conference, to be determined based on the COVID-19 situation.

6. COMMUNICATIONS AND NON-AGENDA ITEMS

- A.** None scheduled.

ADJOURNMENT

There being no further business, Chairman Duggan adjourned the meeting at 1:35 p.m.

James Duggan, Chair

Denny Doyle, Vice Chair

Safety Minute:

Hand Sanitizer Safety

1

Hand Sanitizer Safety

Hand sanitizers can help prevent the spread of germs and harmful bacteria, but there are potential dangers to keep in mind.



2

Alcohol Poisoning

- At 60% ethyl alcohol, even a small dose can be dangerous
- If ingested, can lead to dizziness, slurred speech, headaches and, in extreme cases, brain damage or death

Safety Tips

- Always supervise children's use
 - Use a pea-sized amount
 - Rub hands together until dry
 - Keep hands out of mouths
- Avoid sweet smelling sanitizers
- Store out of children's reach
- Use soap and water whenever possible

Potential Fire Hazard

- Alcohol-based hand sanitizers are classified as Class IC flammable liquid
- Liquid, gel, and vapors can be flammable
- If ignited, can burn very hot, very quickly

Safety Tips

- Only use dime sized amount
- Rub hands until dry
- Never use near a heat source or open flame
- Beware of static electricity
- Store away from all heat and ignition sources

Hand Sanitizer Safety

- Use soap and water instead
- Supervise children using it
- Use sparingly and rub hands until dry
- Avoid ingestion
- Keep and store away from flame and heat

Willamette Water Supply System Commission

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4A-1 RWF_1.0 Contract Amendment for Guaranteed Maximum Price for Phase 1 Construction

May 7, 2020

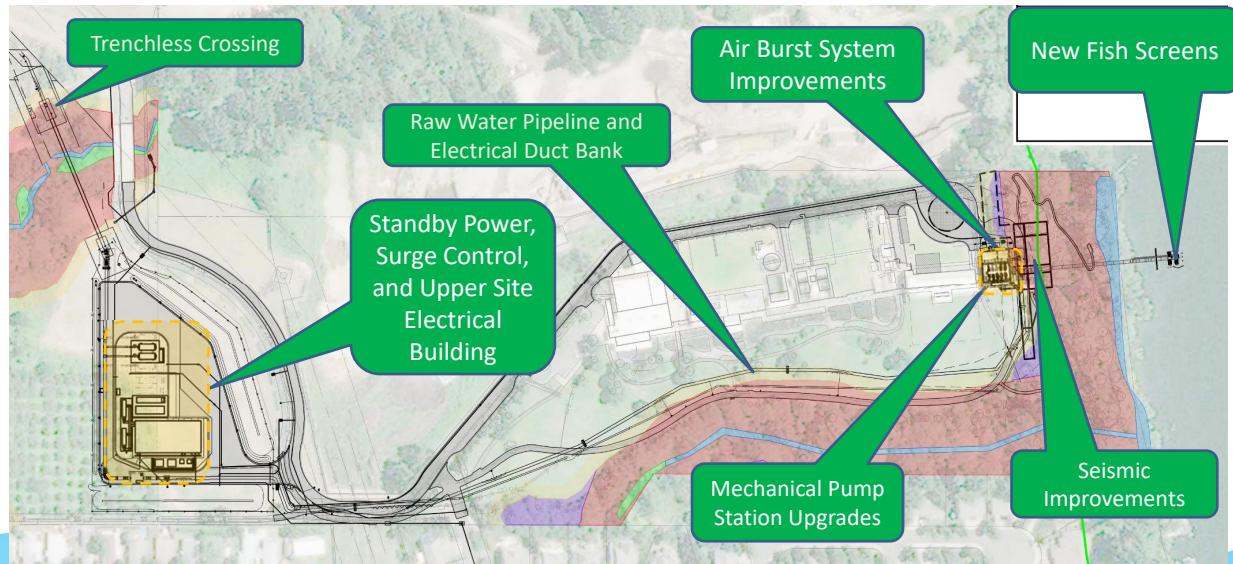
1

Agenda

- Project and cost management background
- Bid process
- GMP review
- GMP comparison to Baseline budget
- Requested Board action

2

RWF_1.0 Project Background



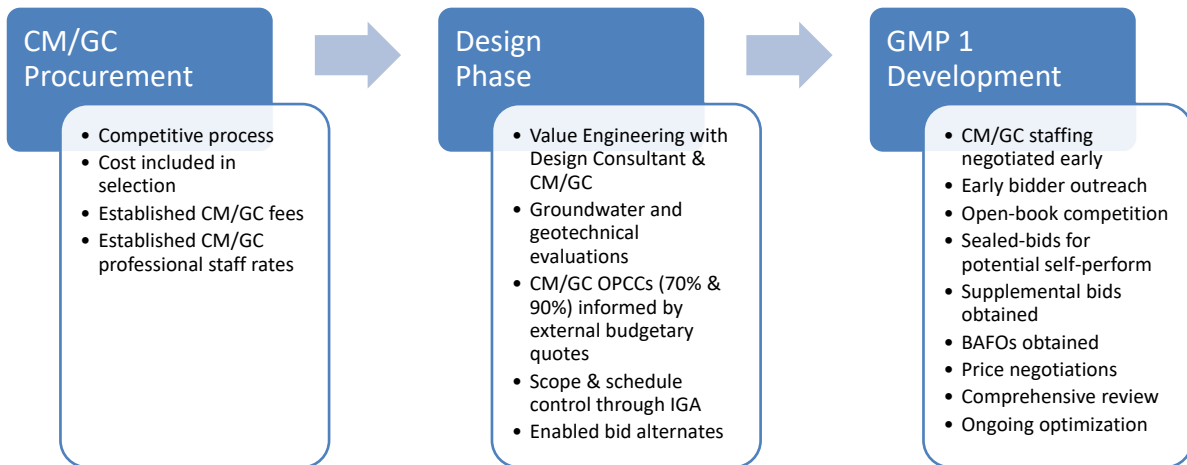
3

RWF_1.0 Background

- Kiewit contract for CM/GC services was executed in June 2018
 - Included design phase services
 - Planned to be amended to include separate GMPs for phase 1 and 2 of construction
- Phase 1 includes underground, high risk elements
- Phase 1 NTP planned for June 5, 2020
- Phase 2 GMP development planned to start in March 2022

4

Actions Taken for Cost Management through GMP 1



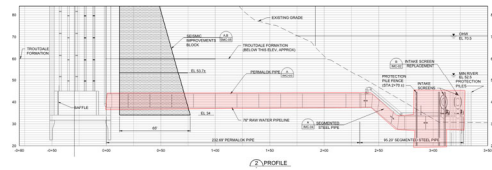
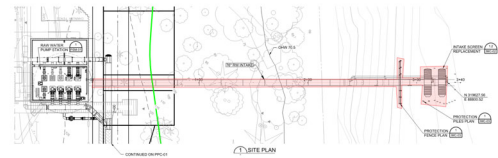
Bidding Process

- Two outreach meetings were held
 - November 19
 - January 28, included site walk
- Questions jointly addressed
 - All technical questions routed to design team
 - Kiewit responded to scoping questions



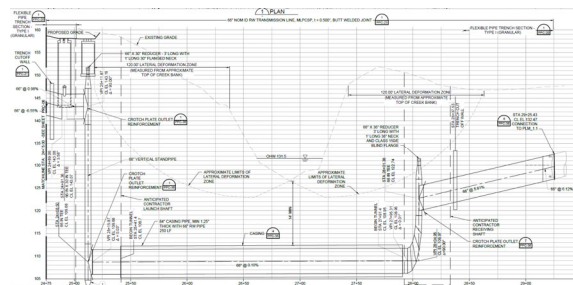
Bidding Process

- 4 best value (technical and cost) work packages
 - WWSP developed evaluation criteria
 - Prequalification step
- 18 minimum requirement and qualifications (low bid)
- 1 Kiewit self-performed work package with a negotiated price
- WWSP administered key procurement activities
- No bid protest
- “Open Book Approach” to bid review



Best Value Work Packages: Trenchless Crossing

- Pump test to quantify groundwater conditions
- Multiple technologies: Auger bore and pipe ramming
- 4 prequalified firms
- 2 responsive bidders
 - Fowler – Pipe ramming
 - Gonzales – Auger bore
- Tunneling Company and Northwest Boring did not submit bids



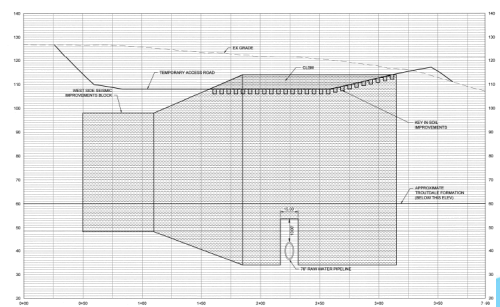
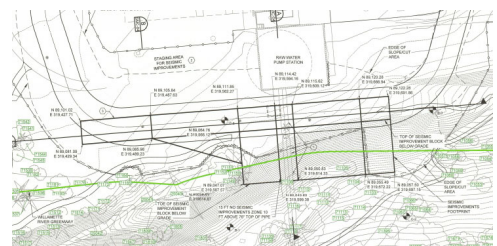
Bid Results for Trenchless Crossing

Bidders	Bid	After Bid Leveling / BAFO	Total Score
1. Fowler	\$8,350,000	\$8,181,000	961
2. Gonzalez	\$ 7,866,759	\$7,991,759	914
Baseline 4.1	\$4,610,000	N/A	N/A

- Budget based on Kiewit OPCC (and consistent with WWSP experience (e.g., PLM_5.1 trenchless crossing is ~\$3.8M))
- High risk work package with potential to encounter boulders (Kiewit carried \$1 million in contingency)

Best Value Work Packages: Seismic Improvements

- Deep Soil Mixing (DSM) added to supplement jet grout
- Footprint reduced throughout design
- 3 prequalified firms
- 2 responsive bidders
 - Condon Johnson
 - Keller
- 1 non-responsive bidder
 - Malcolm
 - Submitted an alternative approach
 - Did not meet RFP requirements



Bid Results for 66" Pipeline

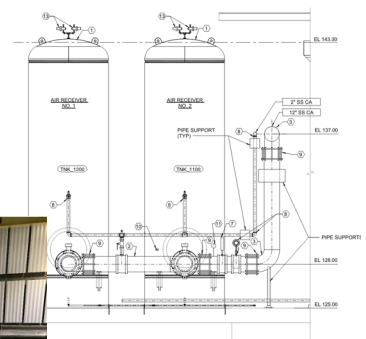
Bidders	Bid	Total Score
1. Kiewit	\$8,800,552	952
2. Emery and Sons	\$9,854,725	925
3. James W. Fowler	\$9,700,000	917
4. MEI	\$9,085,073	924
Baseline 4.1	\$5,106,569	N/A

- Unit cost of pipeline submitted with 70% OPCC (single supplier budgetary quote) was inconsistent with actual, competitively-procured WWSP pipeline bids; Baseline 4.1 used adjusted unit cost
- Unique project elements
 - Pipe wall thickness and joints
 - Pinch point construction
 - Tie-in to existing pipe header
 - Flow meter and vault

13

Best Value Work Packages: Mechanical

- 2 prequalified firms, including Kiewit
- 2 responsive bidders
- Bids received by WWSP
- Bids evaluated by WWSP only



14

Bid Results for Mechanical

Bidders	Bid	Total Score
1. Kiewit	\$1,301,397	641
2. Harder	\$1,483,576	549
Baseline 4.1	\$1,161,235	N/A

- Revised specification requirements for pump improvements
 - IGA required to advance land use
 - WWSP staff negotiated WRWTP pump movement scope

GMP 1 Refinements During Negotiation Phase

- Draft submitted on March 13
- Review by WWSP and SMEs
- Several updates and refinements over 4 weeks
 - CM/GC contingency
 - Continued outreach efforts
 - Received additional bids for upper site civil work
 - Received additional bid for underground infrastructure (ductbank and utilities)
 - Addition of summary sheets with outreach information, bids received, and bid leveling
- Confirmation of Owner's contingency

GMP 1 Review Summary

Summary of Bid Information (74% of GMP 1)			
1 bidder	\$1.04 M		3%
2 bidders	\$15.31 M		45%
3 (or more) bidders	\$13.12 M		38%
1 source fixed or value	\$4.72 M		14%

- Majority of items had 2 bidders, representing slightly higher bids
- Small quantity of interested bidders is a local and national trend
- Kiewit is continuing outreach and receiving bids

GMP vs. Baseline 4.1 Budget

Cost Item	Amount
Current Budget (Baseline 4.1) – Phase 1	\$41,779,232
GMP No.1 total (including contingency*)	\$51,095,816
Amount over Baseline 4.1 Budget – Phase 1	\$9,316,584
Current Budget (Baseline 4.1) – Phase 1 and 2	\$77,322,406
Projected GMP total – Phase 1 and 2** (including contingency*)	\$92,132,198
Amount over Baseline 4.1 Budget – Projected Total	\$14,809,792

* Contingency includes:

- CM/GC contingency – 2.9% (held within contract)
- Owner's contingency – 3.7% (held within contract)
- Additional contingency budget – 4.5% (held outside contract)

** Phase 2 GMP is estimated, not yet competitively, procured

Baseline 4.1

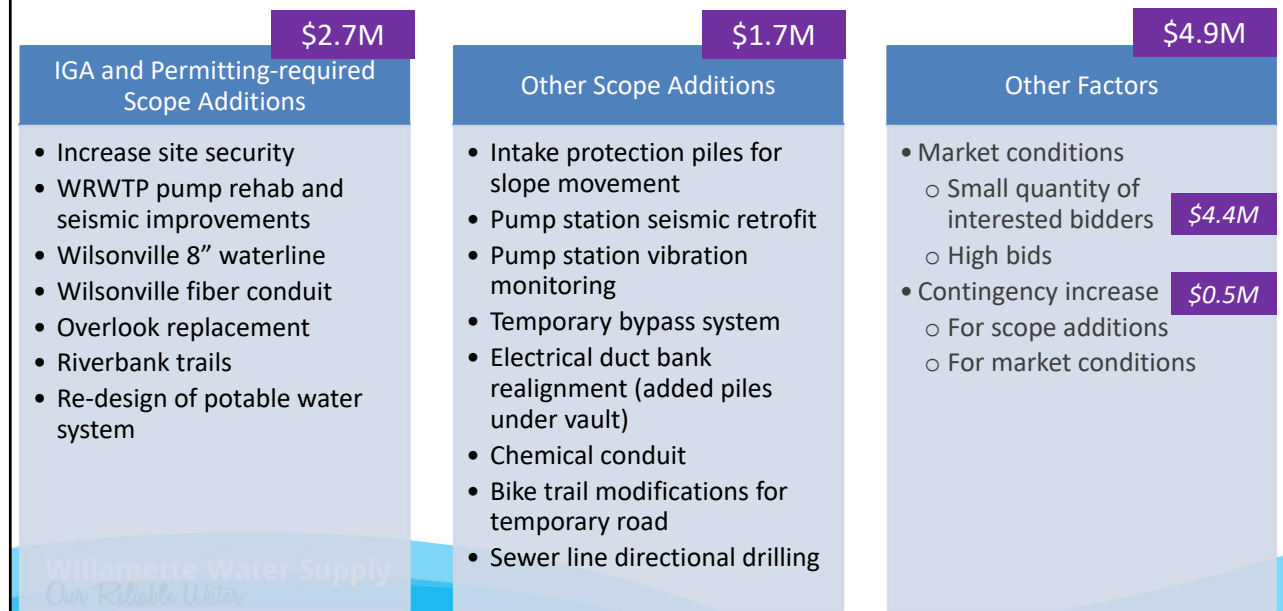
- Prepared Q4 2018
- Used Class 2 OPCC for RWF_1.0 (+20% to -15% accuracy)
- Post-70% design scope additions not included

Budgets to be adjusted in Baseline 5.2

GMP vs. Baseline 4.1 Budget – Phase 1

- Major work packages under budget (\$2.8M)
 - Intake water work package
 - Upper site civil improvements
 - Lower site valve vault

Primary Drivers for GMP 1 \$9.3M above Baseline 4.1



Potential Savings Opportunities – Phase 1

- VE discussions with Condon Johnson
- Opportunity for additional quotes for underground work in 2021
- Reuse of fill above clean fill criteria - \$150K
- Fencing options in Park
- One pipe supplier versus two
- *Open cut alternative to trenchless crossing vetted but determined not feasible*
- *Additional quotes since Management Committee review resulted in \$100K savings*

GMP vs. Baseline 4.1 Budget – Phase 2

- Major work packages with projected cost increase
 - Upper site electrical building (1 quote)
 - WWSS pumps, motors, drives (1 quote per item)
 - Communications (not reflective of current WWSP DCS_1.0 approach)
- Basis
 - Kiewit 70% OPCC
 - Non-competitive, budgetary quotes

Potential Savings Opportunities – Phase 2

- Conduct early and robust bidder outreach for upper site building
 - Increase WWSP participation in procurement process
- Procure equipment with WTP
- Communication system procurement



Schedule

Major Project Milestones	Latest Approved Baseline	Latest Monthly Forecast	Variance (days)
WWSS Board Approval	05/07/20	05/07/20	0
Construction NTP	06/05/20	06/05/20	0
Stage Gate 4: Substantial Completion	09/06/24	09/06/24	0
Stage Gate 5: Final Acceptance	12/03/24	12/03/24	0

Requested Board Action

Approve amendment in the amount of \$49,026,130 to the Kiewit Infrastructure West, Co. for the GMP of Phase 1 of construction of the RWF_1.0 Project

QUESTIONS

Willamette Water Supply System Commission

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WTP_1.0 Design Contract Amendment (Contract No. 2018-014 Amendment 8)

May 7, 2020

1

Background

- Additional design scope related to increased scale and complexity of the project:
 - “Lean” scope of work from CDM at the time of negotiations
 - Increase in WTP_1.0 design capacity (60 mgd to 72 mgd)
 - Compact main process facility
- Effects on design were known but difficult to quantify beyond a parametric approach until the 60% design submittal (enhanced water quality and level of service goals)

2

Change Negotiation

	Date	Amount
Initial Meeting with CDM	09/04/2019	\$1,900,000
WWSP Response (after mid-60% OPPC received)	11/29/2019	N/A
Meeting with CDM (where backup from CDM was requested)	01/30/2020	N/A
CDM Justification for Additional Costs (including backup)	02/19/2020	\$1,510,212
WWSP Response (with our estimate of cost)	02/28/2020	\$821,337
Final Meeting with CDM	03/12/2020	\$885,133 ⁽¹⁾

⁽¹⁾ Represents a 3.9% increase to the \$22.7 million contracted fee negotiated in July 2018

Scope Impact to Design Contract

- Drawing count used to demonstrate increased scale and complexity of the project (net increase of 179 drawings – see table below)
- Analysis of drawing quantity accounted for:
 - Different degrees of complexity across added and deleted drawings

Milestone	Number of Drawings
Negotiations (June 2018)	1,038 ⁽¹⁾
60% Design (January 2020)	1,217 ⁽²⁾
Net Change	179 (231 added, 52 deleted)

⁽¹⁾Based on the original negotiated drawing list and CDM Smith's fee for design efforts, the resulting cost per drawing was approximately \$10,700 per drawing.

⁽²⁾The calculated cost per drawing for the net additional 179 drawings is approximately \$4,900 per drawing (45% of the cost of a negotiated drawing).

Budget Impact to Design Contract

Initial Contract Value	\$22,698,796.09
Amendments 1 through 7	\$1,420,884.49
Current Contract Value	\$24,119,680.58
Proposed Amendment 8	\$885,133.00
Proposed Contract Value	\$25,004,813.58

- Initial contract value for design and ESDC (with no amendments) was 9.9% of the current baseline construction cost (\$232M)
- Proposed contract value for design and ESDC including Amendments 1 through 8 is 10.8% of the current baseline construction cost
- Design and ESDC fees for a typical WTP project range from 10 to 15%
- Still a good value due to the complexity of the design that includes HAZOP, ALM, seismic criteria, resiliency, etc. that would push fees more towards the 15% value

Schedule Impact

- Despite additional design scope related to increased scale and complexity of the project, design consultant has maintained the original project schedule, successfully completing the 60% design on time.
- These changes are expected to have no impact on future schedule.
- The 90% design submittal is anticipated in December 2020.

Continued Cost Reduction

- Continuous VE efforts
- Identified and implementing deductive alternates
- Implementing lessons learned from other CM/GC contracts (RWF)
- Planning for procurement optimization (e.g., drill and blast, concrete mix design, aggregates, etc.)
- Drive CM/GC's rigorous pursuit of cost control, transparency, and accuracy during estimating
 - Upcoming 60% OPCC in mid-May (and subsequent vetting)
 - Evaluate construction delivery options

Requested Board Action

Approve an amendment in the amount of \$885,133.00 (with no contract term extension) to the CDM Smith contract to provide additional design services for the water treatment plant (WTP_1.0) project of the Willamette Water Supply Program (WWSP).

QUESTIONS

Willamette Water Supply System Commission

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RES_1.0 (Combined with PLM_5.3)
Project Delivery Approach

May 7, 2020

1

Outline

- Recommendation preview
- Project overview
- Evaluation process and results
- Implementation steps
- Recommendation

2

Recommendation Preview

Consider approving a motion to read by title only a draft resolution declaring an exemption from competitive bidding for RES_1.0 Storage Reservoirs and approving the use of the Construction Manager/General Contractor (CM/GC) delivery method for construction, receive oral testimony or written comments and direct that the resolution be brought back for a second reading and adoption at the July 2, 2020 Board meeting.

3

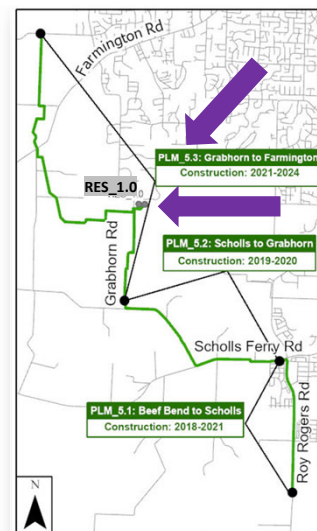
Project Overview & Challenges

Overview

- Two 15 MG circular pre-stressed concrete storage tanks (AWWA D110)
- Four vaults for 66" diameter finished water pipelines and appurtenances
- Yard piping
- Building
- Site grading/rock excavation
- Soil nail and rock bolt reinforcement
- Storm water retention, treatment, and conveyance
- Site access roadways
- Approximately 21,000 feet of 66-inch diameter welded steel pipeline (PLM_5.3)

Key Challenges

- Coordination among specialty contractors
- Site constraints
- Rock removal
- Schedule constraints
- Public outreach
- Traffic control



4

Delivery Approach Evaluation

WWSP Packaging and Delivery Alternatives Evaluation (Mar. 2019)

- Evaluated sequencing alternatives for constructing PLM_5.3 and RES_1.0 to avoid construction conflicts near the reservoir site
- Evaluated different construction delivery approaches
 - Progressive Design Build
 - Lump Sum Design Build
 - CM/GC
 - Design Bid Build
- Deferred delivery approach decision

Black & Veatch Construction Delivery Approach Evaluation (Feb. 2020)

- Reviewed updated RES_1.0 elements and schedule
- Understand delivery options
- Reviewed advantages and disadvantages of each delivery option
- **Identified recommendation for CM/GC delivery**

5

Expected Benefits of CM/GC Delivery Approach

- Provides ability to select the contractor based, in part, on qualifications
- Secures contractor participation during design, including value engineering
- Enables early contractor planning to mitigate potential schedule/cost risks
- Shifts some project delivery risk to the contractor, encouraging collaboration and focus on avoiding construction issues
- Enables early identification/mitigation of safety and public outreach concerns
- Allows for an early phase of construction for schedule-critical earthwork
- Accommodates different design consultants for RES_1.0 and PLM_5.3

6

Exemption Summary

The use of CM/GC delivery for construction RES_1.0/PLM_5.3:

- Is unlikely to encourage favoritism or reduce competition
- Will likely result in cost savings and other substantial benefits

7

Implementation Steps



8

Recommendation

Consider approving a motion to read by title only a draft resolution declaring an exemption from competitive bidding for RES_1.0 Storage Reservoirs and approving the use of the Construction Manager/General Contractor (CM/GC) delivery method for construction, receive oral testimony or written comments and direct that the resolution be brought back for a second reading and adoption at the July 2, 2020 Board meeting.

Willamette Water Supply System Commission

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STAFF REPORT

To: WWSS Board of Commissioners
From: David Kraska, P.E., Willamette Water Supply System General Manager
Date: June 4, 2020
Subject: WWSS IGA Exhibit 1 Amendment to Modify Allocation of Reservoir Capacity

Requested Board Action:

Consider adopting a resolution approving an amendment to the WWSS intergovernmental agreement Exhibit 1 to modify the reservoir capacity allocations, contingent upon execution of the Memorandum of Understanding for WWSS Reservoir RES 1.0 Storage Reallocation.

Key Concepts:

The WWSS owners have agreed upon a reallocation of the WWSS reservoir capacity, pending execution of a Memorandum of Understanding (MOU) for WWSS Reservoir RES 1.0 Storage Reallocation. Changing the storage allocation requires an amendment to the WWSS IGA Exhibit 1.

Background:

RES_1.0 is being designed with a capacity of 30 million gallons (MG) of operational and emergency storage, which was originally allocated among the parties under the WWSS IGA as follows: TVWD – 11.8 MG (all shared storage); Hillsboro 17.2 MG (10 MG owned outright; 7.2 shared storage); and Beaverton 1.0 MG (all shared storage).

4.5 Reservoirs

The WWSS included two 15-MG prestressed concrete reservoirs (tanks). Hillsboro will own 10-MG of the total Reservoirs capacity, and the partners will share in the remaining 20-MG of capacity. Ownership and cost shares will be calculated per the following table:

Partner	Capacity Owned Outright (MG)	WIF Capacity Owned (MGD)	Percent of Shared Reservoir Capacity Owned	Shared Reservoir Capacity Owned (MG)	Total Reservoir Capacity Owned (MG)	Percent of Total Reservoir Capacity Owned (MG)
TVWD	0	59.1	58.92%	11.78	11.78	39.28%
Hillsboro	10	36.2	36.09%	7.22	17.22	57.39%
Beaverton	0	5.0	4.99%	1.00	1.00	3.32%
Totals	10	100.3	100%	20.00	30.00	100.00

Figure 1. WWSS Reservoir Capacity from WWSS IGA Exhibit 1 (July 2019)

Due to potential higher construction cost of the Water Treatment Plant as forecast by the CM/GC contractor, Hillsboro provided a Notice of Intent to Change to the WWSS Program staff to consider several cost cutting measures including the consideration of no longer allocating the separate 10 MG of storage capacity for Hillsboro operations. This would reduce the overall storage capacity of RES 1.0 from 30 MG

WWSS IGA Exhibit 1 Amendment to Modify Allocation of Reservoir Capacity

to 20 MG, which was still consistent with the amount of shared storage contemplated by the parties under the IGA. After weighing various alternatives, the parties agreed that the 10 MG currently set aside for Hillsboro's separate allocation should be returned to the WWSS shared storage pool, so that all 30 MG of reservoir storage will be available for WWSS operational and emergency needs.

In the MOU, the parties further agree that no party has an allocation of any specific quantity of water in RES_1.0. All stored water is held as an undivided interest under the WWSS IGA to enable WWSS operations for the mutual benefit of all as governed by the WWSS operational plan.

4.5 Reservoirs (Revised June 2020)

The WWSS included two 15-MG prestressed concrete reservoirs (tanks). No Party has an allocation of any specific quantity of water in the reservoir capacity. All stored water is held as an undivided interest to enable WWSS operations for the mutual benefit of all. Ownership and cost shares will be calculated per the following table:

Partner	Total Reservoir Capacity Owned (MG)	Percent of Total Reservoir Capacity Owned (MG)
TVWD	16.47	54.90%
Hillsboro	12.14	40.47%
Beaverton	1.39	4.63%
Totals	30.00	100.00

Figure 2. Proposed WWSS Reservoir Capacity from WWSS IGA Exhibit 1 (pending amendment June 2020)

The Parties shall each be responsible for their percentage share of the costs associated with the design and construction of RES_1.0, as shown in the table above.

Budget Impact:

The cost shares per partner are modified under this change, however the overall cost to WWSS remains unchanged and within the WWSS budget.

Staff Contact Information:

David Kraska, PE; Willamette Water Supply Program Director; 503-941-4561; david.kraska@tvwd.org
Joelle Bennett, PE; WWSP Assistant Director; 503-941-4577; Joelle.bennett@tvwd.org

Attachments:

Proposed resolution
Revised WWSS IGA Exhibit 1, Section 4.5 and Section 5

RESOLUTION NO. WWSS-08-20

A RESOLUTION AMENDING EXHIBIT 1 TO THE WILLAMETTE WATER SUPPLY SYSTEM INTERGOVERNMENTAL AGREEMENT.

WHEREAS, the above-entitled matter came before the Willamette Water Supply System Commission (WWSS Commission) at its regular meeting on June 4, 2020; and,

WHEREAS, the Willamette Water Supply System Intergovernmental Agreement (Agreement) between Tualatin Valley Water District (TVWD), the City of Hillsboro (Hillsboro), and the City of Beaverton (Beaverton) (collectively, Members) created the WWSS Commission, an ORS Chapter 190 intergovernmental entity, effective July 1, 2019, to exercise the powers and duties set forth in the Agreement; and,

WHEREAS, the WWSS Commission anticipates that Exhibit 1 of the IGA will require a prompt amendment for any major changes and that minor changes will be reflected in an overall amendment after the WWSS is constructed and placed in service, and,

WHEREAS, the WWSS Members desire to modify the Reservoir Capacity Allocations for the WWSS as agreed upon in a separate Memorandum of Understanding for WWSS Reservoir RES 1.0 Storage Reallocation, and,

WHEREAS, the WWSS Commission finds that amendment by resolution to the Exhibit 1, Section 4.5 and Section 5, to modify the Reservoir Capacity for the WWSS is necessary and being so advised,

NOW, THEREFORE, BE IT RESOLVED BY THE WILLAMETTE WATER SUPPLY SYSTEM COMMISSION THAT:

Section 1: The above recitals shall form an integral part of this resolution and shall have the same force and effect as if fully stated herein.

Section 2: Exhibit 1, Section 4.5 and Section 5, of the WWSS IGA, attached hereto as Exhibit A and Exhibit B and incorporated by reference, are hereby adopted.

Section 3: The Managing Agency is directed to remove the current Exhibit 1, Section 4.5 and Section 5, from the WWSS IGA and replace it with the attached Exhibit A and Exhibit B. The Managing Agency shall provide a copy of this executed resolution to the Members.

Approved and adopted at a regular meeting held on the 4th day of June 2020.

James Duggan, Chair

Denny Doyle, Vice Chair

Exhibit A:

4.5 Reservoirs (Revised June 2020)

The WWSS included two 15-MG prestressed concrete reservoirs (tanks). No Party has an allocation of any specific quantity of water in the reservoir capacity. All stored water is held as an undivided interest to enable WWSS operations for the mutual benefit of all. Ownership and cost shares will be calculated per the following table:

Partner	Total Reservoir Capacity Owned (MG)	Percent of Total Reservoir Capacity Owned (MG)
TVWD	16.47	54.90%
Hillsboro	12.14	40.47%
Beaverton	1.39	4.63%
Totals	30.00	100.00

Exhibit B:

5. Ownership Allocation Summary

ELEMENT	TVWD		Hillsboro		Beaverton	
	Capacity (MGD)	Ownership (%)	Capacity (MGD)	Ownership (%)	Capacity (MGD)	Ownership (%)
Reservoirs						
Capacity Owned Outright	0.0	--	0.0	--	0.0	--
Shared Capacity Owned	16.5	--	12.1	--	1.4	--
Total	16.5	54.90%	12.1	40.47%	1.4	4.63%

Willamette Water Supply System Commission

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Exhibit A:

4.5 Reservoirs (Revised June 2020)

The WWSS included two 15-MG prestressed concrete reservoirs (tanks). No Party has an allocation of any specific quantity of water in the reservoir capacity. All stored water is held as an undivided interest to enable WWSS operations for the mutual benefit of all. Ownership and cost shares will be calculated per the following table:

Partner	Total Reservoir Capacity Owned (MG)	Percent of Total Reservoir Capacity Owned (MG)
TVWD	16.47	54.90%
Hillsboro	12.14	40.47%
Beaverton	1.39	4.63%
Totals	30.00	100.00

Willamette Water Supply System Commission

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Exhibit B:

5. Ownership Allocation Summary

ELEMENT	TVWD		Hillsboro		Beaverton	
	Capacity (MGD)	Ownership (%)	Capacity (MGD)	Ownership (%)	Capacity (MGD)	Ownership (%)
Reservoirs						
Capacity Owned Outright	0.0	--	0.0	--	0.0	--
Shared Capacity Owned	16.5	--	12.1	--	1.4	--
Total	16.5	54.90%	12.1	40.47%	1.4	4.63%

Willamette Water Supply System Commission

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STAFF REPORT

To: Board of Commissioners

From: Dave Kraska, P.E., Willamette Water Supply System General Manager

Date: June 4, 2020

Subject: Recommend Approval of Stantec Consulting Services Inc. (Stantec) Annual Work Plan (AWP) for Program and Construction Management Support Services for Fiscal Year 2021; WWSP Agreement No. WWSP-0715

Requested Board Action:

Consider approving an Annual Work Plan for Stantec Consulting Services Inc. to provide Program and Construction Management Support Services during Fiscal Year 2021.

Key Concepts:

- Implementation of the Willamette Water Supply Program (WWSP) requires substantial assistance from a consultant with expertise and personnel to provide program and construction management support services.
- The proposed AWP identifies Stantec's planned services, planned staffing, estimated fees, and key assumptions for delivery of program and construction management support services for the WWSP for Fiscal Year 2021 (FY2021).
- This AWP corresponds to the planned WWSP activities and milestones in proposed Baseline 5.2 and fulfills the requirements and intent of WWSP Agreement No. WWSP-0715.
- The proposed FY2021 AWP authorization request is \$12,883,082, which is consistent with the forecasted plan in proposed Baseline 5.2.

Background:

Stantec¹ was selected, through a competitive process that included qualifications, approach, and cost, to provide the WWSP with program management support services. The program management support services contract was approved and awarded in July 2015. Stantec was also selected, through a separate competitive process that included qualifications, approach, and cost, to provide the WWSP with construction management support services. The construction management support services were added to the program management support services contract via an amendment approved and awarded in October 2017. The program and construction management support services contract has a total term of 11.5 years (ending December 31, 2026). The contract establishes a comprehensive scope of services to support the WWSP over the term of the contract. Planned services, planned staffing, estimated fees, and key assumptions for delivery of program and construction management support services are defined and authorized on a fiscal year basis through an AWP.

¹ Stantec Consulting Services Inc. purchased MWH Americas, Inc., which was the initially contracted firm. The assignment of WWSP Agreement No. WWSP-0715 from MWH Americas, Inc. to Stantec was recognized via a contract amendment in October 2017.

Recommend Approval of Program and Construction Management Services Fiscal Year 2021 AWP

The annual WWSP baseline budget and schedule update process forecasts WWSP costs through the life of the program. Planned program and construction management support services correspond to the activities and milestones identified in the WWSP Master Program Schedule and Budget Baseline. Program and construction management support needs may change as the WWSP progresses and new information becomes available. The FY2021 Program and Construction Management AWP is based on the proposed Baseline 5.2 and includes services for each of the following work categories:

1. General Program Management
2. Risk Management
3. Procurement and Contract Administration
4. Program Controls and Documentation
5. Design and Construction Management (including Safety)
6. Facility Testing and Commissioning
7. Permitting Support
8. Public Outreach and Public Affairs Support
9. Project and Construction Management

WWSP projects (or work packages) with substantial anticipated activities for the period of the FY2021 AWP are as listed in the table below.

Projects in Design	Projects in Construction
PLM_1.3 (complete design)	PLM_1.1 (complete construction)
PLM_4.1 (complete design)	PLM_1.2 (complete construction with Wilsonville)
PLM_4.2 (complete design)	PLM_1.3 (procure construction contractor)
PLM_4.3 (complete design)	PLM_4.1 (procure construction contractor with Washington Co.; begin and progress construction)
PLM_4.4 (complete design)	PLM_4.2 (procure construction contractor with Washington Co.; begin and progress construction)
PLM_5.3 (complete design)	PLM_4.3 (procure construction contractor)
PLW_1.2 (planned design suspension period)	PLM_4.4 (procure construction contractor with Washington Co.; begin and progress construction)
PLW_2.0 (complete design)	PLM_5.1 (progress construction with Washington County)
RES_1.0 (complete design)	PLM_5.2 (complete construction)
MPE_1.0 (complete design)	PLM_5.3 (prepare to procure construction contractor)
WTP_1.0 (continue design, including CM/GC participation)	PLW_1.3 (progress construction)
	PLW_2.0 (procure construction contractor; begin and progress construction)
	MPE_1.0 (procure construction contractor; begin and progress construction)
	RWF_1.0 (progress phase I construction)
	RES_1.0 (prepare to procure construction contractor)

1. WTP_1.0 includes FPS_1.0 and DCS_1.0 for purposes of the AWP.
2. MPE_1.0 includes COB_1.0 for the purposes of the AWP.
3. PLW_2.0 includes COH_1.0 for the purposes of the AWP.

Recommend Approval of Program and Construction Management Services Fiscal Year 2021 AWP

Budget Impact:

The proposed FY2021 AWP would authorize fees up to \$12,883,082 during FY2021. This amount is reflected in WWSP Baseline 5.2, which is subject to Board approval contemporaneously with the subject AWP.

Staff Contact Information:

David Kraska, PE; Willamette Water Supply Program Director; 503-941-4561; david.kraska@twwd.org

Attachments:

Exhibit 1: Program and Construction Management Services Fiscal Year 2020-2021 AWP

Willamette Water Supply System Commission

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DATE: December 23, 2019 (initial draft)
May 06, 2020 (second submittal)
[Effective July 1, 2020]

TO: David Kraska, WWSP Program Director

FROM: William Van Derveer, WWSP Program Manager

SUBJECT: Annual Work Plan – Fiscal Year 2020-2021 (July 1, 2020 through June 30, 2021),
Willamette Water Supply Program, Agreement No. WWSP-0715 (as amended)

INTRODUCTION

This Annual Work Plan (AWP) identifies Stantec’s planned services, planned staffing, estimated fees, and key assumptions for delivery of program and construction management support services for the Willamette Water Supply Program (WWSP) for Fiscal Year 2020-2021, which extends from July 1, 2020 through June 30, 2021. This AWP fulfills the requirements and intent of the subject Agreement.

PLANNED SERVICES

Program and construction management services planned for this AWP period are identified in Table 1. We recognize that due to the complex nature and long duration of the WWSP, program and construction management support needs may change as the program progresses and new information becomes available. The planned services represent our understanding of current WWSP needs for the AWP period.

PLANNED STAFFING

Planned staffing to provide the planned services for this AWP are identified in Table 2.1-2.3. These tables include the name, role, and planned labor hours by major program task for personnel identified for the planned services. In instances where a specific individual has not yet been identified, a role and planned labor hours are identified. Specific personnel to support the WWSP shall be identified in writing and authorized by the WWSP Program Director in accordance with Article 1.1.5 of the Agreement. The personnel and labor hours within this AWP represent our understanding of the strategic, technical, and administrative requirements for delivering the planned services. Actual requirements will vary and Stantec will adjust the staffing and distribution of labor hours within this AWP accordingly to maintain progress toward delivery of the WWSP.

ESTIMATED FEES

Estimated fees for providing the planned services using the planned staffing within this AWP are identified in Table 3.1-3.3. These tables include planned personnel; hourly pay rate, PMO, part-time support, or field billing rate factor (as appropriate); planned labor hours; and estimated fees. In instances where specific personnel have not yet been identified, an assumed hourly pay rate is included. The table also includes estimated reimbursable expenses associated with the planned services and planned personnel. Material changes to the planning represented by this AWP may result in changes to the estimated fees. Such changes would be managed in accordance with Article 5 of the Agreement.

KEY ASSUMPTIONS

This AWP is based on a number of assumptions about WWSP delivery needs during Fiscal Year 2020-2021. The following key assumptions apply to this AWP:

- Planned program and construction management services for this AWP correspond to the activities and milestones identified in the WWSP Master Program Schedule and Budget Baseline including approved changes through March 2020 (summary attached).
- WWSP projects (or work packages) with substantial anticipated activities for the period of this AWP are as listed in the table below.

Projects in Design	Projects in Construction
PLM_1.3 (complete design) PLM_4.1 (complete design) PLM_4.2 (complete design) PLM_4.3 (complete design) PLM_4.4 (complete design) PLM_5.3 (complete design) PLW_1.2 (planned design suspension period) PLW_2.0 (complete design) RES_1.0 (complete design) MPE_1.0 (complete design) WTP_1.0 (continue design, including CM/GC participation)	PLM_1.1 (complete construction) PLM_1.2 (complete construction with Wilsonville) PLM_1.3 (procure construction contractor) PLM_4.1 (procure construction contractor with Washington Co.; begin and progress construction) PLM_4.2 (procure construction contractor with Washington Co.; begin and progress construction) PLM_4.3 (procure construction contractor) PLM_4.4 (procure construction contractor with Washington Co.; begin and progress construction) PLM_5.1 (progress construction with Washington County) PLM_5.2 (complete construction) PLM_5.3 (prepare to procure construction contractor) PLW_1.3 (progress construction) PLW_2.0 (procure construction contractor; begin and progress construction) MPE_1.0 (procure construction contractor; begin and progress construction) RWF_1.0 (progress phase I construction) RES_1.0 (prepare to procure construction contractor)

1. WTP_1.0 includes FPS_1.0 and DCS_1.0 for purposes of the AWP.
2. MPE_1.0 includes COB_1.0 for the purposes of the AWP.
3. PLW_2.0 includes COH_1.0 for the purposes of the AWP.

- Labor hours, assumed direct labor rates, and assumed budgets for unnamed technical experts and specialists are carried within the “Design Management” and the “Construction Management, Construction Inspection, & Safety/Security” tasks but may be used to meet identified resource needs within any task.

- The resources and associated level of effort/estimates shown for each task may vary if the scope or timing is modified or if the level of resourcing from the Participants' organizations is modified.
- At the direction of the Program Director, Stantec can assist the Participants with other activities/projects within the overall Statement of Work as required, should that assistance be within the budgetary limits of this AWP or an approved amendment.
- It is anticipated some work and priorities will change over the course of this AWP period. Stantec will only perform supplemental services as authorized in writing by the Program Director. Stantec will not begin any supplemental service until the Program Director has reviewed the services, proposed resources/level of effort, and estimated cost and has authorized Stantec to proceed.

APPROVAL

The WWSP Participants approve this AWP.

David Kraska, P.E.
Program Director

Date

Willamette Water Supply System Commission

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Table 1. Planned Program Management Support Services – Fiscal Year 2020-2021 (July 1, 2020 through June 30, 2021).

Task No. ¹	Task Name	Primary WWSP Projects/Initiatives ²	Planned Services	Key Resources ³
1.2	General Program Management	<ul style="list-style-type: none"> Overall management of WWSP Delivery and resourcing in accordance with the Fiscal Year 2020-2021 Master Program Schedule and Budget Baseline Participation in WWSS Board, Management Committee, Management Team, Public Affairs, other progress and coordination meetings 	<ul style="list-style-type: none"> Support Participants’ management of WWSP implementation as directed by the Program Director Coordinate execution of the Program Management Plan (PgMP) and delivery of WWSP in alignment with the Fiscal Year 2020-2021 Master Program Schedule and Budget Baseline Revise Delivery Strategy as necessary following the change management program Participate in ongoing leadership and management meetings Conduct regular program review meetings and monthly progress meetings with Program Director Manage program resources and provide necessary technical, management, and support resources to meet the goals and objectives of the WWSP; acquire/relocate resources as approved by Program Director Coordinate with Participants’ public outreach/affairs staff and consultants to support the outreach program Participate in Participants' leadership, Board, City Council, and Utilities Commission meetings as requested Communicate and work with internal and external stakeholders in coordination with the WWSP Permitting and Outreach Manager Work with Participants’ legal counsel, Program Director, and other key staff to support completion and implementation of various intergovernmental agreements for projects as requested Maintain monthly reporting with correlating metrics for comparison and validation Prepare semi-annual Business Utilization economic benefits reports Review the PgMP and prepare an annual update to PgMP sections as needed 	<p>Bill Van Derveer Virginia Anderson Kristina Tubbert Elnaz Adeh Jeremy Taylor</p> <p>TBD Technical Experts and Specialists (as needed)</p>
1.3	Internal/Participants Governance Process	Included in 1.2 General Program Management and 2.3 Public Outreach and Public Affairs Support	N/A	N/A
1.4	Risk Management	<ul style="list-style-type: none"> Overall Program Active design and construction projects <p>[Estimated costs for implementing this task are included in other tasks (e.g., 1.2 Program Management and 1.5 Program Controls)]</p>	<ul style="list-style-type: none"> Execute, and identify updates and improvements where needed, Risk and Value Management Plan Participate in executing the Program Risk Management Plan Maintain separate risk registers for individual projects (Project-level) and for the Program as a whole (Program-level) Apply qualitative and quantitative methods for identification and analysis of program and project risks in terms of cost and schedule Develop program and project risk responses and mitigation strategies Use risk management process to evaluate Program and project contingencies Analyze potential or actual construction claims as needed Prepare quarterly risk management information for the Program Director and Management Committee Conduct project risk reviews as indicated in the Project Delivery System Support evaluations of opportunity projects 	<p>Elnaz Adeh</p> <p>TBD Technical Experts & Specialists (as needed)</p> <p>TVWD will provide an Asst. Program Director to support this task</p>

Task No. ¹	Task Name	Primary WWSP Projects/Initiatives ²	Planned Services	Key Resources ³
1.6	Procurement and Contract Administration	<ul style="list-style-type: none"> • PLM_1.3 construction • PLM_4.1 construction (via Washington Co.) • PLM_4.2 construction (via Washington Co.) • PLM_4.3 construction • PLM_4.4 construction (via Washington Co.) • PLM_5.3 construction • PLW_2.0 construction • MPE_1.0 construction • RES_1.0 construction • Incidental program support services as needed • Construction testing services as needed • Amendments, changes, and close-out for existing contracts/ agreements 	<ul style="list-style-type: none"> • Implement the Procurement and Contract Administration Management Plan • Participate in executing the Construction Management Plan, Value and Risk Management Plan, the Quality Management Plan, Water Infrastructure Finance and Innovation Act (WIFIA) Compliance Plan • and the change management process • Provide strategic advice and tactical support for Program procurements • Maintain and update construction contract templates for conventional design-bid-build and Construction Manager/General Contractor • Coordinate with other Program functions to address procurement needs 	<p>Kelly Vorenkamp</p> <p>TBD Technical Experts and Specialists (as needed)</p>
1.8	Quality Assurance	<ul style="list-style-type: none"> • Overall Program • Design of PLM_1.3, PLM_4.1, PLM_4.2, PLM_4.3, PLM_4.4, PLM_5.3, PLW_1.2, PLW_2.0, RES_1.0, MPE_1.0, & WTP_1.0 • Construction of PLM_1.1, PLM_1.2, PLM_1.3, PLM_4.1, PLM_4.2, PLM_4.3, PLM_4.4, PLM_5.1, PLM_5.2, PLM_5.3, PLW_1.3, PLW_2.0, MPE_1.0, RWF_1.0, & RES_1.0 • Permitting and environmental services contract <p>[Estimated costs for implementing this task are included in other tasks (e.g., 2.1 Permitting Support, 1.10 Design Management, and 1.11 Construction Management)]</p>	<ul style="list-style-type: none"> • Execute the Quality Management Plan (QMP) and identify updates and improvements where needed • Establish and implement an annual schedule for reviewing compliance with WWSP QMP • Review quality plans submitted by current consultants and construction contractors, and establish and implement a schedule for reviewing compliance with those plans • Include quality requirements in procurement documents (refer to 1.6 Procurement and Contract Administration) • Plan and participate in factory witness inspection for pipe fabrication as needed • Provide administrative/technical writing or graphics staff as needed • Provide on-going quality management guidance to PMO personnel 	<p>Scott Gibson (Program & Design)</p> <p>Andre Tolme (Construction)</p> <p>TBD Technical Specialists (as needed)</p>

Task No. ¹	Task Name	Primary WWSP Projects/Initiatives ²	Planned Services	Key Resources ³
1.5, 1.9	Program Controls and Document Management	<ul style="list-style-type: none"> Overall Program Active contracts/agreements Design of PLM_1.3, PLM_4.1, PLM_4.2, PLM_4.3, PLM_4.4, PLM_5.3, PLW_1.2, PLW_2.0, RES_1.0, MPE_1.0, & WTP_1.0 Construction of PLM_1.1, PLM_1.2, PLM_1.3, PLM_4.1, PLM_4.2, PLM_4.3, PLM_4.4, PLM_5.1, PLM_5.2, PLM_5.3, PLW_1.3, PLW_2.0, MPE_1.0, RWF_1.0, & RES_1.0 	<ul style="list-style-type: none"> Execute, and identify updates and improvements where needed, Program Controls and Document Management Plan and WIFIA Compliance Plan Maintain document management systems and procedures Manage financial and cost reporting systems and procedures Maintain a Master Program Schedule and Budget Baseline, including monthly updates and incorporation of approved changes Prepare an annual reforecast of the Master Program Schedule and Budget Baseline Submit draft budget information for fiscal year 2021-2022 (a 90%± accuracy budget recommendation is due 12/31/20 and a final budget recommendation is due 02/07/21) Review and validate Stantec's Fiscal Year 2021-2022 Annual Work Plan (in late May or early June 2021) with the Program Director to confirm that assumptions about Program needs made in January 2021 remain valid for the upcoming fiscal year Perform analyses of consultant and construction contractor schedule submittals to verify alignment with contractual obligations and identify risks and inconsistency with Program objectives Manage and support the change management process, including participating in Change Committee meetings and maintaining records of potential and actual changes Produce standard controls reports for Management Committee, Program Director, and project teams and ad hoc reports as requested Provide on-going support for systems, tools, and procedures including e-Builder maintenance, modifications, and enhancement requests Support extension of e-Builder to partner project owners as applicable Support development and implementation of processes to comply with conditions of the Participants' WIFIA loans Support other Program functions as required in document, cost, and reporting needs Manage invoicing process 	<p>Jeremy Taylor Rich Edwards Dan Peterson Ellen Peterman</p> <p>TBD Technical Experts and Specialists (as needed)</p> <p>TVWD will provide a full-time document control specialist to support this task</p>
1.10	Design Management	<ul style="list-style-type: none"> Design of PLM_1.3, PLM_4.1, PLM_4.2, PLM_4.3, PLM_4.4, PLM_5.3, PLW_1.2, PLW_2.0, RES_1.0, MPE_1.0, & WTP_1.0 Construction of PLM_1.1, PLM_1.2, PLM_1.3, PLM_4.1, PLM_4.2, PLM_4.3, PLM_4.4, PLM_5.1, PLM_5.2, PLM_5.3, PLW_1.3, PLW_2.0, MPE_1.0, RWF_1.0, & RES_1.0 	<ul style="list-style-type: none"> Execute, and identify updates and improvements where needed, Design Management Plan Participate in executing the Construction Management Plan, Value and Risk Management Plan, the Quality Management Plan, WIFIA Compliance Plan, and the change management process Manage the scope, schedule, and budget for on-going projects Organize and perform technical reviews of design-related deliverables Coordinate design progress for listed design projects Support construction management, including submittals review and change management, for listed construction projects Develop and implement project-specific interim operational plans as projects are completed Maintain and revise Program Pipeline Design Guide as necessary (incorporate Program seismic standards) Support the development of front-end specification modifications with Washington County (and other potential partner projects) as applicable Support the development or amendment of construction IGAs with Washington County (and other potential project partners) as applicable Maintain and update (monthly) a Design Status Summary that describes the status of design for each component of the project Evaluate opportunity projects and prepare Business Case Analyses for emergent opportunity projects Support implementation of a strategy to secure real estate for the pipeline corridor Provide Geographical Information System and Computer-Aided Drawing support as needed (assumes Participants will typically provide GIS services) Support coordination with BPA, PGE, NW Natural, and other utility stakeholders Manage system-wide planning of operations from interim to commissioning to on-going operations, and review compatibility of design to support each operational phase (this task is in conjunction with Task 1.13 Facility Testing and Commissioning) 	<p>Scott Gibson Matthew Gribbins Russ Snow Jude Grounds Corianne Hart Brendan Robless Elena Thomsen Jenn Minton Eric Ward Tammy Cleys Faride Abzade Erica Murphy Elnaz Adeh</p> <p>TBD Technical Experts and Specialists (as needed)</p> <p>TVWD will provide a full-time Geographic Information Systems analyst.</p>

Task No. ¹	Task Name	Primary WWSP Projects/Initiatives ²	Planned Services	Key Resources ³
1.7, 1.11, 1.12	Construction Management, Construction Inspection, & Safety/Security	<ul style="list-style-type: none"> • Construction (via WWSP contractor) of PLM_1.1, PLM_1.3, PLM_5.2, PLW_1.3 PLW_2.0, MPE_1.0, & RWF_1.0 • Construction (via Washington Co. contractor) of PLM_4.1, PLM_4.2, PLM_4.4, & PLM_5.1 • Construction (via Wilsonville) PLM_1.2 • WWSP health and safety program • WTP_1.0 CM/GC contractor design review 	<ul style="list-style-type: none"> • Provide program-level and field services listed construction projects to: <ul style="list-style-type: none"> ○ Execute, and identify updates and improvements where needed, to the Construction Management Plan ○ Provide construction management, inspection and oversight of materials testing ○ Participate in executing and updating other Program plans including the Design Management Plan, Value and Risk Management Plan, Quality Management Plan, Public Outreach and Stakeholder Engagement Plan, Permitting Management Plan, and Program Controls Plan ○ Execute Project Execution Plans ○ Administer construction contracts in coordination with City of Wilsonville and Washington County as appropriate ○ Coordinate construction management resources, including Participants’ Construction Inspector and third-party testing/surveying contractors ○ Attend design and construction meetings (as required) ○ Manage construction project documentation including RFIs, Submittals, Work Change Directives, Design Clarifications, Daily Reports, photographs, and other construction-related correspondence ○ Support procurement of required services during construction ○ Administer construction change management process during construction ○ Review contractor pay applications, coordinate resolution of issues, and recommend payment ○ Estimate cost of potential construction changes as needed ○ Maintain a working set of “record” drawings during construction ○ Conduct quantity tracking for selected progress indicators (e.g., length of pipeline installed) during construction ○ Manage potential/actual contractor claims • Support WWSP & Washington County contractor procurements • Manage WWSP Health and Safety program in accordance with WWSP Health and Safety Plan • Coordinate and assist with preparation of WWSP-related safety reports, including OSHA required reporting • Support the development of front-end specification modifications with Washington County (and other potential partner projects) as applicable • Support the development or amendment of construction IGAs with Washington County (and other potential project partners) as applicable • Coordinate with other Program functions (e.g., Design and Permitting) as required • Prepare or review Opinions of Probable Construction Cost • Participate in opportunity project evaluations • Participate in Program and construction reporting and make recommendations to incorporate additional reporting or delete reporting as projects progress • Review design deliverables for constructability 	<p>Andre Tolme Chad Carlson Construction Managers, Field Inspectors, and Construction Management Specialists as identified in the tables below.</p> <p>TBD Technical Experts and Specialists (as needed)</p> <p>City of Hillsboro will provide a full-time construction inspector to support these tasks</p> <p>TVWD will provide a part-time safety and security supervisor to support this task</p>

Task No. ¹	Task Name	Primary WWSP Projects/Initiatives ²	Planned Services	Key Resources ³
1.13	Facility Testing and Commissioning	<ul style="list-style-type: none"> Overall Program Active design and construction projects Water supply integration planning & operations planning <p>[Estimated hours/cost for other resources such as Design Managers, Project Managers, and permitting staff, are included in the primary tasks for those resources.]</p>	<ul style="list-style-type: none"> Review design deliverables for specified testing and training requirements and equipment selection Participate in the development and implementation of project-specific interim operational plans as projects are completed Participate in operational planning and development Implement a warranty management plan Manage development of System-wide testing, start-up, commissioning, and operations plan (this plan will be developed by the WTP CM\GC and progressively elaborated over multiple years) Manage commissioning and start-up planning and implementation schedule Support refinement and application of a strategy for managing water within WWSS assets prior to placement in service Support Construction Management with review of submittal, RFIs, and design clarifications as appropriate Support water supply integration planning 	<p>Tim Tekippe Erika Murphy</p> <p>TBD Technical Experts and Specialists (as needed)</p> <p>TVWD and City of Hillsboro will provide operations personnel to support this task</p>
2.1	Permitting Support	<ul style="list-style-type: none"> Overall Program Design of PLM_1.3, PLM_4.1, PLM_4.2, PLM_4.3, PLM_4.4, PLM_5.3, PLW_1.2, PLW_2.0, RES_1.0, MPE_1.0, & WTP_1.0 Construction of PLM_1.1, PLM_1.2, PLM_1.3, PLM_4.1, PLM_4.2, PLM_4.3, PLM_4.4, PLM_5.1, PLM_5.2, PLM_5.3, PLW_1.3, PLW_2.0, MPE_1.0, RWF_1.0, & RES_1.0 	<ul style="list-style-type: none"> Execute the Permitting Management Plan and identify updates and improvements where needed Provide strategic advice and tactical support to implement the Participants' Permitting Strategy as required Coordinate and support management of permitting support contract(s) Track and report permitting, including land use, status in coordination with the Participants' permitting consultant Provide technical support and preparation for workshops (typically led by Participants' permitting consultant) with the regulatory agencies Facilitate the delivery of design and construction information to support permit (including land use) applications, supplements, amendments, and reports to be developed by the Participants' permitting consultant Support acquisition of permits required to advance design work (e.g., geotechnical exploration) Coordinate with design team and Participants' permitting consultant to reflect permitting (including land use) requirements in design deliverables Incorporate environmental/cultural best management practices, as selected for use by WWSP and from 404 permit, into Program Pipeline Design Guide Coordinate with design and cost-estimating staff to verify regulatory and land use agency requests and proposed commitments align with other WWSP goals Assist Construction Management and Participants' permitting consultant with addressing any permitting or compliance issues with listed construction projects Maintain a Program Formulation Summary document (as defined in the Permitting Management Plan) Incorporate permitting-related budget and schedule information (developed by Participants' permitting consultant) into Program budget and schedule, including coordination with design and construction work In coordination with the Participants' permitting consultant, maintain a permit (including land use) tracking database, with correlation to Master Program Schedule Serve as permitting liaison to the Program real estate team 	<p>Jill Chomycia Meredith Jordan</p> <p>TBD Technical Experts and Specialists (as needed)</p> <p>TVWD will provide a full-time permitting and outreach manager to support this task</p>

Task No. ¹	Task Name	Primary WWSP Projects/Initiatives ²	Planned Services	Key Resources ³
2.2	Land and Right-of-Way Acquisition Support	<ul style="list-style-type: none"> Overall Program Design of PLM_1.3, PLM_4.1, PLM_4.2, PLM_4.3, PLM_4.4, PLM_5.3, PLW_1.2, PLW_2.0, RES_1.0, MPE_1.0, & WTP_1.0 Construction of PLM_1.1, PLM_1.2, PLM_1.3, PLM_4.1, PLM_4.2, PLM_4.3, PLM_4.4, PLM_5.1, PLM_5.2, PLM_5.3, PLW_1.3, PLW_2.0, MPE_1.0, RWF_1.0, & RES_1.0 <p>[Estimated costs for implementing this task are included in other tasks (e.g., 2.3 Public Outreach and Public Affairs Support (Marciniak); 1.5/1.9 Program Controls and Document Management (Peterson))]</p>	<ul style="list-style-type: none"> Support Participants' execution of the Real Estate Plan and identify updates and improvements where needed Assist Participants and Participants' real estate consultant in the resolution of issues affecting acquisition of land, rights-of-way (ROWs) and easements Support Participants' real estate consultant's maintenance of a database to track rights-of-entry (ROEs), appraisals, and property/easement acquisitions Assist Participants and Participants' real estate consultant with preparation of ROW documents and review of title reports, encumbrances, and findings from environmental site assessments to determine effects on the properties Assist with quality assurance reviews of ROW plans and easement descriptions prepared by design consultants Assist Participants to meet with property owners to apprise them of the project, provide project status, and work with Participants and Participants' real estate consultant to acquire easements 	<p>David Marciniak (property-owner contacts support) Dan Peterson (data support)</p> <p>TBD Technical Experts and Specialists (as needed)</p> <p>TVWD will provide a full-time project coordinator to support this task</p>
2.3	Public Outreach and Public Affairs Support	<ul style="list-style-type: none"> Overall Program Design of PLM_1.3, PLM_4.1, PLM_4.2, PLM_4.3, PLM_4.4, PLM_5.3, PLW_1.2, PLW_2.0, RES_1.0, MPE_1.0, & WTP_1.0 Construction of PLM_1.1, PLM_1.2, PLM_1.3, PLM_4.1, PLM_4.2, PLM_4.3, PLM_4.4, PLM_5.1, PLM_5.2, PLM_5.3, PLW_1.3, PLW_2.0, MPE_1.0, RWF_1.0, & RES_1.0 	<ul style="list-style-type: none"> Execute and identify updates and improvements where needed, Public Outreach and Stakeholder Engagement Plan and Local and Regional Business Utilization Plan Support Participants' staff as needed in its public outreach and public affairs activities Facilitate an ongoing stakeholder identification process and development and implementation of outreach strategies and timing Support development and implementation of property owner engagement strategies Prepare semi-annual local and regional business involvement reports and, as requested, prepare information to support public communications Coordinate with other functions within the Program (e.g., Real Estate) Consult on media relations and issues management Support construction management personnel 	<p>David Marciniak</p> <p>TBD Technical Experts and Specialists (as needed)</p> <p>TVWD will provide a full-time communications supervisor to support this task</p>

¹ – Task numbers correspond to numbered sections within Exhibit A Statement of Work, Article II and Article III of the Agreement. Task No. 1.1 in the Statement of Work is Mobilization and is not included herein.

² – Primary WWSP Projects/Initiatives represent the anticipated focus for the period covered by this AWP. Project codes (e.g., PLM_4.1) correspond to naming conventions used in the Master Program Schedule and Budget Baseline.

³ – Lead resources are in BOLD, other Key Resources associated with a given task are in support roles and are also leading or supporting other tasks. Refer to Table 2 for planned level of effort by resource.

Table 2.1. Planned Program Management Support Staffing Hours Summary – Fiscal Year 2020-2021 (July 1, 2020 through June 30, 2021).

Name	Role	Current Billing Rate ¹	Current Factor	Total
Aldridge Lim	Construction Management Specialist		2.65	1,991
Andre Tolme	Program Construction Manager		2.65	1,991
Bill Van Derveer	Program Manager		2.65	1,991
Brendan Robless	Project Manager		2.65	1,991
Corianne Burnett	Project Manager		2.65	1,991
Dan Peterson	Controls Specialist		2.65	1,991
David Marciniak	Public Affairs/Outreach		2.65	1,991
Elena Thomsen	Staff Professional		2.65	1,991
Ellen Peterman	Controls Specialist (WIFIA)		2.65	1,991
Elnaz Adeh	Special Projects Manager		2.65	1,991
Eric Ward	Project Manager		2.65	1,519
Erika Murphy	Project Manager		2.65	1,991
Faride Abzade	Staff Professional		2.65	1,991
Jennifer Minton	Project Manager		2.65	1,991
Jeremy Taylor	Controls Manager		2.65	1,991
Jill Chomycia	Permitting Coordinator		2.65	1,991
Kelly Vorenkamp	Purchasing Agent/Contracts Coordinator		2.65	1,991
Kristina McLean	Construction Management Specialist		2.65	1,991
Kristina Tubbert	Receptionist		2.65	1,991
Matthew Gribbins	Project Manager		2.65	1,991
Meredith Jordan	Permitting Specialist		2.65	1,991
Rich Edwards	Scheduler		2.65	1,991
Scott Gibson	Design Manager		2.65	1,991
Tammy Cleys	Project Manager		2.65	1,991
TBD Construction Management Specialist 3	Construction Management Specialist		2.65	739
Chad Carlson	Safety		2.65	1,991
TBD Sr. Cost Estimator	Sr. Cost Estimator		2.65	988
Virginia Anderson	Administrative Assistant		2.65	1,991
Charlie Williamson	Field Inspector		2.51	2,410
Gabriel Jalbert	Construction Manager		2.51	828
John Nielsen	Construction Manager		2.51	1,991
Marc Krekos	Field Inspector		2.51	2,340
Rod Warner	Construction Manager		2.51	1,991
Steve Clapper	Field Inspector		2.51	2,392
TBD Field Inspector 5	TBD Field Inspector		2.51	2,410
TBD Field Inspector 6	TBD Field Inspector		2.51	607
Todd Tubbert	Construction Manager		2.51	1,991
Wes Silva	Construction Manager		2.51	745
Bill Hawkins	Project Delivery (SME)		2.82	210
Deborah Gonzales	Administrative Support		2.82	105
Design Review Support (Various)	Design Review Coordinators		2.82	105
Jason Rozgony	Sr. Cost Estimator		2.82	105
Jude Grounds	RWF/WTP Technical Advisor		2.82	210
Kelly Davenport	Technical Editor		2.82	210
Kieran Christie	Schedule Support		2.82	524
Mike Jesionowski	Sr. Cost Estimator		2.82	105
Mike Warriner	Constructability/Schedules		2.82	210
Russell Snow	Administrative Assistant		2.82	734
Sally Dale	Administrative Assistant		2.82	314
TBD Subject Matter Experts (Various)	Subject Matter Experts (SME)		2.82	996
TBD Technical Staff (Various)	Technical Resources		2.82	996
Tim Tekippe	Testing and Commissioning Lead		2.82	524
Grand Total				76,077

¹ _ Direct Labor Rates for TBD resources shall be submitted for approval on a case-by-case basis.

² _approximately 15% overtime budget for Field Inspectors

Table 2.2. Planned Program Management Support Staffing for System wide Tasks – Fiscal Year 2020-2021 (July 1, 2020 through June 30, 2021).

Name	Role	Current Billing Rate ¹	Current Factor	Program Management	Controls	WIFIA	Permitting	Procurement	Public Outreach	Design Management	SW Construction Management	Facilities Commissioning & Startup
				PROG_1.0	PROG_1.0	PROG_1.0	PROG_1.0	PROG_1.0	PROG_1.0	PROG_1.0	PROG_1.0	PROG_1.0
Aldridge Lim	Construction Management Specialist		2.65	-	-	-	-	-	-	-	-	-
Andre Tolme	Program Construction Manager		2.65	-	-	-	-	-	-	-	1,991	-
Bill Van Derveer	Program Manager		2.65	1,991	-	-	-	-	-	-	-	-
Brendan Robless	Project Manager		2.65	-	-	-	-	-	-	-	-	-
Corianne Burnett	Project Manager		2.65	-	-	-	-	-	-	-	-	-
Dan Peterson	Controls Specialist		2.65	-	1,991	-	-	-	-	-	-	-
David Marciniak	Public Affairs/Outreach		2.65	-	-	-	-	-	1,991	-	-	-
Elena Thomsen	Staff Professional		2.65	-	-	-	-	-	-	-	-	-
Ellen Peterman	Controls Specialist (WIFIA)		2.65	-	-	1,991	-	-	-	-	-	-
Elnaz Adeh	Special Projects Manager		2.65	1,991	-	-	-	-	-	-	-	-
Eric Ward	Project Manager		2.65	-	-	-	-	-	-	-	-	-
Erika Murphy	Project Manager		2.65	-	-	-	-	-	-	-	-	996
Faride Abzade	Staff Professional		2.65	-	-	-	-	-	-	-	-	314
Jennifer Minton	Project Manager		2.65	-	-	-	-	-	-	-	-	-
Jeremy Taylor	Controls Manager		2.65	-	1,991	-	-	-	-	-	-	-
Jill Chomycia	Permitting Coordinator		2.65	-	-	-	1,991	-	-	-	-	-
Kelly Vorenkamp	Purchasing Agent/Contracts Coordinator		2.65	-	-	-	-	1,991	-	-	-	-
Kristina McLean	Construction Management Specialist		2.65	-	-	-	-	-	-	-	-	-
Kristina Tubbert	Receptionist		2.65	1,991	-	-	-	-	-	-	-	-
Matthew Gribbins	Project Manager		2.65	-	-	-	-	-	-	-	-	-
Meredith Jordan	Permitting Specialist		2.65	-	-	-	1,991	-	-	-	-	-
Rich Edwards	Scheduler		2.65	-	1,991	-	-	-	-	-	-	-
Scott Gibson	Design Manager		2.65	-	-	-	-	-	-	1,991	-	-
Tammy Cleys	Project Manager		2.65	-	-	-	-	-	-	-	-	-
TBD Construction Management Specialist 3	Construction Management Specialist		2.65	-	-	-	-	-	-	-	-	-
Chad Carlson	Safety		2.65	-	-	-	-	-	-	-	1,991	-
TBD Sr. Cost Estimator	Sr. Cost Estimator		2.65	-	-	-	-	-	-	-	988	-
Virginia Anderson	Administrative Assistant		2.65	1,991	-	-	-	-	-	-	-	-
Bill Hawkins	Project Delivery (SME)		2.82	-	-	-	-	-	-	-	210	-
Deborah Gonzales	Administrative Support		2.82	105	-	-	-	-	-	-	-	-
Design Review Support (Various)	Design Review Coordinators		2.82	-	-	-	-	-	-	105	-	-
Jason Rozgony	Sr. Cost Estimator		2.82	-	-	-	-	-	-	-	105	-
Jude Grounds	RWF/WTP Technical Advisor		2.82	-	-	-	-	-	-	210	-	-
Kelly Davenport	Technical Editor		2.82	210	-	-	-	-	-	-	-	-
Kieran Christie	Schedule Support		2.82	-	524	-	-	-	-	-	-	-
Mike Jesionowski	Sr. Cost Estimator		2.82	-	-	-	-	-	-	-	105	-
Mike Warriner	Constructability/Schedules		2.82	-	-	-	-	-	-	-	210	-
Russell Snow	Administrative Assistant		2.82	-	-	-	-	-	-	734	-	-
Sally Dale	Administrative Assistant		2.82	314	-	-	-	-	-	-	-	-
TBD Subject Matter Experts (Various)	Subject Matter Experts (SME)		2.82	-	-	-	-	-	-	498	498	-
TBD Technical Staff (Various)	Technical Resources		2.82	-	-	-	-	-	-	498	498	-
Tim Tekippe	Testing and Commissioning Lead		2.82	-	-	-	-	-	-	-	-	524
Grand Total				8,594	6,498	1,991	3,982	1,991	1,991	4,035	6,595	1,834

¹ Direct Labor Rates for TBD resources shall be submitted for approval on a case-by-case basis.

² approximately 15% overtime budget for Field Inspectors

Table 2.3. Planned Program Management Support Staffing for Project Tasks – Fiscal Year 2020-2021 (July 1, 2020 through June 30, 2021).

Name	Role	Current Billing Rate ²	Current Factor	Project Management		Project Management		Project Management		Project Management		Project Management		Project Management		Construction Management		Construction Management		Construction Management		Construction Management		Construction Management	
				PLM_1.0	PLM_4.0	PLM_5.0	PLW_1.0	PLW_2.0	MPE_1.0	RES_1.0	RWF_1.0	WTP_1.0	DCS_1.0	PLM_1.1	PLM_1.2	PLM_4.1	PLM_4.2	PLM_4.4	PLM_5.1	PLM_5.2	PLW_1.3	MPE_1.0	RWF_1.0		
Aldridge Lim	Construction Management Specialist	2.65	-	-	-	-	-	-	-	-	-	-	-	-	-	218	-	-	-	-	-	620	-	-	1,153
Andre Tolme	Program Construction Manager	2.65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bill Van Derveer	Program Manager	2.65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Brendan Robless	Project Manager	2.65	-	996	-	-	-	-	996	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Corianne Burnett	Project Manager	2.65	-	-	-	-	996	-	-	-	-	-	681	314	-	-	-	-	-	-	-	-	-	-	-
Dan Peterson	Controls Specialist	2.65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
David Marciniak	Public Affairs/Outreach	2.65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Elena Thomsen	Staff Professional	2.65	-	996	-	-	-	-	996	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ellen Peterman	Controls Specialist (WIFIA)	2.65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Elnaz Adeh	Special Projects Manager	2.65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eric Ward	Project Manager	2.65	1,519	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Erika Murphy	Project Manager	2.65	-	-	-	-	-	996	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Faride Abzade	Staff Professional	2.65	-	-	838	-	-	-	838	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jennifer Minton	Project Manager	2.65	-	-	-	-	-	-	996	996	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jeremy Taylor	Controls Manager	2.65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jill Chomycia	Permitting Coordinator	2.65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kelly Vorenkamp	Purchasing Agent/Contracts Coordinator	2.65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kristina McLean	Construction Management Specialist	2.65	-	-	-	-	-	-	-	-	-	-	-	-	-	349	260	52	-	-	492	-	838	-	-
Kristina Tubbert	Receptionist	2.65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Matthew Gribbins	Project Manager	2.65	-	-	-	-	-	-	-	-	-	1,677	314	-	-	-	-	-	-	-	-	-	-	-	-
Meredith Jordan	Permitting Specialist	2.65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rich Edwards	Scheduler	2.65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Scott Gibson	Design Manager	2.65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tammy Cleys	Project Manager	2.65	-	-	1,991	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TBD Construction Management Specialist 3	Construction Management Specialist	2.65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	607	-
Chad Carlson	Safety	2.65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TBD Sr. Cost Estimator	Sr. Cost Estimator	2.65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Virginia Anderson	Administrative Assistant	2.65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Charlie Williamson	Field Inspector	2.51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,410
Gabriel Jalbert	Construction Manager	2.51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
John Nielsen	Construction Manager	2.51	-	-	-	-	-	-	-	-	-	-	-	-	-	745	260	46	132	808	-	-	-	-	-
Marc Krekos	Field Inspector	2.51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,522	-	-	819	-
Rod Warner	Construction Manager	2.51	-	-	-	-	-	-	-	-	-	-	-	-	-	218	-	-	-	-	-	-	-	-	1,773
Steve Clapper	Field Inspector	2.51	-	-	-	-	-	-	-	-	-	-	-	-	1,003	1,389	-	-	-	-	-	-	-	-	-
TBD Field Inspector 5	TBD Field Inspector	2.51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,410
TBD Field Inspector 6	TBD Field Inspector	2.51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	607	-	-
Todd Tubbert	Construction Manager	2.51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,991	-	-
Wes Silva	Construction Manager	2.51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	745	-
Grand Total				1,519	1,991	2,829	996	996	1,991	1,834	996	2,358	629	1,439	2,483	520	98	264	2,821	1,449	3,437	2,171		7,747	

¹ Direct Labor Rates for TBD resources shall be submitted for approval on a case-by-case basis.
² approximately 15% overtime budget for Field Inspectors

Table 3.1. Estimated Fees for Planned Program Management Support Summary – Fiscal Year 2020-2021 (July 1, 2020 through June 30, 2021).

Name	Role	Current Billing Rate ¹	Current Factor	Total
Aldridge Lim	Construction Management Specialist	2.65	\$	186,636
Andre Tolme	Program Construction Manager	2.65	\$	464,137
Bill Van Derveer	Program Manager	2.65	\$	651,670
Brendan Robless	Project Manager	2.65	\$	390,105
Corianne Burnett	Project Manager	2.65	\$	313,171
Dan Peterson	Controls Specialist	2.65	\$	160,728
David Marciniak	Public Affairs/Outreach	2.65	\$	301,298
Elena Thomsen	Staff Professional	2.65	\$	203,152
Ellen Peterman	Controls Specialist (WIFIA)	2.65	\$	209,273
Elnaz Adeh	Special Projects Manager	2.65	\$	289,848
Eric Ward	Project Manager	2.65	\$	275,773
Erika Murphy	Project Manager	2.65	\$	310,163
Faride Abzade	Staff Professional	2.65	\$	202,783
Jennifer Minton	Project Manager	2.65	\$	316,442
Jeremy Taylor	Controls Manager	2.65	\$	426,197
Jill Chomycia	Permitting Coordinator	2.65	\$	364,196
Kelly Vorenkamp	Purchasing Agent/Contracts Coordinator	2.65	\$	341,401
Kristina McLean	Construction Management Specialist	2.65	\$	243,366
Kristina Tubbert	Receptionist	2.65	\$	116,087
Matthew Gribbins	Project Manager	2.65	\$	487,671
Meredith Jordan	Permitting Specialist	2.65	\$	185,686
Rich Edwards	Scheduler	2.65	\$	338,446
Scott Gibson	Design Manager	2.65	\$	448,254
Tammy Cleys	Project Manager	2.65	\$	381,619
TBD Construction Management Specialist 3	Construction Management Specialist	2.65	\$	85,153
Chad Carlson	Safety	2.65	\$	342,457
TBD Sr. Cost Estimator	Sr. Cost Estimator	2.65	\$	166,621
Virginia Anderson	Administrative Assistant	2.65	\$	222,676
Charlie Williamson	Field Inspector	2.51	\$	344,402
Gabriel Jalbert	Construction Manager	2.51	\$	141,724
John Nielsen	Construction Manager	2.51	\$	310,658
Marc Krekos	Field Inspector	2.51	\$	343,300
Rod Warner	Construction Manager	2.51	\$	343,956
Steve Clapper	Field Inspector	2.51	\$	327,094
TBD Field Inspector 5	TBD Field Inspector	2.51	\$	344,402
TBD Field Inspector 6	TBD Field Inspector	2.51	\$	86,758
Todd Tubbert	Construction Manager	2.51	\$	342,657
Wes Silva	Construction Manager	2.51	\$	97,380
Bill Hawkins	Project Delivery (SME)	2.82	\$	59,787
Deborah Gonzales	Administrative Support	2.82	\$	13,287
Design Review Support (Various)	Design Review Coordinators	2.82	\$	10,150
Jason Rozgony	Sr. Cost Estimator	2.82	\$	25,783
Jude Grounds	RWF/WTP Technical Advisor	2.82	\$	50,513
Kelly Davenport	Technical Editor	2.82	\$	17,998
Kieran Christie	Schedule Support	2.82	\$	59,935
Mike Jesionowski	Sr. Cost Estimator	2.82	\$	22,570
Mike Warriner	Constructability/Schedules	2.82	\$	62,051
Russell Snow	Design Manager Pipelines and Reservoirs	2.82	\$	240,244
Sally Dale	Administrative Assistant	2.82	\$	21,722
TBD Subject Matter Experts (Various)	Subject Matter Experts (SME)	2.82	\$	238,645
TBD Technical Staff (Various)	Technical Resources	2.82	\$	126,342
Tim Tekippe	Testing and Commissioning Lead	2.82	\$	115,909
Other Direct Cost ³		\$ -	1.00	\$ 503,035
Estimated 2021 Annual Labor Rate Adjustment ⁴		\$ -	1.00	\$ 207,770
Grand Total				\$ 12,883,082

¹ Direct Labor Rates for TBD resources shall be submitted for approval on a case-by-case basis.

² approximately 15% overtime budget for Field Inspector

³ Other Direct Cost are estimated at 4% of direct labor cost

⁴ Estimated Aggregate Labor Rate Adjustment shall be used for annual cost of living and merit increase

Table 3.2. Estimated Fees for Planned Program Management Support for System wide Tasks Fiscal Year 2020-2021 (July 1, 2020 through June 30, 2021).

Name	Role	Current Billing Rate ¹	Current Factor	Program Management	Controls	WIFIA	Permitting	Procurement	Public Outreach	Design Management	SW Construction Management	Facilities Commissioning & Startup
				PROG_1.0	PROG_1.0	PROG_1.0	PROG_1.0	PROG_1.0	PROG_1.0	PROG_1.0	PROG_1.0	PROG_1.0
Aldridge Lim	Construction Management Specialist		2.65	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Andre Tolme	Program Construction Manager		2.65	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 464,137	\$ -
Bill Van Derveer	Program Manager		2.65	\$ 651,670	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Brendan Robless	Project Manager		2.65	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Corianne Burnett	Project Manager		2.65	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Dan Peterson	Controls Specialist		2.65	\$ -	\$ 160,728	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
David Marciniak	Public Affairs/Outreach		2.65	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 301,298	\$ -	\$ -	\$ -
Elena Thomsen	Staff Professional		2.65	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ellen Peterman	Controls Specialist (WIFIA)		2.65	\$ -	\$ -	\$ 209,273	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Elnaz Adeh	Special Projects Manager		2.65	\$ 289,848	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Eric Ward	Project Manager		2.65	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Erika Murphy	Project Manager		2.65	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 155,082
Faride Abzade	Staff Professional		2.65	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 32,018
Jennifer Minton	Project Manager		2.65	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Jeremy Taylor	Controls Manager		2.65	\$ -	\$ 426,197	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Jill Chomycia	Permitting Coordinator		2.65	\$ -	\$ -	\$ -	\$ 364,196	\$ -	\$ -	\$ -	\$ -	\$ -
Kelly Vorenkamp	Purchasing Agent/Contracts Coordinator		2.65	\$ -	\$ -	\$ -	\$ -	\$ 341,401	\$ -	\$ -	\$ -	\$ -
Kristina McLean	Construction Management Specialist		2.65	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Kristina Tubbert	Receptionist		2.65	\$ 116,087	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Matthew Gribbins	Project Manager		2.65	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Meredith Jordan	Permitting Specialist		2.65	\$ -	\$ -	\$ -	\$ 185,686	\$ -	\$ -	\$ -	\$ -	\$ -
Rich Edwards	Scheduler		2.65	\$ -	\$ 338,446	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Scott Gibson	Design Manager		2.65	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 448,254	\$ -	\$ -
Tammy Cleys	Project Manager		2.65	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TBD Construction Management Specialist 3	Construction Management Specialist		2.65	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Chad Carlson	Safety		2.65	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 342,457	\$ -
TBD Sr. Cost Estimator	Sr. Cost Estimator		2.65	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 166,621	\$ -
Virginia Anderson	Administrative Assistant		2.65	\$ 222,676	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Bill Hawkins	Project Delivery (SME)		2.82	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 59,787	\$ -
Deborah Gonzales	Administrative Support		2.82	\$ 13,287	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Design Review Support (Various)	Design Review Coordinators		2.82	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,150	\$ -	\$ -
Jason Rozgony	Sr. Cost Estimator		2.82	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25,783	\$ -
Jude Grounds	RWF/WTP Technical Advisor		2.82	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50,513	\$ -	\$ -
Kelly Davenport	Technical Editor		2.82	\$ 17,998	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Kieran Christie	Schedule Support		2.82	\$ -	\$ 59,935	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Mike Jesionowski	Sr. Cost Estimator		2.82	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 22,570	\$ -
Mike Warriner	Constructability/Schedules		2.82	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 62,051	\$ -
Russell Snow	Design Manager Pipelines and Reservoirs		2.82	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 240,244	\$ -	\$ -
Sally Dale	Administrative Assistant		2.82	\$ 21,722	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TBD Subject Matter Experts (Various)	Subject Matter Experts (SME)		2.82	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 119,323	\$ 119,323	\$ -
TBD Technical Staff (Various)	Technical Resources		2.82	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 63,171	\$ 63,171	\$ -
Tim Tekippe	Testing and Commissioning Lead		2.82	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 115,909
Other Direct Cost ³		\$ -	1.00	\$ 503,035	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Estimated 2021 Annual Labor Rate Adjustment ⁴		\$ -	1.00	\$ 22,976	\$ 16,980	\$ 3,606	\$ 9,476	\$ 5,883	\$ 5,192	\$ 16,055	\$ 25,809	\$ 5,222
Grand Total				\$ 1,859,300	\$ 1,002,286	\$ 212,879	\$ 559,359	\$ 347,285	\$ 306,491	\$ 947,710	\$ 1,351,707	\$ 308,231

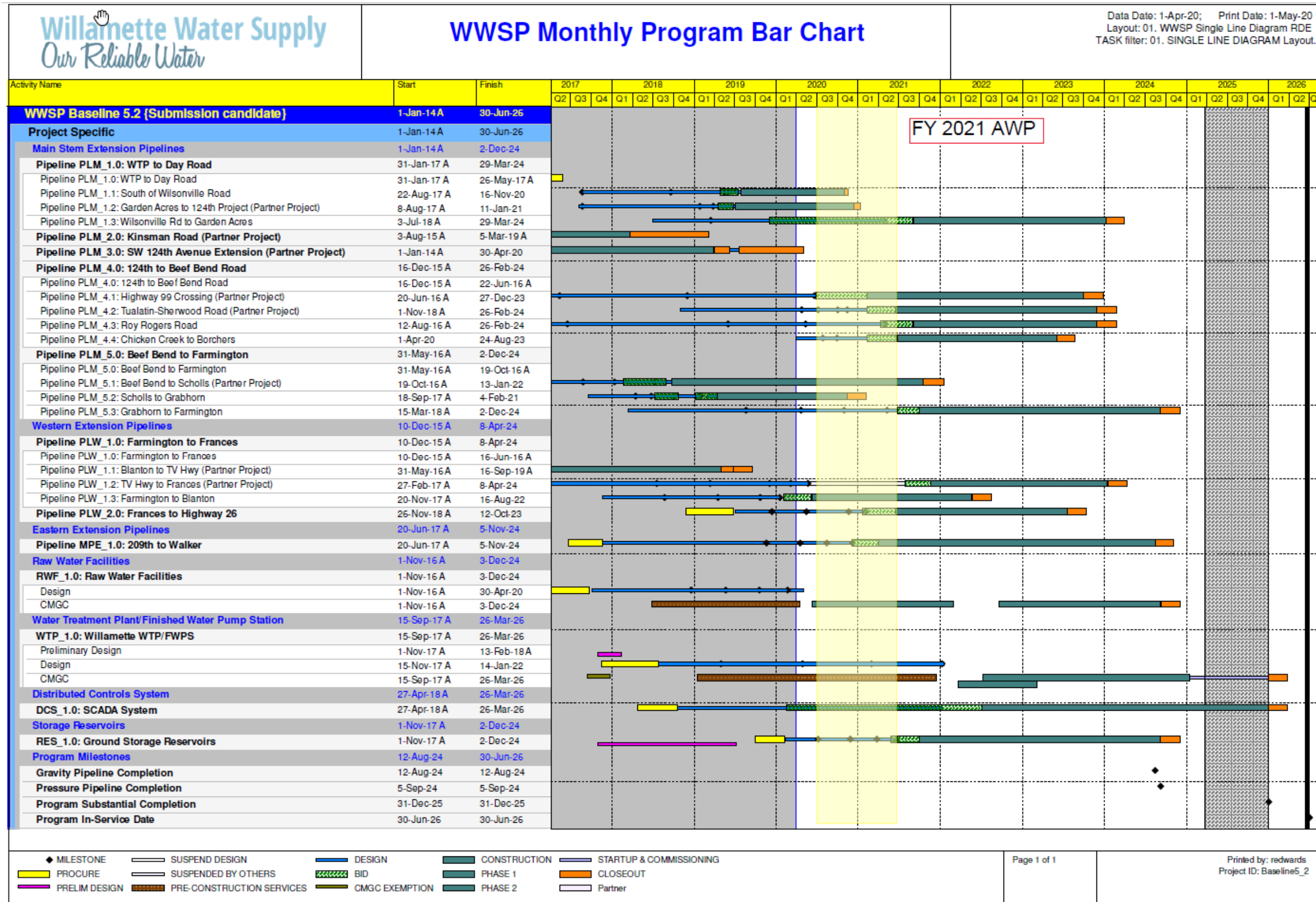
¹ Direct Labor Rates for TBD resources shall be submitted for approval on a case-by-case basis.

² approximately 15% overtime budget for Field Inspector

³ Other Direct Cost are estimated at 4% of direct labor cost

⁴ Estimated Aggregate Labor Rate Adjustment shall be used for annual cost of living and merit increase

Attachment 1. Fiscal Year 2019-2020 WWSP Master Program Schedule and Budget Baseline (status date March 31, 2020).



Willamette Water Supply System Commission

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STAFF REPORT

To: WWSS Board of Commissioners

From: David Kraska, P.E., WWSP Program Director, WWSS Commission General Manager

Date: June 4, 2020

Subject: Request Approval of Contract with Tapani, Inc. for PLW_1.3 Pipeline Construction for the Willamette Water Supply Program

Requested Board Action:

Approve the Contract 2020-051 with Tapani, Inc. for PLW_1.3 Pipeline Construction for the Willamette Water Supply Program.

Key Concepts:

- A best-value selection process was used for this procurement and the Request for Proposal was published on February 21, 2020.
- Seven narrative proposals were received and scored, and following, a price proposal opening was held.
- Tapani, Inc. was identified as the highest-scoring respondent based on the combined scores for narrative and price proposals.
- Limited Notice to Proceed is planned upon approval and execution of the contract.

Background:

PLW_1.3 includes furnishing materials, labor, and equipment required for the construction of a new waterline consisting of approximately six thousand nine hundred seventy-three (6,973) linear feet of sixty-six inch (66-inch) steel water transmission pipeline. Approximately four hundred and ninety-seven (497) linear feet of 66-inch steel pipe will be installed via microtunnel trenchless technology within a 78-inch diameter steel casing, approximately eighty-five (85) linear feet of 66-inch vertical pipe in the shafts, and approximately three thousand nine hundred seventy-one (3,971) linear feet of 30-inch pipeline. A separate flow meter, PRV vaults with associated inlet and outlet piping, and related appurtenances will also be installed.

Budget Impact:

The contract amount is \$28,989,140, which is within the budget for this project. This contract value is reflected in WWSP Baseline 5.2, which is subject to Board approval contemporaneously with the subject contract.

Staff Contact Information:

David Kraska, P.E., WWSP Program Director; 503-941-4561; david.kraska@tvwd.org

Mike Britch, P.E., WWSP Engineering & Construction Manager; 503-941-4565; mike.britch@tvwd.org

Attachments:

1. Contract 2020-051
2. Best Value Scoring Summary
3. Price Proposal Summary

Willamette Water Supply System Commission

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Willamette Water Supply
Our Reliable Water

PROJECT TITLE: PLW_1.3 PIPELINE CONSTRUCTION

CONTRACT NUMBER: 2020-051

Between

Willamette Water Supply System Commission

And

Tapani, Inc.

Willamette Water Supply System Commission

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Willamette Water Supply

Our Reliable Water

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**CONTRACT AGREEMENT
ON THE BASIS OF A STIPULATED PRICE
For Contract # 2020-051**

THIS CONTRACT is effective as of the day of in the year by and between Willamette Water Supply System Commission, an intergovernmental entity formed under ORS Chapter 190 (“Commission” and “Owner”), and Tapani, Inc. (“Contractor”), whose principal place of business is located at 1904 SE 6th Place, Battle Ground, WA 98604. Each one of the above may be individually referred to as a “party” and collectively referred to as the “parties.”

Owner and Contractor, in consideration of the mutual general conditions hereinafter set forth, agree as follows:

SECTION 1 - WORK

The Work includes all labor, equipment, material, testing, inspection and appurtenant components in accordance with, or reasonably inferable from, the Contract Documents (“Work”).

Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

The Work of this Contract includes but is not limited to furnishing materials, labor, and equipment required for the construction of a new waterline consisting of approximately six thousand three hundred twenty-six (6,326) linear feet of sixty-six (66-inch) steel water transmission pipeline, with approximately an additional five hundred and three (503) linear feet installed partly within a 78-inch diameter steel casing, approximately one hundred and forty-six (146) linear feet of 66-inch horizontal and vertical pipe in the shafts, four hundred and ninety-seven (497) linear feet of 78-inch diameter steel casing installed via microtunnel trenchless technology and approximately three thousand eight hundred and fifty-seven (3,857) linear feet of 30-inch pipeline, separate flow meter and PRV vaults with associated 30-inch, 24-inch, 18-inch, and 16-inch inlet and outlet piping, and related appurtenances. The Contractor is required to furnish all other materials, labor, and equipment including valves, vaults, and appurtenances including electrical and instrumentation controls, and to complete the work as defined in these Contract Documents.

SECTION 2 - OWNER REPRESENTATIVE

2.01 Mr. Mike Britch, has been designated as Owner’s Representative and assumes all duties and responsibilities and has the right and authority assigned to Owner’s Representative in the contract documents in connection with completion of the work in accordance with the Contract Documents. Owner’s Representative shall be responsible for coordinating and obtaining appropriate Owner approvals for any requested contractual changes that affect cost, schedule, technical, or any other requirements of this contract.

Mr. Britch may be contacted by phone at 503-941-4565 or by email at mike.britch@tvwd.org.

SECTION 3 - CONTRACT TIMES/MILESTONE

3.01 The Work shall not commence prior to the date specified in the Limited Notice to Proceed and shall be completed in accordance with the following schedule, or any extension thereof granted

by Owner:

Construction Milestones	Date
Limited Notice to Proceed	6/5/2020
Notice to Proceed	8/6/2020
Milestone 1 - Substantial Completion of the Work	5/20/2022
Milestone 2 - Final Completion of the Work	8/16/2022

The Work shall be determined substantially complete in accordance with the General Conditions and Specification Section 01 77 00, Paragraph 1.3. Final Completion of the Work shall be in accordance with the General Conditions and Specification Section 01 77 00, Part 1.4 and ready for final payment in accordance with Article 14.07 of the General Conditions.

3.02 *Liquidated Damages.* The parties recognize that time is of the essence for the completion of all Work under this Contract and that Owner will suffer financial loss if the Work is not completed within the Milestones and Contract Times specified in Section 3.01 above, plus any extensions thereof approved in accordance with Article 12 of the General Conditions. The parties also recognize that there are delays, expenses, and difficulties involved in proving the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as reasonable and appropriate liquidated damages for delay (but not as a penalty), Contractor agrees to pay Owner in accordance with the following:

Construction Milestones	Liquidated Damages
Substantial Completion	Five Thousand Dollars (\$5,000) for each calendar day that expires after the time specified in Section 3.01 of the Contract (or any extension thereof granted by Owner) for Substantial Completion until the Work is substantially complete as defined by the Contract Documents and approved by Owner.
Final Completion	After Substantial Completion, if Contractor neglects, refuses, or fails to complete the remaining Work within the time specified in Section 3.01 of the Contract, for completion and readiness for final payment (or any extension thereof granted by Owner), Contractor shall pay Owner Three Thousand Five Hundred Dollars (\$3,500) for each calendar day that expires after the times specified in Section 3.01 for completion and readiness for final payment.

3.03 Owner shall recover liquidated damages by deducting the amount thereof from any monies due or payable to Contractor. In the event the remaining balance due the Contractor is insufficient to cover the full amount of assessed liquidated damages, Contractor, or its surety, if applicable, shall pay the amount due and Owner shall be entitled to any and all rights and remedies available in law or equity to recover the same.

SECTION 4 - CONTRACT PRICE

4.01 Owner shall pay Contractor for Work completed in accordance with the Contract Documents pursuant to the Schedule of Values set forth in Section 4.03. The Contract Price, shall not exceed Twenty-Eight Million, Nine Hundred Eighty-Nine Thousand, One Hundred Forty and No Cents (\$28,989,140), unless authorized by Owner in accordance with Article 12 of the General Conditions. Priced items, as identified in the Schedule of Values, are firm and not subject to escalation, absent a Change Order.

4.02 In accordance with ORS 279A.120, out-of-state Contractors are required to report to the Department of Revenue the Contract Price, terms of payment, length of Contract, and other information Department of Revenue may require. Owner shall verify Contractor has satisfied this requirement prior to issuing final payment.

4.03 SCHEDULE OF VALUES

Price Proposal Form					
Item No.	Item Description	Unit	Qty.	Unit Price	Extended Unit Price
1	Perform Pre-Mobilization	LS	1	\$275,000.00	\$275,000.00
2	Provide Pre-Mobilization Standby	MO	3	\$25,000.00	\$25,000.00
3	Perform Mobilization	LS	1	\$875,000.00	\$875,000.00
4	Perform Demobilization	LS	1	\$300,000.00	\$300,000.00
5	Temporary Haul Roads and Construction Entrances	LS	1	\$350,000.00	\$350,000.00
6	Perform Health and Safety Activities	LS	1	\$300,000.00	\$300,000.00
7	Storm Water, Sediment, and Erosion Control	LS	1	\$1,000,000.00	\$1,000,000.00
8	Provide Work Limits Preparation	LS	1	\$600,000.00	\$600,000.00
9	Furnish Groundwater Control Plan and a Contractor Test Pit Program	LS	1	\$100,000.00	\$100,000.00
10	Install Wellpoints South of Butternut Creek	EA	824	\$600.00	\$494,400.00
11	Install Observation Wells South of Butternut Creek	EA	4	\$3,000.00	\$12,000.00

Price Proposal Form					
Item No.	Item Description	Unit	Qty.	Unit Price	Extended Unit Price
12	Install Wellpoints North of Butternut Creek	EA	268	\$600.00	\$160,800.00
13	Install Observation Wells North of Butternut Creek	EA	1	\$3,000.00	\$3,000.00
14	Perform Dewatering of Launch Shaft	LS	1	\$150,000.00	\$150,000.00
15	Perform Dewatering of Receiving Shaft	LS	1	\$75,000.00	\$75,000.00
16	Perform Dewatering and Treatment of collected water South of Butternut Creek	LS	1	\$25,000.00	\$25,000.00
17	Perform Dewatering and Treatment of collected water North of Butternut Creek	LS	1	\$25,000.00	\$25,000.00
18	Furnish and Deliver 66-Inch MLPC, Welded Steel Pipe, min t=0.3125-inch Wall	LF	3,134	\$615.00	\$1,927,410.00
19	Install 66-Inch MLPC, Welded Steel Pipe, min t=0.3125-inch Wall	LF	3,134	\$535.00	\$1,676,690.00
20	Furnish and Deliver 66-Inch MLPC, Welded Steel Pipe, min t=0.375-inch Wall	LF	540	\$640.00	\$345,600.00
21	Install 66-Inch MLPC, Welded Steel Pipe, min t=0.375-inch Wall	LF	540	\$535.00	\$288,900.00
22	Furnish and Deliver 66-Inch MLPC, Welded Steel Pipe min t=0.4375-inch Wall	LF	463	\$930.00	\$430,590.00
23	Install 66-Inch MLPC, Welded Steel Pipe min t=0.4375-inch Wall	LF	463	\$535.00	\$247,705.00
24	Furnish and Deliver 66-inch x 48-inch reducer and 48-Inch MLPC, Welded Steel Pipe min t=0.500-inch Wall	LS	1	\$95,000.00	\$95,000.00

Price Proposal Form					
Item No.	Item Description	Unit	Qty.	Unit Price	Extended Unit Price
25	Install 66-inch x 48-inch reducer and 48-Inch MLPC, Welded Steel Pipe min t=0.500-inch Wall	LS	1	\$20,000.00	\$20,000.00
26	Furnish and Deliver 66-Inch MLPC, Welded Steel Pipe min t=0.5625-inch Wall	LF	652	\$800.00	\$521,600.00
27	Install 66-Inch MLPC, Welded Steel Pipe min t=0.5625-inch Wall	LF	652	\$535.00	\$348,820.00
28	Furnish and Deliver 66-Inch MLPC, Welded Steel Pipe min t=0.6875-inch Wall	LF	149	\$1380.00	\$205,620.00
29	Install 66-Inch MLPC, Welded Steel Pipe min t=0.6875-inch Wall	LF	149	\$625.00	\$93,125.00
30	Furnish and Deliver 66-Inch MLPC, Welded Steel Pipe min t=0.75-inch Wall	LF	1,120	\$1,030.00	\$1,153,600.00
31	Install 66-Inch MLPC, Welded Steel Pipe min t=0.75-inch Wall	LF	1,120	\$650.00	\$728,000.00
32	Furnish and Deliver 66-Inch MLPC, Welded Steel Pipe min t=0.875-inch Wall	LF	268	\$1,265.00	\$339,020.00
33	Install 66-Inch MLPC, Welded Steel Pipe min t=0.875-inch Wall	LF	268	\$700.00	\$187,600.00
34	Corrosion Protection for 66" Steel Pipe	LS	1	\$150,000.00	\$150,000.00
35	Furnish and Deliver 30-Inch Restrained Joint Ductile Iron Pipe, Class 52 or 30-inch MLPC, Welded Steel Pipe min t=0.25-inch wall	LF	3,883	\$320.00	\$1,242,560.00
36	Install 30-Inch Restrained Joint Ductile Iron Pipe, Class 52 or 30-Inch MLPC, Welded Steel Pipe min t=0.25-inch wall	LF	3,883	\$270.00	\$1,048,410.00

Price Proposal Form					
Item No.	Item Description	Unit	Qty.	Unit Price	Extended Unit Price
37	Corrosion Protection for 30" pipe	LS	1	\$75,000.00	\$75,000.00
38	Interior joint lining of 66-inch and 48-inch nominal ID MLPC welded steel pipe	LS	1	\$125,000.00	\$125,000.00
39	Trench Foundation Excavation and Material for 66-inch pipe	LF	6,326	\$40.00	\$253,040.00
40	Trench Foundation Excavation and Material for 30-inch pipe	LF	3,857	\$30.00	\$115,710.00
41	30" Manway and Access Vault	EA	2	\$45,120.00	\$90,240.00
42	8" Type I Air Valve Assembly with 30" Manway and Access Vault	EA	4	\$95,000.00	\$380,000.00
43	4" Type I Air Valve Assembly with 12" Collared Outlet and Access Vault	EA	2	\$65,000.00	\$130,000.00
44	Type I 12" Blowoff	EA	3	\$65,000.00	\$195,000.00
45	Type I 8" Blowoff	EA	5	\$55,000.00	\$275,000.00
46	Trench Cutoff Wall	EA	4	\$15,000.00	\$60,000.00
47	Locate stations, curb markers, and marker posts	LS	1	\$75,000.00	\$75,000.00
48	66-inch Butterfly Valve	EA	3	\$335,000.00	\$1,005,000.00
49	48-inch Butterfly Valve	EA	1	\$100,000.00	\$100,000.00
50	30-inch Butterfly Valve	EA	1	\$50,000.00	\$50,000.00
51	Trenchless Launch Shaft and Vertical Pipe	LS	1	\$1,700,000.00	\$1,700,000.00
52	Trenchless Receiving Shaft and Vertical Pipe	LS	1	\$990,000.00	\$990,000.00
53	Trenchless Crossing of Butternut Creek (STA 1176+76.81 to STA 1181+79.00)	LF	503	\$8,150.00	\$4,099,450.00
54	Butternut Creek Turnout	LS	1	\$1,000,000.00	\$1,000,000.00
55	Concrete Curb and Gutter on SW 209 th Ave	LS	1	\$8,000.00	\$8,000.00

Price Proposal Form					
Item No.	Item Description	Unit	Qty.	Unit Price	Extended Unit Price
56	AC Pavement and base on SW Rosedale Road and SW 209 th Avenue	LS	1	\$400,000.00	\$400,000.00
57	Pipeline Access Road	LF	5,349	\$50.00	\$267,450.00
58	Traffic Control on SW Rosedale Road	LS	1	\$100,000.00	\$100,000.00
59	Traffic Control on SW 209 th Avenue	LS	1	\$75,000.00	\$75,000.00
60	Traffic Control on SW Murphy St.	LS	1	\$10,000.00	\$10,000.00
61	Restoration for Wetland Areas W-W1-5 and PHS-C1	LS	1	\$100,000.00	\$100,000.00
62	Remove and Dispose of Trees	LS	1	\$500,000.00	\$500,000.00
63	Trim and Protect Trees	LS	1	\$20,000.00	\$20,000.00
64	Provide Pipeline Cleaning, Testing, and Disinfection of 66-inch pipe	LS	1	\$100,000.00	\$100,000.00
65	Provide Pipeline Cleaning, Testing, and Disinfection of 30-inch pipe	LS	1	\$20,000.00	\$20,000.00
66	4" Drain Tile	LF	400	\$25.00	\$10,000.00
67	6" Drain Tile	LF	600	\$28.00	\$16,800.00
68	8" Drain Tile	LF	600	\$30.00	\$18,000.00
69	Connection to PLW_1.1 pipe	LS	1	\$20,000.00	\$20,000.00
70	16" Steel Casings for future sewer installations	LF	40	\$250.00	\$10,000.00
71	Supply of Instrumentation, Controls, and Telemetry per Sections 40 61 00 and 40 61 10	LS	1	\$250,000.00	\$250,000.00
72	Temporary Access Road on SE Kinnaman Street	LS	1	\$50,000.00	\$50,000.00
73	209 th Ave/ Farmington Turnout	LS	1	\$350,000.00	\$350,000.00

Price Proposal Form					
Item No.	Item Description	Unit	Qty.	Unit Price	Extended Unit Price
74	4" Type I Air Valve Assembly with 30" Manway and Access Vault	EA	1	\$75,000.00	\$75,000.00
MLPC = mortar-lined and polyurethane coated		Base Bid Total Items 1-74		\$28,989,140.00	

All cash allowances (if any) are included in the above price and have been computed in accordance with Article 11.02 of the General Conditions.

Notwithstanding anything else in the Contract Documents to the contrary, Contractor and Owner agree and acknowledge that Contractor may be required to standby, for a period of up to three (3) months prior to issuance the Notice to Proceed, authorizing mobilization onto the Site. For each month the Work is on a Pre-Mobilization Standby, Contractor shall be entitled to receive the Unit Price specified (or a prorated portion thereof) in the Schedule of Values for "Pre-Mobilization Standby Time", for up to a maximum of three (3) months.

SECTION 5 - PAYMENT PROCEDURES/RETAINAGE

5.01 Applications for Payment shall be processed by Owner’s Representative as provided in the Article 14 of the General Conditions. These payment terms shall also be subject to applicable discounts offered by Contractor for any reason, including the terms of any applicable price warranty. Electronic funds transfer is a means of remitting payment only and shall not be construed as limiting Owner’s rights or altering any of the terms or conditions incorporated into this Contract.

5.02 In the event Owner disputes or contests all or any part of any Application for Payment, Owner reserve the right to; (i) request a replacement Application for Payment in its entirety (ii) request a replacement Application for Payment stating only the disputed amount, promptly pay any undisputed amount and withhold payment of any disputed amount without waiving any of its claims or defenses to payment of the disputed amount. In the event that Contractor issues a replacement Application for Payment for any undisputed amount, it is agreed that such issuance of a replacement Application for Payment does not constitute a waiver of Contractor's rights with regard to the disputed amount.

5.03 *Progress Payments; Retainage.* Subject to Owner’s right to withhold payment in accordance with Article 14.02 of the General Conditions, Owner shall make progress payments on account of the Contract Price on the basis of Contractor’s Application for Payment as recommended by Owner’s Representative. All such payments will be made according to the Schedule of Values in Section 4.03 and in accordance with Specification Section 01 22 13.

5.03.A Pursuant to ORS.279C.555 an amount equal to five percent (5%) of the amount shown to be due the Contractor on each Application for Payment shall be withheld for Work required by the Contract Documents as retainage, including all materials and equipment not incorporated in the Work, which are accompanied by documentation satisfactory to Owner as provided are delivered, suitably stored and insured, in Article 14.02 of the General Conditions).

5.04 *Final Payment.* Upon Final Completion of the Work and final acceptance of the Work in accordance with Article 14.07 of the General Conditions, Owner shall pay Contractor the amount of the withheld retainage and accrued interest, as applicable. Retainage shall be held in a Local Government Investment Pool account and accrue interest at the rate Owner receives on its funds. Contractor may choose a different method for holding the retainage in an interest-bearing escrow account, such as a bond or security, provided the administrative cost associated with such alternative shall be paid for by Contractor.

5.05 *Net Spend Reports.* Owner shall provide a Quarterly Net Spend Report template for Contractor to complete and submit (Exhibit F – Quarterly Net Spend Report Template) which includes, at a minimum, the following information

- Total amount spent by Contractor and each Subcontractor and Supplier for the quarter;
- Subcontractor/Subconsultant name, address and type of service(s) provided;
- Other business attributes that may be required by Owner.

Owner will provide a quarterly template update to Contractor by the 15th day of the last month for each calendar quarter for the entire duration of this Contract. Owner reserve the right to withhold payment, without incurring additional expense from Contractor, if Contractor fails to submit the report within fifteen (15) days of the end of each calendar quarter.

SECTION 6 - CONTRACTOR REPRESENTATIONS

Contractor makes the following representations:

6.01 Contractor has thoroughly examined and carefully studied the Contract Documents (including all addenda) listed in Section 8 and the other related data identified in the Request for Proposals including “technical data.” Based upon this review and analysis, Contractor represents to Owner that it will perform all of the Work within the Contract Times and within the Contract Price in accordance with the terms of the Contract.

- 6.02** Contractor has visited the Site, performed a visual inspection, and become familiar with and is satisfied as to the general, local, and site conditions that may affect cost, progress, performance, or furnishing of the Work and represents to Owner that it will provide all of the necessary services and perform all of the Work within the requirements of the Contract Documents.
- 6.03** Contractor is familiar with and agrees it will adhere to all Laws and Regulations that may affect cost, progress, performance, or furnishing of the Work.
- 6.04** Contractor has carefully studied all reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site, including those which have been identified or made available for Owner. Contractor shall be responsible for obtaining (or assumes responsibility for not doing so), prior to commencement of the Work, any additional explorations or tests which Contractor has determined are necessary to thoroughly understand the geotechnical environment for performance of the Work. Contractor accepts the limitations of the extent to which Contractor may rely on the “technical data” contained in such reports and drawings as set forth in Article 4.02 of the General Conditions. Contractor acknowledges that such reports and drawings are not Contract Documents and may not be complete for Contractor’s purposes.
- 6.05** Contractor acknowledges that Owner and Engineer do not assume responsibility for the accuracy or completeness of information and data shown or indicated in the Contract Documents with respect to Underground Facilities at or contiguous to the Site. Contractor has or will obtain and carefully study (or assumes responsibility for having done so), prior to commencement of the Work, all such additional supplementary examinations, investigations, explorations, tests, studies, and data concerning conditions (surface, subsurface, and Underground Facilities) at or contiguous to the Site or otherwise which may affect cost, progress, performance, or furnishing of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor and safety precautions and programs incident thereto. Should Contractor consider that any additional examinations, investigations, explorations, tests, studies, or data are necessary for the performance and furnishing of the Work, Contractor shall bear all costs associated with obtaining, studying, and analyzing such additional examinations, investigations, explorations, tests, studies, or data. If, through such additional examinations, investigations, explorations, tests, studies, or data, it is determined that the conditions do materially so differ and cause an increase or decrease in the Contractor’s cost of, or the time required for, performing any part of the Work, an equitable adjustment may be made under Article 4.03 and the Contract Times or Contract Price may be modified in writing by Change Order in accordance with Article 10.
- 6.06** Contractor is aware of the general nature of Work to be performed by Owner and others to complete the Work in accordance with the Contract Documents.
- 6.07** Contractor has correlated the information known to Contractor, information and observations

obtained from visits to the Site, reports and drawings identified in the Contract Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Contract Documents. Contractor assumes the risk of such Site conditions and will, regardless of such conditions and the expense or difficulty in performing the Work, fully complete the Work for the stated Contract Price without recourse to Owner, whether or not an equitable adjustment is made.

- 6.08** Contractor has given Owner written Notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents and accepted the written resolution thereof by Owner, and the Contractor acknowledges that the Contract Documents are sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
- 6.09** Contractor has satisfied itself regarding the conditions applicable to the Work, such as, but not limited to: (i) conditions bearing on transportation, disposal, handling and storage of materials; (ii) the availability of water, power and road access; (iii) potential weather conditions; (iv) physical conditions of the Site; (v) the conditions of the ground and drainage thereof; and; (vi) Site ground water.
- 6.10** Contractor expressly recognizes that the Work must be completed within the time and fiscal constraints set forth in the Contract Documents and guarantees that it will perform all of the Work in accordance with the Contract Price and the Contract Times.

SECTION 7 - WATER INFRASTRUCTURE FINANCE AND INNOVATION ACT (WIFIA) REQUIREMENTS

During the performance of this contract, the contractor agrees as follows:

- 7.01** The contractor understands that the goods and services called for under this RFP are being funded with monies made available by the federal Water Infrastructure Finance and Innovation Act (“WIFIA”). Contractor agrees to comply with all applicable statutes, regulations, executive orders, and any additional terms and conditions imposed by the Environmental Protection Agency (“EPA”) in connection with WIFIA funding for the Project per Exhibit J – WIFIA Program Requirements, Exhibit K – AIS Certification Template, and Exhibit L - De Minimis Tracking Worksheet Template.

SECTION 8 - CONTRACT DOCUMENTS

The Contract Documents which comprise the entire Contract between Owner and Contractor concerning the Work consist of the following, all of which are incorporated (attached hereto or by reference) into and form the entire Contract between Owner and Contractor:

- 8.01** This Contract (Sections 1 through 9)
- 8.02** General Conditions (Articles 1 through 17)
- 8.03** Exhibit A
 - Attachment 1 – Technical Specifications – February 2020
 - Attachment 2 – Drawings – February 2020
- 8.04** Exhibit B – Contractor’s Proposal and Documentation submitted prior to the Effective Date of the Contract
- 8.05** Exhibit C – Confidentiality Agreement
- 8.06** Exhibit D – Contractor’s qualification submittal documents in response to RFQ-PGM-0300919
- 8.07** Exhibit E – Bond Sureties: Performance Payment Maintenance
- 8.08** Exhibit F – Quarterly Net Spend Reports
- 8.09** Exhibit G – Contractor’s Insurance Certificates
- 8.10** Exhibit I – Request for Proposal RFQ-PLW-0300220 PLW_1.3 Pipeline Construction Bidding Documents and all Addenda
- 8.11** Exhibit J – WIFIA Program Requirements
- 8.12** Exhibit K – AIS Certification Template
- 8.13** Exhibit L – De Minimis Tracking Worksheet Template
- 8.14** Limited Notice(s) to Proceed
- 8.15** Notice(s) to Proceed
- 8.16** The following which may be delivered or issued after the Effective Date of the Contract: Change Orders, Work Change Directives and other documents amending, modifying, or supplementing the Contract Documents pursuant to the General Conditions.

There are no Contract Documents other than those listed in this Section 8. The Contract Documents may only be amended, modified, or supplemented as provided in Article 10 of the General Conditions.

Except as specifically listed, in case of any inconsistency or conflict among the provisions of the Contract and any other terms and conditions of any documents comprising the Contract Documents, the provisions of the Contract shall control. Concerning the Contract Documents, the order of precedence shall be as follows: 1) Drawings and Specifications, 2) Change Orders; 3) Work Change Directives, and 4) other Contract Documents listed in 8.01 through 8.16 above. The Contract Documents listed above represent the entire and integrated Contract between the parties hereto, and supersede prior negotiations, representations, or agreements, either written or oral.

SECTION 9 - MISCELLANEOUS

- 9.01** The Standard General Conditions of the Contract between Owner and Contractor are referred to herein as the General Conditions.
- 9.02** Terms used in this Contract, which are defined in Article 1 of the General Conditions, will

have the meanings indicated therein.

- 9.03** Contractor may not assign or transfer any part of this Contract without the written consent of Owner, and then, only to an Affiliate if (1) the assignee agrees in writing to be bound by the terms of this Contract, (2) the assigning party remains liable for obligations under the Contract, and (3) the assignee accepts the condition of and responsibility for all prior Work. Any other attempt to transfer or assign is void.
- 9.04** Upon a change of control (for example, through a stock purchase or sale, merger, or other form of corporate transaction), (1) the party experiencing the change of control will provide written Notice to the other party within thirty (30) days after the change of control, and (2) the other party may immediately terminate this Contract any time between the change of control and thirty (30) days after it receives the written Notice in subsection (1).
- 9.05** Owner and Contractor each binds itself, its partners, successors, assigns and legal representatives to the other party hereto, its partners, successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.
- 9.06** Any provision or part of the Contract Documents held to be void or unenforceable under any Laws or Regulations shall be deemed stricken and all remaining provisions shall continue to be valid and binding upon Owner and Contractor, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.
- 9.07** Owner and Contractor specifically agree that this Contract is not intended by any of its terms, provisions, or conditions to create in the public or any individual member of the public a third party beneficiary relationship, or to authorize any person not a party to this Contract to maintain suit for personal injuries or property damage pursuant to the terms, conditions or provisions of this Contract.
- 9.08** This Contract, Change Orders, and Work Change Directives may be executed in counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Executed signature pages may be delivered using pdf or similar file type transmitted via electronic mail, cloud-based server, e-signature technology or other similar electronic means.
- 9.09** Contractor understands that the goods and services under this Contract are being funded with monies made available by the WIFIA program. Contractor agrees to comply with all applicable WIFIA statutes and regulations and any additional terms and conditions imposed by EPA in connection with WIFIA funding for the Project.
- 9.10** For the purposes of reviewing, monitoring, and auditing, Owner may at any time make reasonable requests to access and to view or to have their designee access and view, all records, including source data, prepared for or relied on by Contractor in the performance of this

Contract.

IN WITNESS WHEREOF, Owner and Contractor, being duly authorized to commit their respective entities to the terms contained herein, execute this Contract in its entirety as of the Effective Date.

BY WILLAMETTE WATER SUPPLY SYSTEM COMMISSION

By: _____

Name: David Kraska

Title: General Manager

Date: _____

BY CONTRACTOR:

By: _____

Name: Tod Tapani

Title: Vice President

Date: _____

GENERAL CONDITIONS

ARTICLE 1 – DEFINITIONS AND TERMINOLOGY

1.01 *Defined Terms*

- A. Wherever used in the Bidding Requirements or Contract Documents and printed with initial capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.
1. ***Act of God***— Unexpected or uncontrollable events, such as earthquakes, flood, fire, cyclone, epidemic, or other cataclysmic phenomenon of nature. Rain, wind, flood, or other natural phenomenon of intensity less than that recorded for the locality of the Work shall not be construed as an Act of God and no reparation shall be made to Contractor for damages to the Work resulting therefrom or warrant a change to the Contract Times.
 2. ***Addenda***—Written or graphic instruments issued prior to the opening of Proposals which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
 3. ***Application for Payment***—The form acceptable to Owner which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
 4. ***Asbestos***—Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.
 5. ***Proposal*** —The offer or proposal of a Proposer submitted on the prescribed form setting forth the prices for the Work to be performed.
 6. ***Bid Bond***—The security to be furnished by the Proposer on the form furnished as a guaranty of good faith to enter into a contract for the Work contemplated if it were awarded to Proposer.
 7. ***Proposer***—The individual or entity who submits a Proposal directly to Owner.
 8. ***Bid Documents***—The Bidding Requirements and the proposed Contract Documents (including all Addenda).

9. **Bidding Requirements**—The advertisement or request for proposals, bid security form, if any, and the Proposal form with any supplements.
10. **Change Order**—A document signed by Contractor and Owner authorizing an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, issued on or after the Effective Date of the Contract.
11. **Claim**—A demand or assertion by Owner or Contractor seeking an adjustment of Contract Price or Contract Times, or both, or other relief with respect to the terms of the Contract. A demand for money or services by a third party is not a Claim.
12. **Construction Manager**—See Program Manager
13. **Contract**—The entire and integrated written agreement between Owner and Contractor concerning the Work. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral.
14. **Contract Documents**—Those items so designated in the Contract. Only printed or hard copies of the items listed in the Contract are Contract Documents. Approved Shop Drawings, other Contractor submittals, and the reports and drawings of subsurface and physical conditions are not Contract Documents.
15. **Contract Price**—The moneys payable by Owner to Contractor for completion of the Work in accordance with the Contract Documents as stated in the Contract (subject to the provisions of Paragraph 11.03 in the case of Unit Price Work).
16. **Contract Times**—The number of days or the dates stated in the Contract to: (i) achieve Milestones, if any; (ii) achieve Substantial Completion; and (iii) achieve Final Completion of the Work so that it is ready for final payment as evidenced by Engineer’s written recommendation of final payment.
17. **Contractor**—The individual or entity with whom Owner has entered into the Contract.
18. **Contractor Change Notification**—Notification provided in e-Builder by Contractor to Owner within seven (7) days of an occurrence that in the opinion of the Contractor a potential change to the Work that may or may not impact the Contract Price or Contract Times. Contractor shall provide supporting documentation within thirty (30) days of submitting a Contractor Change Notification, or as mutually agreed to by Contractor and Owner. If Owner agree a change is justified, a Request for Quote, Work Change Directive, or Change Order will be issued by Owner. A Contractor Change Notification will not change the Contract Price or the Contract Times.
19. **Cost of the Work**—See Paragraph 11.01 for definition.

20. ***Davis-Bacon and Related Acts*** – The Davis-Bacon Act (40 U.S.C.A. 276a to 276a-5) is federal law that governs the Minimum Wage rate to be paid to laborers and mechanics employed on federal public works projects.
21. ***Drawings***—That part of the Contract Documents prepared or approved by Engineer, which graphically shows the scope, extent, and character of the Work to be performed by Contractor. Shop Drawings and other Contractor submittals are not Drawings as so defined.
22. ***Design Clarification***—A written statement from Engineer, issued by Owner, to Contractor clarifying or revising information shown in the Drawings, Specifications, or both. A Design Clarification will not change the Contract Price or the Contract Times.
23. ***e-Builder***—Owner’s electronic document management system
24. ***Effective Date of the Contract***—The date indicated in the Contract on which it becomes effective, but if no such date is indicated, it means the date on which the Contract is signed and delivered by the last of the party to sign and deliver.
25. ***EMR***—Experience Modification Rate
26. ***Engineer***—The individual or entity, named as such in the Contract, having an agreement with Owner to furnish engineering services with respect to the Work.
27. ***Final Completion of the Work***—The date certified by Owner when (i) all Work has been inspected and operates to the performance standards established in the Contract Documents, (ii) all tasks and documentation required in Specification Section 01 77 00, Paragraph 1.04 have been completed, submitted and approved by Owner, and (iii) a final Application for Payment for the Construction Phase Work in accordance with Article 14.07 is received.
28. ***General Requirements***—Division 1 of the Specifications.
29. ***Hazardous Environmental Condition***—The presence at the Site of Asbestos, PCBs, Petroleum, Hazardous Waste, or Radioactive Material in such quantities or circumstances that may present a danger to persons or property exposed thereto.
30. ***Hazardous Waste***—The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended.
31. ***Laws and Regulations; Laws or Regulations***—Any and all applicable laws, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.

32. **Liens**—Charges, security interests, or encumbrances upon Project funds, real property, or personal property.
33. **Limited Notice to Proceed**—A written Notice from Owner to Contractor fixing the date on which the Contract Times will commence to run and authorizing the start of premobilization activities described in Paragraph 2.04.
34. **Milestone**—A principal event, or intermediate completion date, specified in the Contract Documents.
35. **Notice**—A written document in strict compliance with Article 17.01, which shall in no event include actual, verbal, or constructive notice.
36. **Notice of Award**—The written notice by Owner to the apparent Successful Proposer stating that upon timely compliance by the Successful Proposer with the conditions precedent listed therein, Owner will sign and deliver the Contract.
37. **Notice to Proceed**—A written Notice given by Owner to Contractor which shall authorize Contractor to mobilize onto the Site and start to perform the Work under the Contract Documents.
38. **Owner's Representative**— The person designated in writing to act as Owner's representative with respect to Contractor's performance of the Work, including, but not limited to, an Owner's employee. Such person shall have complete authority to transmit instructions, receive information, interpret and define Owner's policies, and make decisions with respect to performance of the Work.
39. **Partial Utilization**—Use by Owner of substantially completed portions of the Work for the purpose for which it is intended (or a related purpose) prior to Substantial Completion of all the Work.
40. **Payment Bond**—The form of security approved by Owner and furnished by the Contractor and Contractor's surety guaranteeing payment for all labor, materials, services, and equipment furnished for use by the Contractor in performance of the Contract.
41. **PCBs**—Polychlorinated biphenyls.
42. **Performance Bond**—The form of security approved by the Owner and furnished by the Contractor and Contractor's Surety guaranteeing the complete and faithful performance of all the obligations and conditions placed upon the Contractor by the Contract.

43. **Petroleum**—Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Waste and crude oils.
44. **Program Manager**—Stantec Consulting Services Inc.; or its subconsultant Carollo Engineers, Inc. having a contract with Owner to furnish consulting and construction management services with respect to the Project.
45. **Progress Schedule**—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor’s plan to accomplish the Work within the Contract Times.
46. **Project**—The total construction of which the Work to be performed under the Contract Documents, which may be the whole, or a part.
47. **Punch List**— A list provided by the Owner to Contractor of Work that is unfinished, incomplete, defective, damaged or otherwise does not conform to the Contract Documents, and which Contractor must complete prior to Final Payment.
48. **Radioactive Material**—Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended.
49. **Samples**—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.
50. **Schedule of Submittals**—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements to support scheduled performance of related construction activities. The schedule will incorporate review times by Engineer and Owner and time for Contractor to address comments received and resubmit for review and acceptance by Engineer and Owner.
51. **Schedule of Values**—A schedule incorporated into the Contract allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor’s Applications for Payment.
52. **Shop Drawings**—All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work.
53. **Site**—Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and

easements for access thereto, and such other lands furnished by Owner which are designated for the use of Contractor.

54. **Specifications**—That part of the Contract Documents consisting of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable thereto.
55. **Subcontractor**—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work at the Site.
56. **Substantial Completion**—The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Owner, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended providing full time, uninterrupted and continuous beneficial use. The terms “substantially complete” and “substantially completed” as applied to all or part of the Work refer to Substantial Completion thereof. The Work will not meet the requirements of Substantial Completion until all tasks and documentation required in Specification Section 01 77 00, Paragraph 1.03 have been completed, submitted and approved by Owner. Contractor shall follow the procedures described Paragraph 14.04 of these General Conditions.
57. **Successful Proposer**—The Proposer submitting a responsive Proposal to whom Owner makes an award.
58. **Supplementary Conditions**—That part of the Contract Documents which amends or supplements these General Conditions.
59. **Supplier**—A manufacturer, fabricator, supplier, distributor, material man, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or Subcontractor.
60. **Underground Facilities**—All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic, or other control systems.
61. **Unit Price Work**—Work to be paid for on the basis of unit prices.

62. **Work**—The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction, and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.
63. **Work Change Directive**—A written statement to Contractor issued on or after the Effective Date of the Contract and signed by both parties authorizing an addition, deletion, or revision in the Work under which the Work is to be performed. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the change ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order as to its effect, if any, on the Contract Price or Contract Times.
64. **Willamette Water Supply System Commission** – an intergovernmental entity created pursuant to ORS Chapter 190 and formed under this Agreement whose Parties are Tualatin Valley Water District, the City of Hillsboro, and the City of Beaverton, (“Owner”).

1.02 Terminology

- A. The words and terms discussed in Paragraph 1.02.B through F are not defined but, when used in the Bidding Requirements or Contract Documents, have the indicated meaning.
- B. *Intent of Certain Terms or Adjectives:*
1. The Contract Documents include the terms “as allowed,” “as approved,” “as ordered,” “as directed” or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives “reasonable,” “suitable,” “acceptable,” “proper,” “satisfactory,” or adjectives of like effect or import are used to describe an action or determination of Owner as to the Work. It is intended that such exercise of professional judgment, action, or determination will be solely to evaluate, in general, the Work for compliance with the information in the Contract Documents and with the design concept of the Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Owner any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility contrary to the provisions of Paragraphs 8.05 and 9.06 or any other provision of the Contract Documents.
- C. *Day:*

1. The word “day” means a calendar day of 24 hours measured from midnight to the next midnight and as described in Paragraph 17.02.

D. Defective:

1. The word “defective,” when modifying the word “Work,” refers to Work that is unsatisfactory, faulty, or deficient in that it:
 - a. Does not conform to the Contract Documents; or
 - b. Does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or
 - c. Has been damaged prior to Owner recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 14.04 or 14.05).

E. Furnish, Install, Perform, Provide:

1. The word “furnish,” when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.
 2. The word “install,” when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.
 3. The words “perform” or “provide,” when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.
 4. When “furnish,” “install,” “perform,” or “provide” is not used in connection with services, materials, or equipment in a context clearly requiring an obligation of Contractor, “provide” is implied.
- F. Unless stated otherwise in the Contract Documents, words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2 – PRELIMINARY MATTERS

2.01 *Delivery of Bonds, Evidence of Insurance, and Other Documentation*

- A. When Contractor delivers the executed counterparts of the Contract to Owner, Contractor shall also deliver to Owner:
1. Executed counterparts of the Contract.
 2. Such bonds as Contractor may be required to furnish.
 3. Evidence of Insurance with copies to each additional insured identified in the Article 5 of General Conditions.
 4. Scheduler qualifications documentation required by Specification Section 01 32 16.

2.02 *Copies of Documents*

- A. Owner shall furnish to Contractor up to five (5) half-size and one (1) full-size hard copies of the Drawings and Specifications. Electronic copies shall also be provided to Contractor Portable Document Format (PDF) and/or Auto CAD only for convenience.

2.03 *Commencement of Contract Times; Limited Notice to Proceed*

- A. The Contract Times will commence to run on the date stated in the Limited Notice to Proceed. A Limited Notice to Proceed shall be issued to Contractor after the Effective Date of the Contract authorizing premobilization components of the Work to begin. Other specific items of Work authorized to commence shall be described therein, including, but not limited to:
1. Submittals; and
 2. Contractor obtained permits.
 3. Utility location and potholing in the public right of way.
- B. Contractor shall mobilize and start to perform the Work after premobilization components listed in Paragraph 2.04.A are complete and accepted by Owner, and a Notice to Proceed has been issued. No Work shall be done at the Site prior to that date, unless authorized in writing by Owner.

2.04 *Before Starting Construction*

- A. Following the issuance of the Limited Notice to Proceed, Contractor shall complete and submit the following to Owner for review and acceptance before mobilization onto the Site:
1. Preconstruction Conference per Specification Section 01 31 19.
 2. Baseline Schedule in accordance with Specification Section 01 32 16.
 3. Project Sign Submittal per Specification Section 01 58 13.
 4. Schedule of Submittals per Specification 01 33 00.
 5. Baseline cash flow projection.
 6. Contractor Site Specific Safety Plan per Specification Section 01 35 29.
 7. All Contractor required environmental and other permits for the Work.
 8. Photographic and video documentation of pre-existing conditions in accordance with Specification Section 01 32 33.
- B. Owner shall provide comment or approve each submittal listed in 2.04.A within fifteen (15) days after the date received from Contractor.
- C. Contactor's failure to expeditiously complete and allow for Owner's review of all deliverables in Paragraph 2.04.A will not be cause for an adjustment of the Contract Times and/or Contract Price.

ARTICLE 3 – CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

3.01 *Intent*

- A. The Contract Documents are complementary; what is required by one is as binding as if required by all.
- B. It is the intent of the Contract Documents to describe a functionally complete project (or part thereof) to be constructed in accordance with the Contract Documents. Any labor, documentation, services, materials, or equipment that reasonably may be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the indicated result will be provided whether or not specifically called for, at no additional cost to Owner.

- C. Clarifications and interpretations of the Contract Documents shall be issued by Owner as provided in Article 8.

3.02 *Reference Standards*

A. Standards, Specifications, Codes, Laws, and Regulations

1. Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard, specification, manual, code, or Laws or Regulations in effect at the time of opening of Proposals (or on the Effective Date of the Contract if there were no Proposals), except as may be otherwise specifically stated in the Contract Documents.
2. No provision of any such standard, specification, manual, or code, or any instruction of a Supplier, shall be effective to change the duties or responsibilities of Owner, Contractor, or Engineer, or any of their subcontractors, consultants, agents, or employees, from those set forth in the Contract Documents. No such provision or instruction shall be effective to assign to Owner, Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.
3. In case of conflict between codes, reference standards, drawings, and the Contract Documents, the Contract Documents shall govern. All conflicts shall be brought to the attention of the Owner's Representative for clarification and direction prior to ordering or providing any materials or furnishing labor. The Contract Price shall include the most stringent requirements.

3.03 *Reporting and Resolving Discrepancies*

- A. *Contractor's Review of Contract Documents Before Starting Work:* Before undertaking each part of the Work, Contractor shall carefully study and compare the Contract Documents and check and verify pertinent figures therein and all applicable field measurements. Contractor shall promptly report in writing to Owner any conflict, error, ambiguity, or discrepancy which Contractor discovers, or has actual knowledge of, and shall obtain a written interpretation or clarification from Owner before proceeding with any Work affected thereby.
 1. *Contractor's Review of Contract Documents During Performance of Work:* If, during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents, or between the Contract Documents and (a) any applicable Law or Regulation, (b) any standard, specification,

manual, or code, or (c) any instruction of any Supplier, then Contractor shall promptly report it to Owner's Representative in writing by submitting a Contractor Change Notification or Request for Information. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 6.17) until written authorization has been issued by Owner using one of the methods indicated in Paragraph 3.04.

2. Contractor shall not be liable to Owner for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor had actual knowledge thereof.

B. Resolving Discrepancies:

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents and:
 - a. The provisions of any standard, specification, manual, or code, or the instruction of any Supplier (whether or not specifically incorporated by reference in the Contract Documents); or
 - b. The provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 Amending and Supplementing Contract Documents

- A. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof by a Change Order in accordance with Article 10.
- B. The requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, by one or more of the following ways:
 1. Work Change Directive;
 2. Request for Information; or
 3. Design Clarification.

3.05 Reuse of Documents

- A. Contractor and any Subcontractor or Supplier shall not:

1. Have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) provided by Owner, Owner's consultants, and Engineer, including electronic media editions; or
 2. Reuse any such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and specific written verification or adaptation by Engineer.
- B. The prohibitions of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein shall preclude Contractor from retaining copies of the Contract Documents for record purposes.

3.06 *Electronic Data*

- A. Electronic data furnished by Owner to Contractor, or by Contractor to Owner may be relied upon. When transferring documents in electronic media format, the transferring party makes no representations as to long term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by the data's creator.

ARTICLE 4 – AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS; REFERENCE POINTS; WASTE MANAGEMENT

4.01 *Availability of Lands*

- A. Owner shall furnish the Site, rights-of-way, and easements (both permanent and temporary) as indicated on the Drawings. Upon reasonable written request, Owner shall notify Contractor of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work. Owner will obtain in a timely manner and pay for easements as indicated on the Drawings. If Contractor and Owner are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, as a result of any delay in Owner furnishing the Site, rights-of-way, or easements, or a part thereof, Contractor may make a Claim therefor as provided in Paragraph 10.05.
- B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which the Work is to be performed and Owner interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.
- C. Contractor shall provide all additional lands not indicated on the Drawings and access thereto that Contractor deems necessary for temporary construction facilities or storage

of materials and equipment. Costs for such additional lands shall be included in the Contract Price.

1. Contractor shall provide Owner with copies of agreements with private land Owner and evidence of appropriate coverage for the term of such use.

4.02 *Subsurface and Physical Conditions*

A. *Reports and Drawings:*

1. Those reports known to Owner of explorations and tests of subsurface conditions at or contiguous to the Site; and
2. Those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities).

B. *Limited Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the accuracy of the “technical data” contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such “technical data” is identified in the Specification Section 01 42 19. Except for such reliance on such “technical data,” Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors with respect to:

1. The completeness of such reports and drawings for Contractor’s purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto; or
2. Other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
3. Any Contractor interpretation of or conclusion drawn from any “technical data” or any such other data, interpretations, opinions, or information.

4.03 *Differing Subsurface or Physical Conditions*

A. *Notice:* If Contractor believes that any subsurface or physical condition that is uncovered or revealed either:

1. Is of such a nature as to establish that any “technical data” on which Contractor is entitled to rely as provided in Paragraph 4.02 is materially inaccurate; or
2. Is of such a nature as to require a change in the Contract Documents; or

3. Differs materially from that shown or indicated in the Contract Documents; or
4. Is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, within seven (7) days after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.17.), notify Owner in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except as aforesaid) until receipt of written order to do so.

- B. After receipt of written Notice as required by Paragraph 4.03.A, Owner will promptly review the pertinent condition, determine the necessity of obtaining additional exploration or tests with respect thereto, and advise Contractor in writing of Owner's findings and conclusions.

C. *Possible Price and Times Adjustments:*

1. The Contract Price or the Contract Times, or both, will be equitably adjusted to the extent that the existence of such differing subsurface or physical condition causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
 - a. Such condition must meet any one or more of the categories described in Paragraph 4.03.A; and
 - b. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraphs 8.04 and 11.03.
2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times if:
 - a. Contractor knew of the existence of such conditions at the time Contractor made a final commitment to Owner with respect to Contract Price and Contract Times by the submission of a Proposal or becoming bound under a negotiated contract; or
 - b. The existence of such condition could reasonably have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such final commitment; or

- c. Contractor failed to give the written Notice as required by Paragraph 4.03.A and 10.05
3. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, a Claim may be made therefor as provided in Paragraph 10.05. However, neither Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors shall be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.

4.04 *Underground Facilities*

A. *Shown or Indicated:* The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the Site is based on information and data furnished to Owner and Engineer by the owner of such Underground Facilities, including Owner, or by others. Unless it is otherwise expressly provided:

1. Owner and Engineer shall not be responsible for the accuracy or completeness of any such information or data provided by others; and
2. The cost of all of the following will be included in the Contract Price, and Contractor shall have full responsibility for:
 - a. Reviewing and checking all such information and data;
 - b. Locating all Underground Facilities shown or indicated in the Contract Documents;
 - c. Coordination of the Work with the owner of such Underground Facilities, including Owner, during construction; and
 - d. The safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.

B. *Not Shown or Indicated:*

1. If an Underground Facility is uncovered or revealed at or contiguous to the Site which was not shown or indicated, or not shown or indicated with reasonable accuracy in the Contract Documents, Contractor shall, within seven (7) days after becoming aware thereof and before further disturbing conditions affected thereby or performing

any Work in connection therewith (except in an emergency as required by Paragraph 6.17), identify the owner of such Underground Facility and give written Notice to that owner and to Owner. Owner will promptly review the Underground Facility and determine the extent, if any, to which a change is required in the Contract Documents to reflect and document the consequences of the existence or location of the Underground Facility. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.

2. If Owner conclude that a change in the Contract Documents is required, a Work Change Directive or a Change Order will be issued to reflect and document such consequences. An equitable adjustment shall be made in the Contract Price or Contract Times, or both, to the extent that they are attributable to the existence or location of any Underground Facility that was not shown or indicated or not shown or indicated with reasonable accuracy in the Contract Documents and that Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment in Contract Price or Contract Times, Owner or Contractor may make a Claim therefor as provided in Paragraph 10.05.

4.05 *Reference Points*

- A. Owner shall provide control points to establish reference points for construction. Contractor shall be responsible for laying out the Work, shall protect and preserve the established control points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Owner whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments provided by Owner.

4.06 *Hazardous Environmental Condition at Site*

- A. Reports and Drawings: Refer to Contract Drawings and Specifications, if any.
- B. Contractor shall not be responsible for any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work. Contractor shall be responsible for a Hazardous Environmental Condition created with any materials brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible.

- C. If Contractor encounters a Hazardous Environmental Condition or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, Contractor shall immediately: (i) secure or otherwise isolate such condition; (ii) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 6.17); and (iii) notify Owner's Representative (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any. Promptly after consulting with Engineer, Owner shall take such actions as are necessary to obtain required permits and provide Contractor the written Notice.
- D. Contractor shall not be required to resume Work in connection with such condition or in any affected area until after Owner have obtained any required permits related thereto and delivered written Notice to Contractor: (i) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work; or (ii) specifying any special conditions under which such Work may be resumed safely. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by Contractor, either party may make a Claim therefore as provided in Paragraph 10.05.
- E. If after receipt of such written Notice Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of an adjustment in Contract Price or Contract Times as a result of deleting such portion of the Work, then either party may make a Claim therefor as provided in Paragraph 10.05. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 7.
- F. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition: (i) was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be included within the scope of the Work, and (ii) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06.F shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

- G. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, Engineer, Consultants and the officers, directors, employees, agents, other consultants and subcontractors of each and any of them from and against all claims, costs, losses and damages arising out of or resulting from such hazardous condition, provided that: (i) any such claim, cost, loss or damage is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting there from, (ii) nothing in this Paragraph shall obligate Owner to indemnify any person or entity from and against the consequences of that person's or entity's conduct or activities, and (iii) nothing in this Paragraph 4.06.G shall obligate Owner to indemnify any person or entity in an amount in excess of the Tort Action Liability limitations for municipal corporations set forth in ORS Chapter 30.
- H. The provisions of Paragraphs 4.02, 4.03, and 4.04 do not apply to a Hazardous Environmental Condition uncovered or revealed at the Site.
- I. Waste generated by demolition operations must be categorized, managed and disposed of in accordance with applicable federal, state, and local solid waste and hazardous waste regulations. Upon request, the Contractor shall provide a copy of the waste determination analytical results and the Certificate of Acceptance, if applicable from the disposal site.

ARTICLE 5 – BONDS AND INSURANCE

5.01 Performance, Payment, and Other Bonds

- A. Contractor shall furnish Performance and Payment Bonds each in an amount equal to the Contract Price as security for the faithful performance and payment of all of Contractor's obligations under the Contract Documents. The Payment Bonds shall remain in effect until one (1) year after the date of Substantial Completion, except as provided otherwise by Laws or Regulations or by the Contract Documents. The Performance Bond shall remain in effect until two (2) years after the date of Substantial Completion, except as provided otherwise by Laws or Regulations or by the Contract Documents Contractor shall also furnish such other bonds as are required by the Contract Documents.
- B. All bonds shall be in the form prescribed by the Contract Documents except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in the list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. All bonds signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual's authority to bind the surety. The evidence of authority shall show that it is effective on the date the agent or attorney-in-fact signed each bond.

- C. If the surety on any bond furnished by Contractor is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements of Paragraph 5.01.B, Contractor shall promptly notify Owner and shall, within twenty (20) days after the event giving rise to such notification, provide another bond and surety, both of which shall comply with the requirements of Paragraphs 5.01.B and 5.02.

5.02 *Licensed Sureties and Insurers*

- A. All bonds and insurance required by the Contract Documents to be purchased and maintained by Contractor and shall be obtained from surety or insurance companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds or insurance policies for the limits and coverages so required. Such surety and insurance companies shall also meet such additional requirements and qualifications as may be provided in this Article 5.

5.03 *Certificates of Insurance*

- A. For the duration of the Contract and for a period of not less than the specific number of years after Final Completion of the Work in the table below, Contractor shall, at its own expense, procure and maintain insurance of the type and with the minimum limits as set forth below, on all operations, in companies authorized to do business in the State of Oregon and rated by A.M. Best's Rating as A:VIII or better, or in companies acceptable to Owner.

<p><u>Workers Compensation</u></p>	<p>Statutory Limits for states and federal (e.g., Longshoreman) where work is performed and/or where benefits can be claimed. Waiver of subrogation in favor of Owner shall be obtained. Coverage shall remain in effect for the duration of the Contract.</p> <p>Contractor and Subcontractors that employ workers who work under this Contract in the State of Oregon shall comply with ORS 656.017 and provide required Workers' Compensation coverage, unless such employers are exempt under ORS 656.126. Contractor shall ensure that each of its Subcontractors complies with these requirements.</p> <p>In accordance with ORS 279C.530, Contractor shall promptly, as due, make payment to any entity furnishing care for incidents due to sickness or injury, to employees of Contractor, of all sums which Contractor agrees to pay for such care and all moneys which Contractor deducted from the wages of employees pursuant to any law, contract, or agreement for the purpose of providing or paying for such service.</p>
<p><u>Employers Liability</u></p>	<p>\$1,000,000 – Each Occurrence \$1,000,000 – Disease: Each Employee \$1,000,000 – Disease: Policy Limit Coverage shall remain in effect for the duration of the Contract.</p>

<p><u>Commercial General Liability</u></p> <ul style="list-style-type: none"> Specifically including (or not excluding) and not limited to coverage for premises and operations, products and completed operations, personal and advertising injury, contractual liability, independent contractors, riggers liability, railroad liability (if working within fifty feet (50') of railroad, offsite operations and storage, and XCU* exposures. Completed operations coverage to remain in effect for minimum ten (10) years after the date of Substantial Completion. <p>*Explosion/Collapse/Underground</p>	<p>\$1,000,000 – Each Occurrence \$1,000,000 – for Personal and Advertising Injury Liability \$2,000,000 – Aggregate for Products-Completed Operations \$2,000,000 – General Aggregate</p>
<p><u>Automobile Liability</u></p> <ul style="list-style-type: none"> All owned, hired and non-owned vehicles. 	<p>\$2,000,000 – Each Occurrence, property damage or bodily injury Combined Single Limit (“CSL”)</p>
<p><u>Umbrella or Excess Liability</u></p> <ul style="list-style-type: none"> Excess of the primary Commercial General Liability, Automobile Liability and Employers Liability Limits above. Completed operations coverage shall remain in effect for a minimum of ten (10) years after the date of Substantial Completion 	<p>\$6,000,000 – Each Occurrence and Policy Aggregate for the Project</p> <p>Umbrella or Excess Liability coverage will follow form with and be at least as broad as the underlying coverages.</p>
<p><u>Builders Risk/Installation Floater</u></p>	<p>The required coverage and terms are outlined in Paragraph 5.06.</p> <p>Policy shall include coverage for owner provided material and equipment received and accepted by Contractor</p>
<p><u>Contractors Pollution Legal Liability</u></p>	<p>\$5,000,000 – Each Accident and Policy Aggregate for the Project</p>

<p><u>Additional Insured</u></p> <ul style="list-style-type: none"> • All coverages except Workers Compensation/Employers Liability and Professional Liability • Specifically including for completed operations exposure 	<p>Additional Insureds shall include: The Owner, its officers, Commissioners, agents and employees, as well as the parties to the Commission: Tualatin Valley Water District, its members, officers, boards, agents and employees and the City of Hillsboro, the Hillsboro Utilities Commission, its members, officers, boards, agents and employees, and the City of Beaverton, its members, officers, boards, agents and employees, as well as Stantec Consulting Services Inc., its members, officers, boards, agents and employees, and Carollo Engineers, Inc., its members, officers, boards, agents and employees, its related and affiliated companies, subconsultants, and the officers, directors, partners, shareholders, employees, agents and representatives thereof.</p>
<p><u>Other Requirements</u></p> <ul style="list-style-type: none"> • Contractor coverage is primary and non-contributory as respects any similar insurance maintained by Owner • If Contractor does not comply with this Article 5.03, Owner may, in addition to any other remedies it may have, terminate this Contract, subject to any provision of this Contract. • Unless otherwise specified above all coverages are occurrence based. 	

- B. Failure of Owner to demand such certificates or other evidence of Contractor's full compliance with these insurance requirements or failure of Owner to identify a deficiency in compliance from the evidence provided shall not be construed as a waiver of Contractor's obligation to maintain such insurance.
- C. Owner do not represent that insurance coverage and limits established in this Contract will be adequate to protect Contractor.
- D. The insurance and insurance limits required herein shall not be deemed as a limitation on Contractor's liability under the indemnities granted to Owner in the Contract Documents.
- E. Contractor shall cause each Subcontractor to purchase and maintain in full force and effect policies of insurance and limits as specified in the Contract Documents. Contractor will be responsible for the Subcontractors' coverage if the Subcontractors fail to purchase and maintain the required insurance. When requested by the Owner, Contractor will furnish copies of certificates of insurance establishing coverage for each Subcontractor.

5.04 *Contractor's Insurance*

- A. Contractor shall purchase and maintain such insurance as is appropriate for the Work being performed and will provide protection from claims set forth below which may arise out of or result from Contractor's performance of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable:
1. Claims under workers' compensation, disability benefits, and other similar employee benefit acts;
 2. Claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees;
 3. Claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees;
 4. Claims for damages insured by reasonably available personal injury liability coverage which are sustained:
 - a. By any person as a result of an offense directly or indirectly related to the employment of such person by Contractor, or
 - b. By any other person for any other reason;
 5. Claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom; and
 6. Claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.
- B. The policies of insurance required by this Paragraph 5.04 shall:
1. With respect to insurance required by Paragraphs 5.04.A.3 through 5.04.A.6 inclusive, be written on an occurrence basis, include as additional insureds (subject to any customary exclusion regarding professional liability) Owner and Engineer, and any other individuals or entities identified in these General Conditions, all of whom shall be listed as additional insureds, and include coverage for the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of all such additional insureds, and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby;

2. Include at least the specific coverages and be written for not less than the limits of liability provided in these General Conditions or required by Laws or Regulations, whichever is greater;
3. Include contractual liability insurance covering Contractor's indemnity obligations under Paragraphs 6.16 and 6.20;
4. Contain a provision or endorsement that the coverage afforded will not be canceled, materially changed or renewal refused until at least thirty (30) days' prior written Notice has been given to Owner and Contractor and to each other additional insured identified in these General Conditions to whom a certificate of insurance has been issued (and the certificates of insurance furnished by the Contractor pursuant to Paragraph 5.03 will so provide);
5. Remain in effect at least until final payment and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work in accordance with Paragraph 13.07; and
6. Include completed operations coverage.
 - a. Such insurance shall remain in effect ten (10) years after Substantial Completion.
 - b. Contractor shall furnish Owner additional insured identified in these General Conditions, to whom a certificate of insurance has been issued, evidence satisfactory to Owner and any such additional insured of continuation of such insurance at final payment and one year thereafter.

5.05 *Owner Liability Insurance*

- A. In addition to the insurance required to be provided by Contractor under Paragraph 5.04, Owner, at Owner's option, may purchase and maintain at Owner's expense Owner's own liability insurance as will protect Owner against claims which may arise from operations under the Contract Documents.

5.06 *Property Insurance*

- A. Contractor shall purchase and maintain property insurance upon the Work at the Site in the amount of the full replacement cost thereof. Contractor shall be responsible for any deductible or self-insured retention and shall:
 1. Include the interests of Owner, Contractor, Subcontractors, Engineer and any other individuals or entities identified herein, and the officers, directors, partners, employees, agents and other consultants and subcontractors of any of them each of

whom is deemed to have an insurable interest and shall be listed as an insured or additional insured;

2. Be written on a Builder's Risk "all-risk" or open peril or special causes of loss policy form that shall at least include insurance for physical loss and damage to the Work, temporary buildings, false work, and materials and equipment in transit and shall insure against at least the following perils or causes of loss: fire, lightning, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws and Regulations, water damage (other than that caused by flood), and such other perils or causes of loss as may be specifically required by the Contract Documents;
 - a. In addition to the above listed perils, the property insurance shall:
 - 1) Include flood, landslide or mudslide, seismic event, and damage to electrical apparatus from electrical currents.
 - 2) Cover expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects);
 - 3) Cover materials and equipment stored at the Site or at another location that was agreed to in writing by Owner prior to being incorporated in the Work, or materials and equipment in transit, provided that such materials and equipment have been included in an Application for Payment;
 - 4) Allow for partial utilization of the Work by Owner;
 - 5) Be in effect until final payment is made unless otherwise agreed to in writing by Owner and Contractor with thirty (30) days written Notice to each other additional insured to whom a certificate of insurance has been issued.
 - B. Owner shall not be responsible for purchasing and maintaining any property insurance specified in this Paragraph 5.06 to protect the interests of Contractor, Subcontractors, or others in the Work to the extent of any deductible amounts that are identified in this Article 5. The risk of loss within such identified deductible amount will be borne by Contractor, Subcontractors, or others suffering any such loss, and if any of them wishes property insurance coverage within the limits of such amounts, each may purchase and maintain it at the purchaser's own expense.
 - C. If Owner request in writing that other special perils be included in the property insurance policies provided under Paragraphs 5.06.A or 5.06.B, Contractor shall, if possible, include such insurance, and the cost thereof will be charged to Owner by appropriate Change Order. Prior to commencement of the Work at the Site, Contractor shall in

writing advise Owner whether or not such other insurance has been procured by Contractor.

5.07 *Waiver of Rights*

- A. Owner and Contractor intend that all policies purchased in accordance with Paragraph 5.06 will protect Owner, Contractor, Subcontractors, and Engineer, and all other individuals or entities identified in the Contract Documents as loss payees (and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them) in such policies and will provide primary coverage for all losses and damages caused by the perils or causes of loss covered thereby. All such policies shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any of the insureds or loss payees thereunder. Owner and Contractor waive all rights against each other and their respective officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them for all losses and damages caused by, arising out of or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Subcontractors and Engineer, and all other individuals or entities identified in these General Conditions as loss payees (and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them) under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by Owner as trustee or otherwise payable under any policy so issued.
- B. Any insurance policy maintained by Owner covering any loss, damage or consequential loss referred to in Paragraph 5.07.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against Contractor, Subcontractors, or Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them.

5.08 *Receipt and Application of Insurance Proceeds*

- A. Any insured loss under the policies of insurance required by Paragraph 5.06 will be adjusted with Contractor and made payable to Contractor as fiduciary for the insured, as their interests may appear, subject to the requirements of any applicable mortgage clause and of Paragraph 5.08.B. Contractor shall deposit in a separate account any money so received, and shall distribute it in accordance with such agreement as the party in interest may reach. If no other special agreement is reached the damaged Work shall be repaired or replaced, the moneys so received applied on account thereof and the Work and the cost thereof covered by an appropriate Change Order.

- B. Contractor as fiduciary shall have power to adjust and settle any loss with the insurers unless one of the party in interest shall object in writing within fifteen (15) days after the occurrence of loss to Contractor's exercise of this power. If such objection be made, Contractor as fiduciary shall make settlement with the insurers in accordance with such agreement as the party in interest may reach. If no such agreement among the party in interest is reached, Contractor as fiduciary shall adjust and settle the loss with the insurers and, if required in writing by any party in interest, Contractor as fiduciary shall give bond for the proper performance of such duties.

5.09 *Acceptance of Bonds and Insurance; Option to Replace*

- A. If either Owner or Contractor has any objection to the coverage afforded by or other provisions of the bonds or insurance required to be purchased and maintained by the other party in accordance with Article 5 on the basis of non-conformance with the Contract Documents, the objecting party shall so notify the other party in writing within ten (10) days after receipt of the certificates (or other evidence requested) required by Paragraph 2.01. Owner and Contractor shall each provide to the other such additional information in respect of insurance provided as the other may reasonably request. If either party does not purchase or maintain all of the bonds and insurance required of such party by the Contract Documents, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage. Without prejudice to any other right or remedy, the other party may elect to obtain equivalent bonds or insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and a Change Order shall be issued to adjust the Contract Price accordingly.

5.10 *Partial Utilization, Acknowledgment of Property Insurer*

- A. If Owner finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in Paragraph 14.05, no such use or occupancy shall commence before the insurers providing the property insurance pursuant to Paragraph 5.06 have acknowledged notice thereof and in writing effected any changes in coverage necessitated thereby. The insurers providing the property insurance shall consent by endorsement on the policy or policies, but the property insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy. The property insurance shall contain no partial occupancy restriction for utilization of the Project by Owner for the purpose intended.

ARTICLE 6 – CONTRACTOR’S RESPONSIBILITIES

6.01 *Supervision and Superintendence*

- A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction. Contractor shall not be responsible for the negligence of Owner or Engineer in the design or specification of a specific means, method, technique, sequence, or procedure of construction, which is shown or indicated in and expressly required by the Contract Documents.
- B. At all times during the progress of the Work, Contractor shall assign one competent project manager and one competent project superintendent, approved by Owner, for the duration of the project, who shall not be replaced without prior written Notice to Owner (except under extraordinary circumstances).

6.02 *Labor; Working Hours*

- A. Refer to Specification Section 01 14 19 for approved Site working hours.
- B. In accordance with ORS 279C.520, no person shall be employed for more than 10 hours in any 1 day, or 40 hours in any 1 week, except in cases of necessity, emergency, or where the public policy absolutely requires it. In such cases, the person so employed shall be paid at least time and a half the person’s regular rate of pay for all time worked in excess of 40 hours in one week; when work week is 8 hours for 5 consecutive days or 10 hours for 4 consecutive days, and for time worked on Saturday and on any legal holiday specified in ORS 279C.540. This provision will not apply if the Contractor is currently a party to a collective bargaining agreement in effect with any labor organization. Contractor shall cause a circular to be posted in accordance with ORS 279C.545 and ORS 279C.840 regarding claim rights and limitations for overtime pay and benefits.

6.03 *Services, Materials, and Equipment*

- A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start-up, and completion of the Work.
- B. All materials and equipment incorporated into the Work shall be as specified or, if not specified, shall be of good quality and new, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Contract Documents

shall expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.

- C. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents. Failure by Contractor to comply with this Paragraph will be at the sole expense of Contractor.

6.04 *Progress Schedule*

- A. Contractor shall adhere to the Progress Schedule established in accordance with the Specification Section 01 32 16.
 - 1. Proposed adjustments in the Progress Schedule whether or not resulting in changes to the Contract Times shall be indicated with each Monthly Progress Schedule submittal.
 - 2. Proposed adjustments in the Progress Schedule that will change the Contract Times shall be submitted in accordance with the requirements of Article 12. Approved adjustments in Contract Times may only be made by a Change Order.

6.05 *Substitutes and "Or-Equals"*

- A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the specification or description is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or-equal" item or no substitution is permitted, other items of material or equipment or material or equipment of other Suppliers may be submitted to Owner for review as described in the Specification Section 01 33 00 Submittal Procedures.

6.06 *Concerning Subcontractors, Suppliers, and Others*

- A. Contractor shall not employ any Subcontractor, Supplier, or other individual or entity (including those acceptable to Owner as indicated in Paragraph 6.06.B), whether initially or as a replacement, against whom Owner may have reasonable objection. Contractor shall not be required to employ any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against whom Contractor has reasonable objection.
- B. If the Contract Documents require the identity of certain Subcontractors, Suppliers, or other individuals or entities to be submitted to Owner in advance for acceptance by

- Owner by a specified date, and if Contractor has submitted a list thereof in accordance with the Contract Documents, Owner's acceptance (either in writing or by failing to make written objection thereto by the date indicated for acceptance or objection in the Bidding Documents or the Contract Documents) of any such Subcontractor, Supplier, or other individual or entity so identified may be revoked on the basis of reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity, and the Contract Price will be adjusted by the difference in the cost occasioned by such replacement, and an appropriate Change Order will be issued. No acceptance by Owner of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of any right of Owner to reject defective Work.
- C. Contractor shall be fully responsible to Owner for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as Contractor is responsible for Contractor's own acts and omissions. Nothing in the Contract Documents:
1. Shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between Owner and any such Subcontractor, Supplier or other individual or entity; nor
 2. Shall create any obligation on the part of Owner to pay or to see to the payment of any moneys due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.
- D. Contractor shall be solely responsible for scheduling and coordinating the Work of Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work under a direct or indirect contract with Contractor.
- E. Contractor shall require all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work to communicate to or with Owner through Contractor.
- F. The divisions and sections of the Specifications and the identifications of any Drawings shall not control Contractor in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.
- G. All Work performed for Contractor by a Subcontractor or Supplier will be pursuant to an appropriate agreement between Contractor and the Subcontractor or Supplier which specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer. Whenever any such agreement is with a Subcontractor or Supplier who is listed as a loss payee on the property insurance provided in Paragraph 5.06, the agreement between the Contractor and the

Subcontractor or Supplier will contain provisions whereby the Subcontractor or Supplier waives all rights against Owner, Contractor, Engineer, and all other individuals or entities to be listed as insureds or loss payees (and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them) for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work. If the insurers on any such policies require separate waiver forms to be signed by any Subcontractor or Supplier, Contractor will obtain the same.

H. Owner may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to Contractor on account of Work performed for Contractor by a particular Subcontractor or Supplier

6.07 *Patent Fees and Royalties*

- A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if, to the actual knowledge of Owner, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by Owner in the Contract Documents.
- B. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, and its officers, directors, members, partners, employees, agents, consultants, and subcontractors from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device specified in the Contract Documents, but not identified as being subject to payment of any license fee or royalty to others required by patent rights or copyrights.
- C. Contractor shall, at its sole expense, defend and pay all damages, fees, royalties, and costs awarded in any proceeding brought against Owner, its employees agents and consultants, in which it is claimed that the manufacture, sale, or use of any treatment process, material and equipment, or parts thereof furnished thereunder constitutes an infringement of any patent or other proprietary information right, provided Contractor is promptly notified of the commencement of any such proceedings. Contractor's indemnity, as to use, applies only when infringement occurs from the normal use for which such treatment process,

material, and equipment were designed. Owner may, at its option, be represented at any such proceeding.

1. If such manufacture, sale, or use is held in any such proceeding to constitute an infringement and is enjoined, Contractor, at its expense, shall either procure for Owner the right to manufacture, sell, and use such treatment process, material and equipment; or pay the costs for damages, fees, or royalties.

6.08 *Permits*

- A. Unless otherwise provided in the Contract Documents, Contractor shall obtain and pay for all construction permits and licenses. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of opening of Proposals, or, if there are no Proposals, on the Effective Date of the Contract. Owner shall pay all charges of utility owners for connections for providing permanent service to the Work.
- B. Contractor shall conform to the requirements of all permits required to complete the Project. Such requirements are hereby made a part of these Contract Documents as fully and completely as though the same were set forth herein.

6.09 *Laws and Regulations*

- A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.
- B. If Contractor performs any Work knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work. However, it shall not be Contractor's responsibility to make certain that the Specifications and Drawings are in accordance with Laws and Regulations, but this shall not relieve Contractor of Contractor's obligations under Paragraph 3.03.
- C. Changes in Laws or Regulations not known at the time of opening of Proposals (or, on the Effective Date of the Contract if there were no Proposals) having an effect on the cost or time of performance of the Work shall be the subject of an adjustment in Contract Price or Contract Times. If Owner and Contractor are unable to agree on entitlement to

or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

6.10 *Prevailing Wage Rates*

- A. Contractor shall fully comply with ORS 279C.800 through 279C.870, and the Davis Bacon Act, concerning payment of not less than prevailing wage rates; each worker in each trade or occupation employed in the performance of the Work under these Contract Documents, either by Contractor, Subcontractor, or other person doing or contracting to do the whole or any part of the Work, shall be paid not less than the applicable prevailing wage rates for state or federal wages, whichever is higher. Prevailing wage publications applicable to this contract are the Prevailing Wage Rates for Public Works Contracts in Oregon effective February 1, 2020, and the Prevailing Wage Rate Amendment effective February 1, 2020 and the PWR Apprenticeship Rates effective January 1, 2020. These can be found at http://www.oregon.gov/boli/WHD/PWR/Pages/pwr_state.aspx. The applicable Federal Davis Bacon Wage Rates are the General Decision: OR20200061, 1/03/2020. These can be found at <http://www.beta.SAM.gov>.
- B. Contractor and its subcontractors shall submit complete certified statements of payrolls and submit them as required under ORS 279C.845. If the Contractor or subcontractors fail to submit the required statements, Owner will deduct 25% of what is owed for Work performed until the required statements are submitted. Contractor shall pay the Commissioner of the Bureau of Labor and Industries the fee required by ORS 279C.825.

6.11 *Discrimination*

- A. In accordance with ORS 279A.110, Contractor will not discriminate against minority, women, or emerging small businesses in obtaining required subcontracts.

6.12 *Payment, Contributions, Liens, Withholding*

- A. In accordance with ORS 279C.505, Contractor shall:
1. Make payment promptly, as due, to all persons supplying to the Contractor labor or material for the performance of the work provided for in the contract;
 2. Pay all contributions or amounts due the Industrial Accident Fund from the Contractor or subcontractor incurred in the performance of the contract;
 3. Not permit any lien or claim to be filed or prosecuted against the Owner on account of any labor or material furnished;
- B. Pay to the Department of Revenue all sums withheld from employees under ORS 316.167.

- C. Pursuant to ORS 279C.515, if Contractor fails, neglects or refuses to make prompt payment on any claim for labor or services furnished to Contractor or Subcontractor by any person in connection with the Work as such claim becomes due, Owner may pay the claim and charge the amount of the payment against funds due or to become due to the Contractor under this Contract. Payment of claims in this manner shall not relieve Contractor or Contractor's Surety from obligation with respect to any unpaid claims. A notice of claim on the Payment Bond may also be filed under ORS 279C.605.

6.13 *Contractor's Written Drug Testing Program*

- A. Contractor's written drug testing program shall require drug testing for all new subject employees or alternatively, require testing of all subject employees every 12 months on a random selection basis and require testing of a subject employee when the contractor has reasonable cause to believe the subject employee is under the influence of drugs.
 - 1. A drug-testing program that meets the above requirements is deemed a "qualifying employee drug-testing program." An employee is a "subject employee" only if that employee will be working on the public improvement project job site.
 - 2. Contractor represents and warrants that the qualifying employee drug-testing program is in place at the time of Contract execution and will continue in effect for the entire duration of the Contract. Further, the Owner performance obligation (which includes without limitation, the Owner's obligation to make payment) is contingent upon Contractor's compliance with this representation and warranty.
- B. Contractor requires each subcontractor providing labor for the Project to:
 - 1. Demonstrate to Contractor that it has a qualifying employee drug-testing program for the subcontractor's subject employees, and represents and warrants to the Contractor that the qualifying employee drug-testing program is in place at the time of subcontract execution and will continue in full force and effect for the duration of the subcontract; or
 - 2. Contractor shall require that the subcontractor's subject employees participate in the Contractor's Qualifying Employee Drug Testing Program for the duration of the subcontract.

6.14 *Environmental Pollution*

- A. In compliance with ORS 279C.525, Owner has knowledge of federal, state and local agencies of which have enacted ordinances or regulations relating to environmental pollution and the preservation of natural resources that may affect the performance of the Contract. Contractor shall strictly comply requirements of such ordinances or regulations

while performing the Work. Refer to Specification Section 01 57 00 for the list regulatory agencies.

6.15 *Taxes*

- A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

6.16 *Use of Site and Other Areas*

A. *Limitation on Use of Site and Other Areas:*

1. Contractor shall not enter upon nor use property not under Owner's control until appropriate easements have been executed and a copy is on file at the Site.
2. Contractor shall confine construction equipment, the storage of materials and equipment, and the operations of workers to the Site and other areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and other areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof, or of any adjacent land or areas resulting from the performance of the Work.
3. Should any claim be made by any such owner or occupant because of the performance of the Work, Contractor shall promptly settle with such other party by negotiation or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law.
4. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner, its officers, Commissioners, boards, agents and employees, as well as the parties to the Commission: Tualatin Valley Water District, its members, officers, boards, agents and employees, the City of Hillsboro, the Hillsboro Utilities Commission, its members, officers, boards, agents and employees, the City of Beaverton, its members, officers, boards, agents and employees, Stantec Consulting Services Inc., its members, officers, boards, agents and employees, and Carollo Engineers, Inc., its members, officers, boards, agents and employees from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused by or based upon Contractor's performance of the Work.

- B. *Removal of Debris During Performance of the Work:* During the progress of the Work Contractor shall keep the Site and other areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.
 - 1. In accordance with ORS 279C.510, Contractor shall salvage or recycle construction and demolition debris if feasible and cost effective.
- C. *Cleaning:* Prior to Substantial Completion of the Work, Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work, Contractor shall remove from the Site all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.
- D. *Loading Structures:* Contractor shall not load nor permit any part of any structure (either buried or above grade) to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

6.17 *Emergencies*

- A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent threatened damage, injury, or loss. Contractor shall give Owner prompt written Notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If Owner determines that a change in the Contract Documents is required because of the action taken by Contractor in response to such an emergency, a Work Change Directive and/or Change Order will be issued.

6.18 *Continuing the Work*

- A. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as permitted by Paragraph 15.04 or as Owner and Contractor may otherwise agree in writing.

6.19 *Contractor's General Warranty and Guarantee*

- A. Contractor warrants and guarantees to Owner that all Work will be performed in a professional, competent, good and workmanlike manner, in the best interests of Owner, with high professional standards and in strict compliance with the provisions of the Contract Documents and all Laws and Regulations, that the finished Work shall be fit for its intended use, compatible with the Project and that the Work shall be free from defects

in design, materials, and workmanship. Contractor further warrants that all materials, equipment, and supplies, to the maximum extent reasonably possible unless otherwise approved by Owner in writing shall be new, merchantable, and of the most suitable grade and fit for their intended purpose, which warranties shall be transferable to Owner, and further shall furnish satisfactory evidence to Owner as to the kind and quality of the materials and equipment incorporated into the Work. Any professional services supplied by Contractor as part of the Work shall be performed in accordance with generally accepted standards and practices and free from error. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:

1. Abuse, modification, or improper maintenance or operation by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or
 2. Normal wear and tear under normal usage.
- B. Except where a longer period is provided for specific equipment or facilities in the Contract Documents, Contractor warrants and guarantees the Work for a period of two (2) years from the date of Substantial Completion. Without limitation of any other rights or remedies of Owner, if any defect in the Work in violation of the foregoing warranties arises or the Work is determined by Owner not to have been completed in accordance with the Contract Documents, Contractor shall, upon receipt of written Notice of such defect, promptly furnish, at no cost to Owner, design and engineering, labor, equipment, and materials necessary to correct such defect and cause the Work to comply fully with the foregoing warranties and Contract Documents. This obligation shall survive both Final Completion of and Final Payment for the Work. Owner shall not be invoiced for any of the costs of warranty work and Contractor shall not be entitled to submit any Claim for an increased fee arising therefrom. None of the following will constitute a waiver of Warranty for Work that is not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents:
1. Observations by Owner's Representative;
 2. Observations by Owner's Program Manager
 3. Observations by Engineer;
 4. Payment by Owner of any progress or final payment;
 5. The issuance of a certificate of Substantial Completion by Owner or any payment related thereto by Owner;
 6. Use or occupancy of the Work or any part thereof by Owner;

7. Any review and approval of a Shop Drawing or Sample submittal or the issuance of a notice of acceptability by Owner;
 8. Any inspection, test, or approval by others; or
 9. Any correction of defective Work by Owner.
- C. Contractor shall promptly, without expense to the Owner:
1. Correct all damage to the Site, equipment or contents which is the result of the use of materials, equipment or workmanship which are inferior, defective, or not in accordance with the Contract Documents;
 2. Correct any Work, material, equipment, or contents of building, structure or Site disturbed in fulfilling the guarantee.
 3. Repairs, replacements or changes made under the warranty requirements shall be warranted for the specified warranty period, or for one year, beginning on the date of the acceptance of the repairs, replacements or changes, whichever is longer.
 4. If the Contractor fails within ten (10) days to proceed to comply with the terms of this warranty, Owner may have the defects corrected. Contractor and the Contractor's surety shall be liable for all expense incurred. In case of an emergency where delay would cause serious loss or damage, repairs may be made without notice to Contractor and Contractor or Contractor's surety shall pay the cost.

6.20 *Indemnification*

- A. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless the Owner, its officers, Commissioners, agents and employees, as well as the parties to the Commission: Tualatin Valley Water District, its members, officers, boards, agents and employees, the City of Hillsboro, the Hillsboro Utilities Commission, its members, officers, boards, agents and employees, and the City of Beaverton, its members, officers, boards, agents and employees, as well as Stantec Consulting Services Inc., its members, officers, boards, agents and employees, and Carollo Engineers, Inc., its members, officers, boards, agents and employees from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, including the loss of use resulting therefrom but only to the extent caused by any act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable .

- B. In any and all claims against the Owner, its officers, Commissioners, agents and employees, as well as parties to the Commission: Tualatin Valley Water District, its members, officers, boards, agents and employees, the City of Hillsboro, the Hillsboro Utilities Commission, its members, officers, boards, agents and employees, and the City of Beaverton, its members, officers, boards, agents and employees, as well as Stantec Consulting Services Inc., its members, officers, boards, agents and employees, Carollo Engineers, Inc., its members, officers, boards, agents and employee, and Engineer, its members, officers, boards, agents and employees by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 6.20.A shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.
- C. The indemnification obligations of Contractor under Paragraph 6.20.A shall not extend to the liability of Engineer and Engineer's officers, directors, members, partners, employees, agents, consultants and subcontractors arising out of:
 - 1. The preparation or approval of, or the failure to prepare or approve maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or
 - 2. Giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.

6.21 *Delegation of Professional Design Services*

- A. Contractor will not be required to provide professional design services unless such services are specifically required by the Contract Documents for a portion of the Work or unless such services are required to carry out Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. Contractor shall not be required to provide professional services in violation of applicable law.
- B. If professional design services or certifications by a design professional related to systems, materials or equipment are specifically required of Contractor by the Contract Documents, Owner will specify all performance and design criteria that such services must satisfy. Contractor shall cause such services or certifications to be provided by a properly licensed professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings and other submittals prepared by such professional. Shop Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to Owner.

- C. Owner shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications or approvals performed by such design professionals, provided Owner have specified to Contractor all performance and design criteria that such services must satisfy.
- D. Pursuant to this Paragraph 6.21, Owner's review and approval of design calculations and design drawings will be only for the limited purpose of checking for conformance with performance and design criteria given, the design concept expressed in the Contract Documents, and for the stamp of a professional engineer. Owner review and approval of Shop Drawings and other submittals (except design calculations and design drawings) will be only for the purpose stated Specification Section 01 33 00.
- E. Contractor shall not be responsible for the adequacy of the performance or design criteria required by the Contract Documents.

ARTICLE 7 – OTHER WORK AT THE SITE

7.01 Related Work at Site

- A. Owner may perform other work related to the Project at the Site with Owner employees, or through other direct contracts therefor, or have other work performed by utility Owner. Owner may also have agreements with third parties performing different work on the Site unrelated to the Project. If such other work referred to in this paragraph is not noted in the Contract Documents, then:
 - 1. Written Notice thereof will be given to Contractor prior to starting any such other work; and
 - 2. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times that should be allowed as a result of such other work, a Claim may be made therefor as provided in Paragraph 10.05.
- B. Contractor shall afford each other contractor who is a party to such a direct contract, each utility owner, and Owner, if Owner is performing other work with Owner's employees, proper and safe access to the Site, provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work, and properly coordinate the Work with theirs. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering such work; provided, however, that Contractor may cut or alter others' work with the written consent of Owner and the others whose work will be affected. The duties and responsibilities of Contractor under this Paragraph are for the benefit of such utility owner and other

contractors to the extent that there are comparable provisions for the benefit of Contractor in said direct contracts between Owner and such utility owner and other contractors.

- C. If the proper execution or results of any part of Contractor's Work depends upon work performed by others under this Article 7, Contractor shall inspect such other work and promptly report to Owner in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.

7.02 *Coordination*

- A. If Owner intends to contract with others for the performance of other work on the Project at the Site, or to contract with others to coordinate other work unrelated to the Project at the Site, the following will be set forth in the General Requirements:
 - 1. The individual or entity who will have authority and responsibility for coordination of the activities among the various parties and contractors will be identified;
 - 2. The specific matters to be covered by such authority and responsibility will be itemized; and
 - 3. The extent of such authority and responsibilities will be provided.
- B. Unless otherwise provided in the General Requirements, Owner shall have sole authority and responsibility for such coordination.

7.03 *Legal Relationships*

- A. Paragraphs 7.01.A and 7.02 are not applicable for utilities not under the control of Owner.
- B. Each other direct contract of Owner under Paragraph 7.01.A shall provide that the other contractor is liable to Owner and Contractor for the reasonable direct delay and disruption costs incurred by Contractor as a result of the other contractor's wrongful actions or inactions.
- C. Contractor shall be liable to Owner and any other contractor under direct contract to Owner for the reasonable direct delay and disruption costs incurred by such other contractor as a result of Contractor's wrongful action or inactions.

ARTICLE 8 – OWNER RESPONSIBILITIES

8.01 *Communications to Contractor*

- A. Except as otherwise provided in Contract Documents, Owner shall issue all communications to Contractor through the designated Owner’s Representative. The duties, responsibilities and the limitations of authority of Owner’s Representative during construction are set forth in the in Paragraph 8.03.

8.02 *Replacement of Owner’s Representative*

- A. In the event that an identified individual’s employment is terminated or he or she is unable to perform the role of Owner’s Representative, Owner shall replace Owner’s Representative; such replacement shall assume the full status under the Contract Documents of the former Owner’s Representative.

8.03 *Owner’s Representative’s Authority*

- A. Owner’s Representative will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. All matters in question and other matters between Owner and Contractor arising prior to the date final payment is due relating to the acceptability of the Work, and the interpretation of the requirements of the Contract Documents pertaining to the performance of the Work.
- B. Engineer shall promptly advise Owner’s Representative as to its clarifications and interpretations. Upon approval by Owner’s Representative, such written clarifications and interpretations will be communicated to Contractor and will be binding on Owner and Contractor.
- C. If Contractor believes that any such decision entitles them to an adjustment in the Contract Price or Contract Times or both, a Claim may be made under Paragraph 10.05 by submitting a Contractor Change Notification.

8.04 *Determinations for Unit Price Work*

- A. Owner’s Representative will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Owner’s Representative will review with Contractor the preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Owner’s Representative’s written decision thereon will be final and binding (except as modified by Owner’s Representative to reflect changed factual conditions or more accurate data) upon Owner and Contractor, subject to the provisions of Paragraph 10.05.

8.05 *Limitations on Owner Representative's Responsibilities*

- A. Neither Owner's Representative's authority or responsibility under this Paragraph 8.05 or under any other provision of the Contract Documents nor any decision made by Owner's Representative in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Owner's Representative shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by Owner to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for an employee or agent of any of them.
- B. Owner's Representative shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.
- C. Owner's Representative has the authority to reject Work which they believe to be defective, or that Engineer believes will not produce a completed Project that conforms to the Contract Documents or that will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Engineer may recommend Owner require special inspection or testing of the Work as provided in Paragraph 13.03, whether or not the Work is fabricated, installed, or completed.
- D. Owner's Representative will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.
- E. Owner's Representative's review of all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Paragraph 14.07.A and Specification Section 01 77 00 will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals that the results certified indicate compliance with, the Contract Documents.

8.06 *Furnish Data*

- A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

8.07 *Pay When Due*

- A. Owner shall make uncontested payments to Contractor when they are due as provided in Paragraphs 14.02.C and 14.07.C.

8.08 *Lands and Easements; Reports and Tests*

- A. Owner duties with respect to providing lands and easements and providing engineering surveys to establish reference points are set forth in Paragraphs 4.01 and 4.05. Paragraph 4.02 refers to Owner identifying and making available to Contractor copies of reports of explorations and tests of subsurface conditions and drawings of physical conditions relating to existing surface or subsurface structures at the Site.

8.09 *Insurance*

- A. Owner responsibilities, if any, with respect to purchasing and maintaining liability and property insurance are set forth in Article 5.

8.10 *Change Orders*

- A. Owner are obligated to execute Change Orders as indicated in Paragraph 10.03.

8.11 *Inspections, Tests, and Approvals*

- A. Owner responsibility with respect to certain inspections, tests, and approvals is set forth in Paragraph 13.03.B.

8.12 *Undisclosed Hazardous Environmental Condition*

- A. Owner responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 4.06.

8.13 *Compliance with Safety Program*

- A. While at the Site, Owner employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Owner has been informed pursuant to Specification Section 01 35 29.

ARTICLE 9 – ENGINEER'S STATUS DURING CONSTRUCTION

9.01 *Visits to Site*

- A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of Contractor's

executed Work. Based on information obtained during such visits and observations, Owner and Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will endeavor to guard Owner against defective Work.

- B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 9.06. Particularly, but without limitation, during or as a result of Engineer's visits or observations of Contractor's Work, Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

9.02 *Project Representative*

- A. If authorized by Owner, Engineer may furnish a Resident Project Representative to assist Owner in providing more extensive observation of the Work. The authority and responsibilities of any such Resident Project Representative and assistants will be as provided in Paragraph 9.06. If Owner designates another representative or agent to represent Owner at the Site who is not Engineer's consultant, agent or employee, the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in the General Requirements.

9.03 *Authorized Variations in Work*

- A. Engineer may recommend minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. These may be accomplished by a Design Clarification from the Engineer, issued by Owner to Contractor, who shall perform the Work involved promptly. If Owner or Contractor believes that a Work Change Directive justifies an adjustment in the Contract Price or Contract Times, or both, and the party are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

9.04 *Rejecting Defective Work*

- A. Engineer may recommend Owner reject Work which Engineer believes to be defective, or that Engineer believes will not produce a completed Project that conforms to the Contract Documents or that will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Engineer may also recommend special inspection or testing of the Work as provided in Paragraph 13.03, whether or not the Work is fabricated, installed, or completed.

9.05 *Submittals and Shop Drawings*

- A. In connection with Engineer's authority, and limitations thereof, as to Shop Drawings and Samples, see Specification Section 01 33 00.
- B. In connection with Engineer's authority, and limitations thereof, as to design calculations and design drawings submitted in response to a delegation of professional design services, if any, see Paragraph 6.21.

9.06 *Limitations on Engineer's Authority and Responsibilities*

- A. Neither Engineer's authority or responsibility under this Article 9 or under any other provision of the Contract Documents nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.
- B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.
- C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.
- D. Engineer's review of all maintenance and operating instructions, certificates of inspection, tests, and approvals, and other documentation required to be for Substantial Completion and Final Completion will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals that the results certified indicate compliance with, the Contract Documents.

- E. The limitations upon authority and responsibility set forth in this Paragraph 9.06 shall also apply to the Resident Project Representative, if any, and assistants, if any.

9.07 *Compliance with Safety Program*

- A. While at the Site, Engineer's employees and representatives will be expected to comply with the specific applicable requirements of Contractor's safety programs of which Engineer has been informed pursuant General Requirement Section 01 35 29.

ARTICLE 10 – CHANGES IN THE WORK; CLAIMS

10.01 *Authorized Changes in the Work*

- A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work by a Change Order, or a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).
- B. Owner may, in anticipation of possibly ordering an addition, deletion, or revision to the Work, issue a request for quote for Contractor to prepare a proposal of additional or deductive cost and/or times for Owner contemplated changes in the Work. Owner is not responsible for any cost incurred by Contractor associated with the preparation of the proposal. Contractor's written proposal shall be transmitted to Owner's Representative promptly, but not later than fourteen (14) days after Contractor's receipt of Owner written request and shall remain a firm offer for a period not less than forty-five (45) days after receipt thereof. Contractor is not authorized to proceed on an Owner contemplated change in the Work prior to Contractor's receipt of an executed Change Order or Work Change Directive authorizing such change into the Work.
- C. If Owner and Contractor are unable to agree on entitlement to, or on the amount or extent, if any, of an adjustment in the Contract Price or Contract Times, or both, that should be allowed as a result of a Work Change Directive, a Claim may be made therefor as provided in Paragraph 10.05.

10.02 *Unauthorized Changes in the Work*

- A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents as amended, modified, or supplemented as provided in Paragraph 3.04, except in the case of an emergency as provided in Paragraph 6.17 or in the case of uncovering Work as provided in Paragraph 13.04.

10.03 *Execution of Change Orders*

A. Owner and Contractor shall execute appropriate Change Orders covering:

1. Changes in the Work which are: (i) ordered by Owner pursuant to Paragraphs 10.01.A and 10.01.B, (ii) required because of acceptance of defective Work under Paragraph 13.08.A or Owner's correction of defective Work under Paragraph 13.09, or (iii) agreed to by the parties;
2. Changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive; and
3. Changes in the Contract Price or Contract Times which embody the substance of any written decision rendered by Owner pursuant to Paragraph 10.05; provided that, in lieu of executing any such Change Order, an appeal may be taken from any such decision in accordance with the provisions of the Contract Documents and applicable Laws and Regulations, but during any such appeal, Contractor shall carry on the Work and adhere to the Progress Schedule as provided in Paragraph 6.04.

B. In signing a Change Order, Owner and Contractor acknowledge and agree that:

1. Contractor acknowledges and agrees on behalf of itself, all Subcontractors, and all Suppliers, that the stipulated adjustment includes adjustment for all work contained in the Change Order, plus all adjustment for the interruption of schedules, extended field overhead costs, delay, and all impact, ripple effect or cumulative impact on all other work under this Contract.
2. The Change Order constitutes the full mutual accord and satisfaction for the change, and that the time and/or cost under the Change Order constitutes the total equitable adjustment owed to Contractor, all Subcontractors, and all Suppliers as a result of the change.
3. Contractor, on behalf of itself, all Subcontractors, and all Suppliers, agrees to waive all rights, without exception or reservation of any kind whatsoever, to file any further Claim related to this Change Order. No further Claim or request for equitable adjustment of any type shall arise out of or as a result of this Change Order or the impact of this Change Order on the remainder of the Work under this Contract.

C. All Change Orders shall contain the following terms:

1. The equitable adjustment (to the Contract Price and Contract Times) set forth in this Change Order comprises the total adjustment due the Contractor,

2. All Subcontractors and all Suppliers costs for the Work or change defined in the Change Order, including impact on other work.

10.04 *Notification to Surety*

- A. If the provisions of any bond require notice to be given to a surety of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times), the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

10.05 *Claims*

- A. *Notice:* Written Notice stating the general nature of each Claim shall be delivered by the claimant the other party to the Contract promptly (but in no event later than seven (7) days) after the start of the event giving rise thereto or the Claim shall be forever barred, unless Owner allows additional time, in writing, for claimant to submit additional or more accurate data in support of such Claim, dispute, or other matter. The responsibility to substantiate a Claim shall rest with the party making the Claim. Within thirty (30) days of Notice of Claim, claimant shall provide the following: (i) a statement of the amount or extent of the Claim, dispute, or other matter, (ii) supporting data explaining the reason, amount, and/or extent of the Claim, dispute, or other matter and, (iii) a written statement that the adjustment claimed is the entire adjustment to which the claimant believes it is entitled as a result of said event. Claimant's failure to submit such supporting data shall be a waiver of any and all Claims related to the data. A Claim for an adjustment in Contract Price shall be prepared in accordance with the provisions of Paragraph 12.01.A. A Claim for an adjustment in Contract Times shall be prepared in accordance with the provisions of Paragraph 12.02.B.
- B. Owner will review each Claim and, within thirty (30) days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any, take one of the following actions in writing:
 1. Deny the Claim in whole or in part;
 2. Approve the Claim; or
 3. Notify the party that Owner is unable to resolve the Claim if, in the Owner's sole discretion, it would be inappropriate for the Owner to do so. For purposes of further resolution of the Claim, such notice shall be deemed a denial.
- C. In the event that Owner does not take action on a Claim within said thirty (30) days, the Claim shall be deemed denied.

- D. Owner written action under Paragraph 10.05.B or denial pursuant to Paragraphs 10.05.B.3 or 10.05.C will be final and binding upon Owner and Contractor, unless Owner or Contractor invoke the dispute resolution procedure set forth in Article 16 within thirty (30) days of such action or denial.
- E. No Claim for an adjustment in Contract Price or Contract Times will be valid if not submitted in accordance with this Paragraph 10.05.

ARTICLE 11 – COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

11.01 *Cost of the Work*

- A. *Costs Included:* The term Cost of the Work means the sum of all costs, except those excluded in Paragraph 11.01.B, necessarily incurred and paid by Contractor in the proper performance of the Work. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, the costs to be reimbursed to Contractor will be only those additional or incremental costs required because of the change in the Work or because of the event giving rise to the Claim. Except as otherwise may be agreed to in writing by Owner, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall not include any of the costs itemized in Paragraph 11.01.B, and shall include any and all the following items:
 - 1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor. Such employees shall include, without limitation, superintendents, foremen, and other personnel employed full time on the Work. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by Owner.
 - 2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to Contractor unless Owner deposit funds with Contractor with which to make payments, in which case the cash discounts shall accrue to Owner. All trade discounts, rebates and refunds and returns from sale of surplus materials and equipment shall accrue to Owner, and Contractor shall make provisions so that they may be obtained.

3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, who will then determine which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 11.01.
4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories and surveyors) employed for services specifically related to the Work with approval by Owner.
5. Supplemental costs including the following:
 - a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.
 - b. Cost, including transportation and maintenance, of all materials, water, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.
 - c. Equipment costs shall be calculated using the rental rate listed for such equipment in the Equipment Watch Rental Rate Blue Book for Owned Equipment. Such rental rate will be used to compute payments for equipment whether the equipment is under the Contractor's control through direct ownership, leasing, renting, or another method of acquisition. The rental rate to be applied for use of each item of equipment will be the rate resulting in the least total cost to Owner for the total period of use, and in general shall be the monthly rental rate divided by 176 times the actual hours used. If it is deemed necessary by the Contractor to use equipment not listed in the publication specified herein, an equitable rental rate for the equipment will be established by Owner. Contractor may furnish cost data which may assist Owner in the establishment of the rental rate. Individual pieces of equipment or tools having a replacement value of \$500 or less, whether or not consumed by use, will be considered to be small tools and no payment will be made therefore.
 - d. The rental time to be paid for equipment on the Site will be the time the equipment is in productive operation on the extra Work being performed and, in addition, will include the time required to move the equipment to the location of the extra Work and return it to the original location or to another location requiring no

more time than that required to return it to its original location. Rental time will not be allowed while equipment is inoperative due to breakdowns. The rental time of equipment on the work Site will be computed subject to the following:

- 1) When hourly rates are listed, any part of an hour less than 30 minutes of operation will be considered to be half-hour of operation, and any part of an hour in excess of 30 minutes will be considered one hour of operation.
 - 2) When daily rates are listed, any part of a day less than 4 hours operation will be considered to be half-day of operation. When owner-operated equipment is used to perform extra Work to be paid for on a time and materials basis, the Contractor will be paid for the operator(s), as set forth in Article 11.01.
- e. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, as imposed by Laws and Regulations.
 - f. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
 - g. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with Paragraph 5.06), provided such losses and damages have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's fee.
 - h. The cost of utilities, fuel, and sanitary facilities at the Site.
 - i. Minor expenses such as, long distance telephone calls, telephone service at the Site, express and courier services, and similar petty cash items in connection with the Work.
 - j. The costs of premiums for all bonds and insurance Contractor is required by the Contract Documents to purchase and maintain.

B. *Costs Excluded:* The term Cost of the Work shall not include any of the following items:

1. Payroll costs and other compensation of Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, safety managers,

engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 11.01.A.1 or specifically covered by Paragraph 11.01.A.4, all of which are to be considered administrative costs covered by the Contractor's fee.

2. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.
 3. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.
 4. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
 5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraphs 11.01.A.
- C. *Contractor's Fee:* When all the Work is performed on the basis of cost-plus, Contractor's fee shall be determined as set forth in the Contract. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, Contractor's fee shall be determined as set forth in Paragraph 12.01.C.
- D. *Documentation:* Whenever the Cost of the Work for any purpose is to be determined pursuant to Paragraphs 11.01.A and 11.01.B, Contractor will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to Owner's Representative an itemized cost breakdown together with supporting data.

11.02 Allowances

- A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner's Representative.
- B. *Cash Allowances:*
1. Contractor agrees that:

- a. The cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
 - b. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.
- C. Prior to final payment, an appropriate Change Order will be issued as recommended by Owner to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

11.03 *Unit Price Work*

- A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Contract.
- B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Proposals and determining an initial Contract Price. Determinations of the actual quantities and classifications of Unit Price Work performed by Contractor will be made by Owner subject to the provisions of Paragraph 8.04.
- C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.
- D. Owner or Contractor may make a Claim for an adjustment in the Contract Price in accordance with Paragraph 10.05 if:
 - 1. The quantity of any item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Specification Section 01 22 13; and
 - 2. There is no corresponding adjustment with respect to any other item of Work; and
 - 3. Contractor believes that Contractor is entitled to an increase in Contract Price as a result of having incurred additional expense or Owner believe that Owner are entitled to a decrease in Contract Price and the parties are unable to agree as to the amount of any such increase or decrease.

ARTICLE 12 – CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES

12.01 *Change of Contract Price*

- A. The Contract Price may only be changed by a Change Order. Any Claim for an adjustment in the Contract Price shall be based on written Notice submitted by the party making the Claim to Owner in accordance with the provisions of Paragraph 10.05.
- B. The value of any Work covered by a Change Order or of any Claim for an adjustment in the Contract Price will be determined as follows:
 - 1. Where the Work involved is covered by unit prices contained in the Contract Documents, by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 11.03); or
 - 2. Where the Work involved is not covered by unit prices contained in the Contract Documents, by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 12.01.C.2); or
 - 3. Where the Work involved is not covered by unit prices contained in the Contract Documents and agreement to a lump sum is not reached under Paragraph 12.01.B.2, on the basis of the Cost of the Work (determined as provided in Paragraph 11.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 12.01.C).
- C. *Contractor's Fee:* The Contractor's fee for overhead and profit shall be determined as follows:
 - 1. A mutually acceptable fixed fee; or
 - 2. If a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
 - a. For costs incurred under Paragraphs 11.01.A.1 and 11.01.A.2, the Contractor's fee shall not exceed 10 percent;
 - b. For costs incurred under Paragraph 11.01.A.3, the Contractor's fee shall be five percent;
 - c. Where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraphs 12.01.C.2.a and 12.01.C.2.b is that the Subcontractor who actually performs the Work, at whatever tier, will be paid a fee of 10 percent of the costs incurred by such Subcontractor under Paragraphs 11.01.A.1 and 11.01.A.2 and that any higher tier

Subcontractor and Contractor will each be paid a fee of five percent of the amount paid to the next lower tier Subcontractor;

- d. No fee shall be payable on the basis of costs itemized under Paragraphs 11.01.A.4, 11.01.A.5, and 11.01.B;
- e. The amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in Contractor's fee by an amount equal to five percent of such net decrease; and
- f. When both additions and credits are involved in any one change, the adjustment in Contractor's fee shall be computed on the basis of the net change in accordance with Paragraphs 12.01.C.2.a through 12.01.C.2.e, inclusive.

12.02 *Change of Contract Times*

- A. The Contract Times (or Milestones) may only be changed by a Change Order. Any Claim for an adjustment in the Contract Times shall be based on written submitted by the party making the Claim to Owner in accordance with the provisions of Paragraph 10.05.
- B. Any adjustment of the Contract Times (or Milestones) covered by a Change Order or any Claim for an adjustment in the Contract Times will be determined in accordance with the provisions of this Article 12 and Specification Section 01 32 16.

12.03 *Delays*

- A. Where Contractor is prevented from completing any part of the Work within the Contract Times (or Milestones) due to delay beyond the control of Contractor, the Contract Times (or Milestones) will be extended in an amount equal to the time lost due to such delay if a Claim is made therefor as provided in Paragraph 12.02.A. Delays beyond the control of Contractor shall include, but not be limited to, acts or neglect by Owner, acts or neglect of utility owner or other contractors performing other work as contemplated by Article 7, or Acts of God.
- B. If Owner, Engineer, or other contractors or utility owner performing other work for Owner as contemplated by Article 7, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times (or Milestones), or both. Contractor's entitlement to an adjustment of the Contract Times (or Milestones) is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times (or Milestones).

- C. If Contractor is delayed in the performance or progress of the Work by Acts of God, acts or failures to act of utility owner not under the control of Owner, or other causes not the fault of and beyond control of Owner and Contractor, then Contractor shall be entitled to an equitable adjustment in Contract Times (or Milestones), if such adjustment is essential to Contractor's ability to complete the Work within the Contract Times. Such an adjustment shall be Contractor's sole and exclusive remedy for the delays described in this Paragraph 12.03.C.
- D. Owner, Engineer, and their officers, directors, members, partners, employees, agents, consultants, or subcontractors shall not be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.
- E. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times (or Milestones) for delays within the control of Contractor. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of Contractor.
- F. In no event shall Owner be liable to Contractor, any Subcontractor, any Supplier, or any other person or organization, or to any surety for or employee or agent of any of them, for damages arising out of or resulting from:
 - 1. Delays caused by or within the control of Contractor; or
 - 2. Delays beyond the control of both Owner and Contractor including but not limited to fires, floods, epidemics, abnormal weather conditions, acts of God, or acts or neglect by utility owner or other contractors performing other work as contemplated by Article 7, unless provided for in Paragraph 15.01.
 - 3. Nothing in this Paragraph 12.03.F bars a change in Contract Price pursuant to this Article 12 to compensate Contractor due to delay, interference, or disruption directly attributable to actions or inactions of Owner or anyone for whom Owner is responsible.

ARTICLE 13 – TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

13.01 *Notice of Defects*

- A. Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor. All defective Work may be rejected, corrected, or accepted as provided in this Article 13.

13.02 *Access to Work*

- A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and governmental agencies with jurisdictional interests will have access to the Site and the Work at reasonable times for their observation, inspection, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's safety procedures and programs so that they may comply therewith as applicable.

13.03 *Tests and Inspections*

- A. Contractor shall give Owner's Representative minimum 48-hours' notice of readiness of the Work for all required inspections, tests, or approvals and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.
- B. Owner shall employ and pay for the services of an independent testing laboratory to perform all inspections, tests, or approvals required by the Contract Documents except:
 - 1. For inspections, tests, or approvals covered by Paragraphs 13.03.C and 13.03.D below;
 - 2. That costs incurred in connection with tests or inspections conducted pursuant to Paragraph 13.03.C shall be paid as provided in Paragraph 13.03.D; and
 - 3. As otherwise specifically provided in the General Requirements.
- C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Owner the required certificates of inspection or approval.
- D. Contractor shall be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests, or approvals required for Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work; or acceptance of

materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work. Such inspections, tests, or approvals shall be performed by organizations acceptable to Owner and Engineer.

- E. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Owner, Contractor shall, if requested by Owner, uncover such Work for observation.
- F. Uncovering Work as provided in Paragraph 13.03.E shall be at Contractor's expense unless Contractor has given Owner timely notice of Contractor's intention to cover the same and Owner have not acted with reasonable promptness in response to such notice.

13.04 *Uncovering Work*

- A. If any Work is covered prior inspection by Owner, it must, if requested by Owner's Representative, be uncovered for Owner's observation and replaced at Contractor's expense.
- B. If Owner considers it necessary or advisable that covered Work be observed by Owner or inspected or tested by others, Contractor, at Owner's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Owner may require, that portion of the Work in question, furnishing all necessary labor, material, and equipment.
 - 1. If it is found that the uncovered Work is defective, Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and Owner shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefor as provided in Paragraph 10.05.
 - 2. If the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times (or Milestones), or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, Contractor may make a Claim therefor as provided in Paragraph 10.05.

13.05 *Owner May Stop the Work*

- A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work shall not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.
- B. In the event Owner determines, in its sole discretion, that a violation of any required permit exists, Owner may order Contractor to stop the Work, or any portion thereof, until the cause of such violation has been eliminated.
- C. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times (or Milestones) for delays as a result of the conditions described in this Paragraph 13.05.

13.06 *Correction or Removal of Defective Work*

- A. Promptly after receipt of written Notice, Contractor shall correct all defective Work, whether or not fabricated, installed, or completed, or, if the Work has been rejected by Owner, remove it from the Project and replace it with Work that is not defective. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or removal (including but not limited to all costs of repair or replacement of work of others).
- B. When correcting defective Work under the terms of this Paragraph 13.06 or Paragraph 13.07, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.

13.07 *Correction Period*

- A. Pursuant to ORS 12.135(2), if within ten (10) years after the date of Substantial Completion (or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents) or by any specific provision of the Contract Documents, any Work is found to be defective, or if the repair of any damages to the land, water or groundwater or areas made available for Contractor's use by Owner or permitted by Laws and Regulations as contemplated in Paragraph 6.16.A is found to be defective, Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:
 - 1. Repair such defective land, water or groundwater, or areas; or

2. Correct such defective Work; or
 3. If the defective Work has been rejected by Owner, remove it from the Project and replace it with Work that is not defective, and
 4. Satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others or other land or areas resulting therefrom.
- B. If Contractor does not promptly comply with the terms of Owner written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others) will be paid by Contractor.
- C. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications.
- D. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this Paragraph 13.07, the correction period hereunder with respect to such Work will be in accordance with Paragraph 13.07.A or be extended for a period of one year after such correction or removal and replacement has been satisfactorily completed, whichever is longer.
- E. Contractor's obligations under this Paragraph 13.07 are in addition to any other obligation or warranty. The provisions of this Paragraph 13.07 shall not be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

13.08 *Acceptance of Defective Work*

- A. If, instead of requiring correction or removal and replacement of defective Work, Owner prefers to accept it, Owner may do so. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) attributable to Owner's evaluation of and determination to accept such defective Work (and for the diminished value of the Work to the extent not otherwise paid by Contractor pursuant to this sentence. If any such acceptance occurs prior to final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work, and Owner shall be entitled to an appropriate decrease in the Contract Price, reflecting the diminished value of Work so

accepted. If the party are unable to agree as to the amount thereof, Owner may make a Claim therefor as provided in Paragraph 10.05. If the acceptance occurs after such recommendation, an appropriate amount will be paid by Contractor to Owner.

13.09 *Owner May Correct Defective Work*

- A. If Contractor fails within a reasonable time after written Notice from Owner to correct defective Work, or to remove and replace rejected Work as required by Engineer in accordance with Paragraph 13.06.A, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any other provision of the Contract Documents, Owner may, after seven (7) days written Notice to Contractor, correct, or remedy any such deficiency.
- B. In exercising the rights and remedies under this Paragraph 13.09, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, take possession of Contractor's tools, appliances, construction equipment and machinery at the Site, and incorporate in the Work all materials and equipment stored at the Site or for which Owner have paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner representatives, agents and employees, and Owner other contractors and consultants access to the Site to enable Owner to exercise the rights and remedies under this Paragraph.
- C. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 13.09 will be charged against Contractor, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and Owner shall be entitled to an appropriate decrease in the Contract Price. If the party are unable to agree as to the amount of the adjustment, Owner may make a Claim therefor as provided in Paragraph 10.05. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.
- D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 13.09.

ARTICLE 14 – PAYMENTS TO CONTRACTOR AND COMPLETION

14.01 *Schedule of Values*

- A. The Schedule of Values in Section 4.03 of the Contract will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Owner's Representative. Progress payments shall be in accordance with Specification Section 01 22 13.

14.02 *Progress Payments*

A. *Applications for Payments:*

1. On or before the 10th day of each month, Contractor shall submit to Owner's Representative for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents.
2. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location approved by Owner in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that Owner has received the materials and equipment free and clear of all Liens and evidence that the materials and equipment are covered by appropriate property insurance or other arrangements to protect Owner interest therein, all of which must be satisfactory to Owner. Owner shall pay up to seventy-five percent (75%) until materials or equipment are delivered to the Site and incorporated into the Work in accordance with the Contract Documents.
3. Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated with prior Applications for Payment.
4. The amount of retainage with respect to progress payments will be as stipulated in the Section 5 of the Contract.

B. *Review of Applications:*

1. Owner's Representative will, within ten (10) days after receipt of each Application for Payment, either indicate in writing a recommendation of payment or return the Application to Contractor indicating in writing Owner's reasons for refusing to

recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.

2. Owner's Representative's recommendation of any payment requested in an Application for Payment will constitute a representation by Owner, based on Owner's Representative's observations of the executed Work and the accompanying data and schedules, that to the best of Owner's Representative's knowledge, information and belief:
 - a. The Work has progressed to the point indicated;
 - b. The quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, the results of any subsequent tests called for in the Contract Documents, a final determination of quantities and classifications for Unit Price Work under Paragraph 8.04 and any other qualifications stated in the recommendation); and
 - c. The conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Owner's Representative's responsibility to observe the Work.
3. By recommending any such payment, Owner's Representative will not thereby be deemed to have represented that:
 - a. Inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Owner's Representative in the Contract Documents; or
 - b. There may not be other matters or issues between the party that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.
4. Neither Owner's Representative's review of Contractor's Work for the purposes of recommending payments nor Owner's Representative's recommendation of any payment, including final payment, will impose responsibility on Owner's Representative's:
 - a. To supervise, direct, or control the Work, or
 - b. For the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or

- c. For Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work, or
 - d. To make any examination to ascertain how or for what purposes Contractor has used the moneys paid on account of the Contract Price, or
 - e. To determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.
5. Owner's Representative may refuse to recommend the whole or any part of any payment if, in Owner's Representative's opinion, it would be incorrect to make the representations stated in Paragraph 14.02.B.2. Owner's Representative may also refuse to recommend any such payment, because of subsequently discovered evidence or the results of subsequent inspections or tests, revise or revoke any such payment recommendation previously made, to such extent as may be necessary in Owner's Representative's opinion to protect Owner from losses, which may include, but is not limited to the following:
- a. The Work is defective, or completed Work has been damaged, requiring correction or replacement;
 - b. The Contract Price has been reduced by Change Orders;
 - c. Owner has been required to correct defective Work or complete Work in accordance with Paragraph 13.09; or
 - d. Owner's Representative's has actual knowledge of the occurrence of any of the events enumerated in Paragraph 15.02.A.
 - e. Failure of Contractor to diligently prosecute the Work and maintain progress to assure completion within the Contract Times; or
 - f. Failure of the Contractor to maintain bonds, certificates of insurance, or other information as required under the Contract.
 - g. Failure of Contractor to submit monthly progress schedules, required reports, de minimis list, and as-built and survey data drawing information.
 - h. Any reasonable doubt that the Work can be completed for the balance then unpaid.
 - i. Claims have been filed or reasonable evidence indicating probable filing of Claims on account of Contractor's acts or omissions.

- j. Security interests have been filed in connection with the Work, except where Contractor has delivered a specific Bond satisfactory to Owner to secure the satisfaction and discharge of such security interests.
- k. Failure to obtain and maintain required permits and licenses.
- l. Failure to maintain a representative on Site as required by Contract Documents.

C. Payment Becomes Due:

- 1. Thirty (30) days after Owner's Representative's recommendation of payment, the amount recommended will (subject to the provisions of Paragraph 14.02.D) become due, and when due will be paid by Owner to Contractor.

D. Reduction in Payment:

- 1. Owner may refuse to make payment of the full amount recommended by Owner's Representative's because:
 - a. Claims have been made against Owner on account of Contractor's performance or furnishing of the Work;
 - b. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens;
 - c. There are other items entitling Owner to a set-off against the amount recommended;
 - d. Owner have actual knowledge of the occurrence of any of the events enumerated in Paragraphs 14.02.B.5.a through 14.02.B.5.c or Paragraph 15.02.A; or
 - e. Liability for liquidated damages incurred by Contractor.
- 2. If Owner refuses to make payment of the full amount recommended by Owner's Representative, Owner will give Contractor immediate written Notice stating the reasons for such action and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, when Contractor remedies the reasons for such action.
- 3. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by Paragraph 14.02.C.1.

E. *Subcontractor Payments*

1. In accordance with ORS 279C.505, Contractor shall: (i) make payment promptly, as due to all persons supplying to Contractor, labor or material for the prosecution of the Work under these Contract Documents, (ii) pay all contributions or amounts due the Industrial Accident Fund from Contractor or Subcontractor incurred in the performance of the Work, (iii) not permit any lien or Claim to be filed or prosecuted against Owner, on account of labor or material furnished, and (iv) pay to the Department of Revenue all sums withheld from employees pursuant to ORS 316.167.
2. In accordance with ORS 279C.515:
 - a. If Contractor fails, neglects, or refuses to make prompt payment to Subcontractors or Suppliers of any Claim as such Claim becomes due, Owner may pay such Claim and deduct the amount of the payment against funds due Contractor. The payment of a Claim in the manner authorized shall not relieve Contractor or Contractor's surety from obligation with respect to any unpaid Claims.
 - b. If Contractor or first-tier Subcontractor fails, neglects, or refuses to make payments within thirty (30) days after receipt of payment from Owner, Contractor or first-tier Subcontractor shall owe amount due plus interest charges commencing at the end of the ten (10) day period that payment is due and ending upon payment.
 - c. If Contractor or first-tier Subcontractor fails, neglects, or refuses to make payments to person furnishing labor or materials, person may file a complaint with the Construction Contractors Board.
3. In accordance with ORS 279C.580:
 - a. Contractor shall include in each subcontract for property or services entered in to by Contractor or first-tier Subcontractor, including material Suppliers, for the purpose of performing Work under this Contract, a clause that obligates Contractor to pay first-tier Subcontractor for satisfactory performance under its subcontract within ten (10) days out of such amounts as are paid to Contractor by Owner.
 - b. Contractor shall include in each subcontract a clause that obligates Contractor to pay first-tier Subcontractor an interest penalty of three (3) times the discount rate on ninety (90) day commercial paper in effect at the Federal Reserve Bank in the Federal Reserve district that includes Oregon on the date that is thirty (30) days after the date when payment was received from Owner, but the rate of interest shall not exceed thirty percent (30%). The amount of interest may not be waived.

- c. Contractor shall require first-tier Subcontractors to included same clauses in subcontracts with lower tiered Subcontractors and Suppliers in connection with this Project.

14.03 *Contractor's Warranty of Title*

- A. Contractor warrants and guarantees that title to all Work, materials, and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to Owner no later than the time of payment free and clear of all Liens.
- B. Contractor shall ensure that Subcontractors from whom Contractor obtains materials and equipment do not retain, encumber, or reserve title to any such items. Contractor shall indemnify, defend, and hold Owner harmless from any such claims by Contractor's Subcontractors.
- C. The care, custody, and control of the Work shall remain with Contractor until such Work has been accepted in writing by Owner and shall thereupon pass to Owner unless Owner notifies Contractor in writing that such care, custody, and control is assumed by Owner at an earlier date. The taking of possession of such Work prior to Final Completion, shall not constitute the assumption of care, custody, and control of such Work until such time as such Work has either been accepted in writing by Owner or Contractor has been notified in writing as set forth herein.

14.04 *Substantial Completion*

- A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner's Representative in writing that the entire Work is substantially complete (except for items specifically listed by Contractor as incomplete) and request that Owner's Representative issue a certificate of Substantial Completion.
- B. Promptly after Contractor's notification, Owner's Representative, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Owner's Representative does not consider the Work substantially complete, Owner's Representative will notify Contractor in writing giving the reasons therefor.
- C. If Owner's Representative considers the Work substantially complete, Owner's Representative shall prepare a certificate of Substantial Completion which shall fix the date of Substantial Completion. There shall be attached to the certificate a list of items to be completed or corrected before final payment.
- D. At the time of delivery of the certificate of Substantial Completion, Owner's Representative will deliver to Contractor a written recommendation as to division of responsibilities pending final payment between Owner and Contractor with respect to

security, operation, safety, and protection of the Work, maintenance, heat, utilities, insurance, and warranties and guarantees.

- E. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to remove its property, complete or correct items, provide warranty services and participate in optimization process as specified in the Contract Documents.

14.05 *Partial Utilization*

- A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner's Representative and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions:
 - 1. Owner at any time may request Contractor in writing to permit Owner to use or occupy any such part of the Work which Owner believe to be ready for its intended use and substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor and Owner will follow the procedures of Paragraph 14.04.A through E for that part of the Work.
 - 2. Contractor at any time may notify Owner's Representative in writing that Contractor considers any such part of the Work ready for its intended use and substantially complete and request Owner's Representative to issue a certificate of Substantial Completion for that part of the Work.
 - 3. Within a reasonable time after either such request, Owner's Representative, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Owner's Representative does not consider that part of the Work to be substantially complete, Owner's Representative will notify Contractor in writing giving the reasons therefor. If Owner's Representative considers that part of the Work to be substantially complete, the provisions of Paragraph 14.04 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.
 - 4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 5.10 regarding property insurance.

14.06 *Final Inspection & Final Completion of the Work*

- A. Upon written Notice from Contractor that the entire Work or an agreed portion thereof is complete, Owner's Representative and Engineer will promptly make a final inspection with Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

14.07 *Final Payment*

A. *Application for Payment:*

1. After Contractor has, in the opinion of the Owner's Representative, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Specification Section 01 77 00, all documentation and other documents, Contractor may make application for final payment following the procedure for progress payments.
2. The final Application for Payment shall be accompanied (except as previously delivered) by:
 - a. All documentation called for in the Contract Documents, including but not limited to the evidence of insurance required by Paragraph 5.04;
 - b. Consent of the surety, if any, to final payment;
 - c. A list of all Claims against Owner that Contractor believes are unsettled; and
 - d. Complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of or Liens filed in connection with the Work;
 - e. Final signed De Minimis list per Exhibit L.
3. In lieu of the releases or waivers of Liens specified in Paragraph 14.07.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (i) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (ii) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner might in any way be responsible, or which might in any way result in Liens or other burdens on Owner's property, have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien.

B. Review of Application and Acceptance:

1. If, on the basis of the Owner's Representative's observation of the Work during construction and final inspection, and review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Owner's Representative is satisfied that the Work has been completed and Contractor's other obligations under the Contract Documents have been fulfilled, Owner's Representative will, within ten (10) days after receipt of the final Application for Payment, indicate in writing to Contractor acceptance of final payment. At the same time, Owner's Representative will also give written Notice to Contractor that the Work is acceptable subject to the provisions of Paragraph 14.09. Otherwise, Owner's Representative will return the Application for Payment to Contractor, indicating in writing the reasons for refusing final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.

C. Payment Becomes Due:

1. Thirty (30) days after the acceptance by Owner's Representative of the final Application for Payment and accompanying documentation by the Owner's Representative, the amount recommended less any sum Owner is entitled to set off against by the Owner's Representative's recommendation, including but not limited to liquidated damages, will become due and will be paid by Owner to Contractor.

14.08 *Final Completion Delayed*

- A. If, through no fault of Contractor, final completion of the Work is significantly delayed, and if Owner shall, upon receipt of Contractor's final Application for Payment (for Work fully completed and accepted), and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by Owner for Work not fully completed or corrected is less than the retainage stipulated in the Contract, and if bonds have been furnished as required in Paragraph 5.01, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by Contractor to the Owner's Representative with the Application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

14.09 *Waiver of Claims*

A. The making and acceptance of final payment will constitute:

1. A waiver of all Claims by Owner against Contractor, except Claims arising from unsettled Liens, from defective Work appearing after final inspection pursuant to Paragraph 14.06, from failure to comply with the Contract Documents or the terms

of any special guarantees specified therein, or from Contractor's continuing obligations under the Contract Documents; and

2. A waiver of all Claims by Contractor against Owner other than those previously made in accordance with the requirements herein and expressly acknowledged by Owner in writing as still unsettled.

ARTICLE 15 – SUSPENSION OF WORK AND TERMINATION

15.01 Owner May Suspend Work

- A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than ninety (90) consecutive days by notice in writing to Contractor which will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be granted an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension if Contractor makes a Claim therefor as provided in Paragraph 10.05.
- B. Contractor's Claim for an adjustment in the Contract Price for any such suspension of Work shall not exceed five thousand dollars (\$5,000.00) for each business day that Work is suspended. Contractor shall waive all Claims to the abovementioned stipulated damages for the first three (3) business days of suspended Work following the day of discovery if the suspension is caused by one or more of the following Site conditions: findings of (i) cultural, archeological, or historical significance; (ii) plant and/or wildlife in areas of the natural habitat; (iii) conditions preventing Work due to permit compliance requirements; (iv) Hazardous Environmental Condition; and/or (v) evidence of criminal or tortious acts.
- C. In no event shall an equitable adjustment be made for the benefit of Contractor to the extent the suspension arises from faulty workmanship or material, improper supervision, Contractor's failure to carry out orders or perform and provision of the Contract Documents.
- D. Any delays associated with the Pre-Mobilization Standby, for which Contractor is compensated shall not be subject to this Paragraph 15.01.

15.02 Owner May Terminate for Cause

- A. The occurrence of any one or more of the following events will justify termination for cause:
 1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers

- or suitable materials or equipment or failure to adhere to the Baseline Schedule established under Paragraph 2.04 as adjusted monthly pursuant to Paragraph 6.04);
2. Contractor's disregard of Laws or Regulations of any public body having jurisdiction;
 3. Contractor's repeated disregard of the authority of Owner's Representative; or
 4. Contractor's violation in any substantial way of any provisions of the Contract Documents.
- B. If one or more of the events identified in Paragraph 15.02.A occur, Owner may, after giving Contractor (and surety) seven (7) days written Notice of its intent to terminate the services of Contractor:
1. Exclude Contractor from the Site, and take possession of the Work and of all Contractor's tools, appliances, construction equipment, and machinery at the Site, and use the same to the full extent they could be used by Contractor (without liability to Contractor for trespass or conversion);
 2. Incorporate in the Work all materials and equipment stored at the Site or for which Owner have paid Contractor but which are stored elsewhere; and
 3. Complete the Work as Owner may deem expedient.
- C. If Owner proceed as provided in Paragraph 15.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Owner arising out of or relating to completing the Work, such excess will be paid to Contractor. If such claims, costs, losses, and damages exceed such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Owner's Representative as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this Paragraph, Owner shall not be required to obtain the lowest price for the Work performed.
- D. Notwithstanding Paragraphs 15.02.B and 15.02.C, Contractor's services will not be terminated if Contractor begins within seven (7) days of receipt of notice of intent to terminate to correct its failure to perform and proceeds diligently to cure such failure within no more than thirty (30) days of receipt of said notice.

- E. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue. Any retention or payment of moneys due Contractor by Owner will not release Contractor from liability.
- F. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 5.01.A, the termination procedures of that bond shall supersede the provisions of Paragraphs 15.02.B and 15.02.C.

15.03 *Owner May Terminate For Convenience*

- A. Upon seven days (7) written Notice to Contractor, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract or a portion thereof. In such case, Contractor shall be paid for (without duplication of any items):
 - 1. Completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
 - 2. Expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses;
 - 3. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred in settlement of terminated contracts with Subcontractors, Suppliers, and others; and
 - 4. Reasonable expenses directly attributable to termination.
- B. Contractor shall not be paid on account of loss of anticipated profits or revenue or other economic loss arising out of or resulting from such termination.

15.04 *Contractor May Stop Work or Terminate*

- A. If, through no act or fault of Contractor, (i) the Work is suspended for more than ninety (90) consecutive days by Owner or under an order of court or other public authority, or (ii) Owner's Representative fails to act on any Application for Payment within thirty (30) days after it is submitted, or (iii) Owner fails for thirty (30) days to pay Contractor any sum finally determined to be due, then Contractor may, upon seven (7) days' written Notice to Owner, and provided Owner does not remedy such suspension or failure within

that time, terminate the Contract and recover from Owner payment on the same terms as provided in Paragraph 15.03.

- B. In lieu of terminating the Contract, and without prejudice to any other right or remedy, if Owner's Representative has failed to act on an Application for Payment within thirty (30) days after it is submitted, or Owner has failed for thirty (30) days to pay Contractor any sum finally determined to be due, Contractor may, seven (7) days after written Notice to Owner, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this Paragraph 15.04 are not intended to preclude Contractor from making a Claim under Paragraph 10.05 for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this Paragraph.

ARTICLE 16 – DISPUTE RESOLUTION

- A. If a dispute arises between the parties relating to this Contract, the procedure below shall be followed as a condition precedent to litigation:
1. The aggrieved party will notify the other party in writing describing the dispute and requested relief (Notice of Dispute). The parties shall hold a meeting promptly, but in no event later than thirty (30) days from the initial written Notice of Dispute, attended by persons with decision-making authority regarding the dispute, to attempt in good faith to negotiate a resolution of the dispute; provided, however, that no such meeting shall be deemed to vitiate or reduce the obligations and liabilities of the parties thereunder or be deemed a waiver by a party hereto of any remedies to which such party would otherwise be entitled thereunder unless otherwise agreed to by the party in writing.
 2. If, following thirty (30) days of such meeting, the parties have not succeeded in negotiating a resolution of the dispute, either party may notify the other of its election to submit the dispute to non-binding mediation (Election to Mediate). The parties shall exercise good faith efforts to select a mediator who is an Oregon member of the National Academy of Distinguished Neutrals or such other person as they mutually agree. The mediator shall be compensated equally by both parties. Mediation will be conducted in Portland, Oregon, unless both parties agree in writing otherwise. Both parties agree to exercise good faith efforts to resolve disputes covered by this Section through this mediation process.
 3. Mediation shall be completed within sixty (60) days from the date of Election to Mediate unless the parties agree otherwise. The parties hereby expressly agree that no claim or dispute arising under the terms of this Contract shall be resolved other than first through mediation and, only in the event said mediation efforts fail, through litigation. If a party requests mediation and the other party fails to respond within

ten (10) days of the Election to Mediate, or if the party fail to agree on a mediator within ten (10) days of the Election to Mediate, or if mediation is completed within sixty (60) days without resolution, then the aggrieved party may commence litigation and assert all claims under this Contract.

ARTICLE 17 – MISCELLANEOUS

17.01 Giving Notice

A. Whenever any provision of the Contract Documents requires the giving of written Notice, it will be deemed to have been validly given if:

1. Delivered in e-Builder to Owner’s Representative or Contractor’s project manager;
or
2. Delivered at or sent by registered or certified mail, postage prepaid addressed to all of the following:

If to Owner:

Willamette Water Supply System Commission
David Kraska, Program Director
1850 SW 170th Avenue
Beaverton, OR 97003

If to Contractor:

Tapani, Inc.
Tod Tapani, Vice President
1904 SE 6th Place
Battle Ground, WA 98604

17.02 Computation of Times

A. When any period of time is referred to in the Contract Documents by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

17.03 *Cumulative Remedies*

- A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract Documents. The provisions of this Paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

17.04 *Survival of Obligations*

- A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion, and acceptance of the Work or termination or completion of the Contract or termination of the services of Contractor.

17.05 *Controlling Law*

- A. This Contract is to be governed by the law of the state of Oregon.

17.06 *Headings*

- A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

4C.3

PLW_1.3 Pipeline Contractor	Cost Proposal	Variance from Low Bid	Cost Score (700)	Safety Approach (75)	Firm Experience and Qualifications (25)	Key Staff Quals and Team Organization (75)	Project Understanding and Approach (125)	Total Non-Cost Score (300)	Total Non-Cost Score Adjusted (300)	Total Score (1,000)
Emery and Sons	\$30,761,202.00	\$1,772,062.00	660	50	23	70	110	253	286	945
James W. Fowler	\$31,900,000.00	\$2,910,860.00	636	60	23	68	114	266	300	936
Kerr Contractors	\$31,677,449.00	\$2,688,309.00	641	40	17	52	61	170	192	832
Kiewit Infrastructure West	\$41,257,100.00	\$12,267,960.00	492	60	23	67	112	263	296	788
Moore Excavation	\$30,064,310.00	\$1,075,170.00	675	50	21	56	92	219	247	922
S.J. Louis	\$29,723,000.00	\$733,860.00	683	35	18	50	59	162	183	865
Tapani	\$28,989,140.00	\$0.00	700	45	18	61	113	237	267	967

Client: Willamette Water Supply Program
 Project: RFP-PLW-030220
 Description: PLW_1.3 Pipeline Construction

Item No.	Item Description	Unit	Qty	Emery and Sons Construction Group		James W. Fowler Co.		Kerr Contractors Oregon, Inc.		Kiewit Infrastructure West		Moore Excavation, Inc.		S.J. Louis Construction, Inc.		Tapani	
				Bid Unit Price	Extended Bid Price	Bid Unit Price	Extended Bid Price	Bid Unit Price	Extended Bid Price	Bid Unit Price	Extended Bid Price	Bid Unit Price	Extended Bid Price	Bid Unit Price	Extended Bid Price	Bid Unit Price	Extended Bid Price
1	Perform Pre-Mobilization	LS	1	\$ 290,000.00	\$ 290,000.00	\$ 300,000.00	\$ 300,000.00	\$ 63,000.00	\$ 63,000.00	\$ 400,000.00	\$ 400,000.00	\$ 300,000.00	\$ 300,000.00	\$ 250,000.00	\$ 250,000.00	\$ 275,000.00	\$ 275,000.00
2	Provide Pre-Mobilization Standby	MO	3	\$ 43,700.00	\$ 131,100.00	\$ 1,000.00	\$ 3,000.00	\$ 44,000.00	\$ 132,000.00	\$ 1.00	\$ 3.00	\$ 15,000.00	\$ 45,000.00	\$ 6,000.00	\$ 18,000.00	\$ 25,000.00	\$ 75,000.00
3	Perform Mobilization	LS	1	\$1,220,000.00	\$ 1,220,000.00	\$ 1,270,000.00	\$ 1,270,000.00	\$3,200,000.00	\$ 3,200,000.00	\$1,650,000.00	\$ 1,650,000.00	\$1,200,000.00	\$ 1,200,000.00	\$1,000,000.00	\$ 1,000,000.00	\$ 875,000.00	\$ 875,000.00
4	Perform Demobilization	LS	1	\$ 290,000.00	\$ 290,000.00	\$ 325,000.00	\$ 325,000.00	\$ 20,000.00	\$ 20,000.00	\$ 480,000.00	\$ 480,000.00	\$ 325,000.00	\$ 325,000.00	\$ 310,000.00	\$ 310,000.00	\$ 300,000.00	\$ 300,000.00
5	Temporary Haul Roads and Construction Entrances	LS	1	\$ 600,000.00	\$ 600,000.00	\$ 150,000.00	\$ 150,000.00	\$ 200,000.00	\$ 200,000.00	\$ 350,000.00	\$ 350,000.00	\$ 600,000.00	\$ 600,000.00	\$ 80,000.00	\$ 80,000.00	\$ 350,000.00	\$ 350,000.00
6	Perform Health and Safety Activities	LS	1	\$ 900,000.00	\$ 900,000.00	\$ 175,000.00	\$ 175,000.00	\$ 10,000.00	\$ 10,000.00	\$ 500,000.00	\$ 500,000.00	\$ 75,000.00	\$ 75,000.00	\$ 45,000.00	\$ 45,000.00	\$ 300,000.00	\$ 300,000.00
7	Storm Water, Sediment, and Erosion Control	LS	1	\$ 350,000.00	\$ 350,000.00	\$ 350,000.00	\$ 350,000.00	\$ 280,000.00	\$ 280,000.00	\$ 650,000.00	\$ 650,000.00	\$ 300,000.00	\$ 300,000.00	\$ 80,000.00	\$ 80,000.00	\$1,000,000.00	\$ 1,000,000.00
8	Provide Work Limits Preparation	LS	1	\$ 100,000.00	\$ 100,000.00	\$ 750,000.00	\$ 750,000.00	\$1,862,390.00	\$ 1,862,390.00	\$ 850,000.00	\$ 850,000.00	\$ 750,000.00	\$ 750,000.00	\$ 50,000.00	\$ 50,000.00	\$ 600,000.00	\$ 600,000.00
9	Furnish Groundwater Control Plan and a Contractor Test Pit Program	LS	1	\$ 100,000.00	\$ 100,000.00	\$ 50,000.00	\$ 50,000.00	\$ 2,500.00	\$ 2,500.00	\$ 250,000.00	\$ 250,000.00	\$ 100,000.00	\$ 100,000.00	\$ 25,000.00	\$ 25,000.00	\$ 100,000.00	\$ 100,000.00
10	Install Walpoints South of Butternut Creek	EA	824	\$ 290.00	\$ 238,960.00	\$ 980.00	\$ 807,520.00	\$ 550.00	\$ 453,200.00	\$ 700.00	\$ 576,800.00	\$ 650.00	\$ 535,600.00	\$ 700.00	\$ 576,800.00	\$ 600.00	\$ 494,400.00
11	Install Observation Wells South of Butternut Creek	EA	4	\$ 2,600.00	\$ 10,400.00	\$ 1,800.00	\$ 7,200.00	\$ 2,500.00	\$ 10,000.00	\$ 3,000.00	\$ 12,000.00	\$ 5,000.00	\$ 20,000.00	\$ 4,000.00	\$ 16,000.00	\$ 3,000.00	\$ 12,000.00
12	Install Walpoints North of Butternut Creek	EA	268	\$ 290.00	\$ 77,720.00	\$ 900.00	\$ 241,200.00	\$ 550.00	\$ 147,400.00	\$ 700.00	\$ 187,600.00	\$ 650.00	\$ 174,200.00	\$ 700.00	\$ 187,600.00	\$ 600.00	\$ 160,800.00
13	Install Observation Wells North of Butternut Creek	EA	1	\$ 2,600.00	\$ 2,600.00	\$ 1,800.00	\$ 1,800.00	\$ 2,500.00	\$ 2,500.00	\$ 3,000.00	\$ 3,000.00	\$ 5,000.00	\$ 5,000.00	\$ 4,000.00	\$ 4,000.00	\$ 3,000.00	\$ 3,000.00
14	Perform Dewatering of Launch Shaft	LS	1	\$ 200,000.00	\$ 200,000.00	\$ 125,000.00	\$ 125,000.00	\$ 80,000.00	\$ 80,000.00	\$ 225,000.00	\$ 225,000.00	\$ 35,000.00	\$ 35,000.00	\$ 100,000.00	\$ 100,000.00	\$ 150,000.00	\$ 150,000.00
15	Perform Dewatering of Receiving Shaft	LS	1	\$ 200,000.00	\$ 200,000.00	\$ 90,000.00	\$ 90,000.00	\$ 41,800.00	\$ 41,800.00	\$ 225,000.00	\$ 225,000.00	\$ 35,000.00	\$ 35,000.00	\$ 100,000.00	\$ 100,000.00	\$ 75,000.00	\$ 75,000.00
16	Perform Dewatering and Treatment of collected water South of Butternut Creek	LS	1	\$ 400,000.00	\$ 400,000.00	\$ 625,000.00	\$ 625,000.00	\$ 680,000.00	\$ 680,000.00	\$1,000,000.00	\$ 1,000,000.00	\$ 350,000.00	\$ 350,000.00	\$ 125,000.00	\$ 125,000.00	\$ 25,000.00	\$ 25,000.00
17	Perform Dewatering and Treatment of collected water North of Butternut Creek	LS	1	\$ 300,000.00	\$ 300,000.00	\$ 150,000.00	\$ 150,000.00	\$ 260,000.00	\$ 260,000.00	\$ 350,000.00	\$ 350,000.00	\$ 140,000.00	\$ 140,000.00	\$ 90,000.00	\$ 90,000.00	\$ 25,000.00	\$ 25,000.00
18	Furnish and Deliver 66-Inch MLPC, Welded Steel Pipe, min t=0.3125-inch Wall	LF	3,134	\$ 480.00	\$ 1,504,320.00	\$ 530.00	\$ 1,661,020.00	\$ 745.00	\$ 2,334,830.00	\$ 770.00	\$ 2,413,180.00	\$ 582.00	\$ 1,823,988.00	\$ 750.00	\$ 2,350,500.00	\$ 625.00	\$ 1,958,750.00
19	Install 66-Inch MLPC, Welded Steel Pipe, min t=0.3125-inch Wall	LF	3,134	\$ 575.00	\$ 1,802,050.00	\$ 930.00	\$ 2,914,620.00	\$ 550.00	\$ 1,723,700.00	\$ 1,100.00	\$ 3,447,400.00	\$ 725.00	\$ 2,272,150.00	\$ 750.00	\$ 2,350,500.00	\$ 535.00	\$ 1,676,690.00
20	Furnish and Deliver 66-Inch MLPC, Welded Steel Pipe, min t=0.375-inch Wall	LF	540	\$ 585.00	\$ 315,900.00	\$ 560.00	\$ 302,400.00	\$ 904.00	\$ 488,160.00	\$ 940.00	\$ 507,600.00	\$ 710.00	\$ 383,400.00	\$ 900.00	\$ 486,000.00	\$ 650.00	\$ 351,000.00
21	Install 66-Inch MLPC, Welded Steel Pipe, min t=0.375-inch Wall	LF	540	\$ 665.00	\$ 359,100.00	\$ 800.00	\$ 432,000.00	\$ 795.00	\$ 429,300.00	\$ 1,100.00	\$ 594,000.00	\$ 825.00	\$ 445,500.00	\$ 750.00	\$ 405,000.00	\$ 535.00	\$ 288,900.00
22	Furnish and Deliver 66-Inch MLPC, Welded Steel Pipe min t=0.4375-inch Wall	LF	463	\$ 710.00	\$ 328,730.00	\$ 810.00	\$ 375,030.00	\$ 1,113.00	\$ 515,319.00	\$ 1,250.00	\$ 578,750.00	\$ 875.00	\$ 405,125.00	\$ 1,100.00	\$ 509,300.00	\$ 950.00	\$ 439,850.00
23	Install 66-Inch MLPC, Welded Steel Pipe min t=0.4375-inch Wall	LF	463	\$ 678.00	\$ 313,914.00	\$ 1,150.00	\$ 532,450.00	\$ 585.00	\$ 270,855.00	\$ 1,100.00	\$ 509,300.00	\$ 1,100.00	\$ 509,300.00	\$ 850.00	\$ 393,550.00	\$ 535.00	\$ 247,705.00
24	Furnish and Deliver 66-inch x 48-inch reducer and 48-Inch MLPC, Welded Steel Pipe min t=0.500-inch Wall	LS	1	\$ 75,000.00	\$ 75,000.00	\$ 52,000.00	\$ 52,000.00	\$ 120,180.00	\$ 120,180.00	\$ 120,000.00	\$ 120,000.00	\$ 95,000.00	\$ 95,000.00	\$ 120,000.00	\$ 120,000.00	\$ 100,000.00	\$ 100,000.00
25	Install 66-inch x 48-inch reducer and 48-Inch MLPC, Welded Steel Pipe min t=0.500-inch Wall	LS	1	\$ 35,000.00	\$ 35,000.00	\$ 34,000.00	\$ 34,000.00	\$ 10,500.00	\$ 10,500.00	\$ 35,000.00	\$ 35,000.00	\$ 60,000.00	\$ 60,000.00	\$ 25,000.00	\$ 25,000.00	\$ 20,000.00	\$ 20,000.00
26	Furnish and Deliver 66-Inch MLPC, Welded Steel Pipe min t=0.5625-inch Wall	LF	652	\$ 720.00	\$ 469,440.00	\$ 850.00	\$ 554,200.00	\$ 1,125.00	\$ 733,500.00	\$ 1,100.00	\$ 717,200.00	\$ 885.00	\$ 577,020.00	\$ 1,125.00	\$ 733,500.00	\$ 825.00	\$ 537,900.00
27	Install 66-Inch MLPC, Welded Steel Pipe min t=0.5625-inch Wall	LF	652	\$ 740.00	\$ 482,480.00	\$ 925.00	\$ 603,100.00	\$ 615.00	\$ 400,980.00	\$ 1,100.00	\$ 717,200.00	\$ 900.00	\$ 586,800.00	\$ 750.00	\$ 489,000.00	\$ 535.00	\$ 348,820.00
28	Furnish and Deliver 66-Inch MLPC, Welded Steel Pipe min t=0.6875-inch Wall	LF	149	\$ 1,450.00	\$ 216,050.00	\$ 1,400.00	\$ 208,600.00	\$ 2,300.00	\$ 342,700.00	\$ 2,300.00	\$ 342,700.00	\$ 1,810.00	\$ 269,690.00	\$ 2,300.00	\$ 342,700.00	\$ 1,400.00	\$ 208,600.00
29	Install 66-Inch MLPC, Welded Steel Pipe min t=0.6875-inch Wall	LF	149	\$ 1,250.00	\$ 186,250.00	\$ 1,150.00	\$ 171,350.00	\$ 765.00	\$ 113,985.00	\$ 1,350.00	\$ 201,150.00	\$ 1,100.00	\$ 163,900.00	\$ 800.00	\$ 119,200.00	\$ 625.00	\$ 93,125.00
30	Furnish and Deliver 66-Inch MLPC, Welded Steel Pipe min t=0.75-inch Wall	LF	1,120	\$ 950.00	\$ 1,064,000.00	\$ 900.00	\$ 1,008,000.00	\$ 1,500.00	\$ 1,680,000.00	\$ 1,500.00	\$ 1,680,000.00	\$ 1,180.00	\$ 1,321,600.00	\$ 1,500.00	\$ 1,680,000.00	\$ 1,050.00	\$ 1,176,000.00
31	Install 66-Inch MLPC, Welded Steel Pipe min t=0.75-inch Wall	LF	1,120	\$ 1,050.00	\$ 1,176,000.00	\$ 950.00	\$ 1,064,000.00	\$ 710.00	\$ 795,200.00	\$ 1,100.00	\$ 1,232,000.00	\$ 920.00	\$ 1,030,400.00	\$ 800.00	\$ 896,000.00	\$ 650.00	\$ 728,000.00
32	Furnish and Deliver 66-Inch MLPC, Welded Steel Pipe min t=0.875-inch Wall	LF	268	\$ 1,200.00	\$ 321,600.00	\$ 1,300.00	\$ 348,400.00	\$ 1,900.00	\$ 509,200.00	\$ 1,900.00	\$ 509,200.00	\$ 1,500.00	\$ 402,000.00	\$ 1,900.00	\$ 509,200.00	\$ 1,275.00	\$ 341,700.00
33	Install 66-Inch MLPC, Welded Steel Pipe min t=0.875-inch Wall	LF	268	\$ 715.00	\$ 191,620.00	\$ 1,000.00	\$ 268,000.00	\$ 720.00	\$ 192,960.00	\$ 1,100.00	\$ 294,800.00	\$ 975.00	\$ 261,300.00	\$ 850.00	\$ 227,800.00	\$ 700.00	\$ 187,600.00
34	Corrosion Protection for 66" Steel Pipe	LS	1	\$ 200,000.00	\$ 200,000.00	\$ 310,000.00	\$ 310,000.00	\$ 200,000.00	\$ 200,000.00	\$ 375,000.00	\$ 375,000.00	\$ 155,000.00	\$ 155,000.00	\$ 500,000.00	\$ 500,000.00	\$ 150,000.00	\$ 150,000.00
35	Furnish and Deliver 30-Inch Restrainted Joint Ductile Iron Pipe, Class 52 or 30-inch MLPC, Welded Steel Pipe min t=0.25-inch wall	LF	3,883	\$ 227.00	\$ 881,441.00	\$ 300.00	\$ 1,164,900.00	\$ 380.00	\$ 1,475,540.00	\$ 400.00	\$ 1,553,200.00	\$ 180.00	\$ 698,940.00	\$ 450.00	\$ 1,747,350.00	\$ 325.00	\$ 1,261,975.00
36	Install 30-Inch Restrainted Joint Ductile Iron Pipe, Class 52 or 30-Inch MLPC, Welded Steel Pipe min t=0.25-inch wall	LF	3,883	\$ 350.00	\$ 1,359,050.00	\$ 840.00	\$ 3,261,720.00	\$ 195.00	\$ 757,185.00	\$ 730.00	\$ 2,834,590.00	\$ 235.00	\$ 912,505.00	\$ 200.00	\$ 776,600.00	\$ 275.00	\$ 1,067,825.00
37	Corrosion Protection for 30" pipe	LS	1	\$ 125,000.00	\$ 125,000.00	\$ 150,000.00	\$ 150,000.00	\$ 100,000.00	\$ 100,000.00	\$ 350,000.00	\$ 350,000.00	\$ 70,000.00	\$ 70,000.00	\$ 150,000.00	\$ 150,000.00	\$ 75,000.00	\$ 75,000.00
38	Interior joint lining of 66-inch and 48-inch nominal ID MLPC welded steel pipe	LS	1	\$ 125,000.00	\$ 125,000.00	\$ 400,000.00	\$ 400,000.00	\$ 72,000.00	\$ 72,000.00	\$ 180,000.00	\$ 180,000.00	\$ 100,000.00	\$ 100,000.00	\$ 100,000.00	\$ 100,000.00	\$ 125,000.00	\$ 125,000.00
39	Trench Foundation Excavation and Material for 66-inch pipe	LF	6,326	\$ 55.00	\$ 347,930.00	\$ 40.00	\$ 253,040.00	\$ 44.00	\$ 278,344.00	\$ 42.00	\$ 265,692.00	\$ 45.00	\$ 284,670.00	\$ 39.00	\$ 246,714.00	\$ 40.00	\$ 253,040.00
40	Trench Foundation Excavation and Material for 30-inch pipe	LF	3,857	\$ 37.00	\$ 142,709.00	\$ 30.00	\$ 115,710.00	\$ 62.00	\$ 239,134.00	\$ 35.00	\$ 134,995.00	\$ 30.00	\$ 115,710.00	\$ 27.00	\$ 104,139.00	\$ 30.00	\$ 115,710.00
41	30" Manway and Access Vault	EA	2	\$ 100,000.00	\$ 200,000.00	\$ 50,000.00	\$ 100,000.00	\$ 110,000.00	\$ 220,000.00	\$ 65,000.00	\$ 130,000.00	\$ 75,000.00	\$ 150,000.00	\$ 75,000.00	\$ 150,000.00	\$ 50,000.00	\$ 100,000.00
42	4" Type I Air Valve Assembly with 30" Manway and Access Vault	EA	4	\$ 120,000.00	\$ 480,000.00	\$ 105,000.00	\$ 420,000.00	\$ 156,000.00	\$ 624,000.00	\$ 125,000.00	\$ 500,000.00	\$ 125,000.00	\$ 500,000.00	\$ 130,000.00	\$ 520,000.00	\$ 100,000.00	\$ 400,000.00
43	4" Type I Air Valve Assembly with 12" Collared Outlet and Access Vault	EA	2	\$ 85,000.00	\$ 170,000.00	\$ 55,000.00	\$ 110,000.00	\$ 112,000.00	\$ 224,000.00	\$ 60,000.00	\$ 120,000.00	\$ 100,000.00	\$ 200,000				

Client: Willamette Water Supply Program
 Project: RFP-PLW-0300220
 Description: PLW_1.3 Pipeline Construction

Item No.	Item Description	Unit	Qty	Emery and Sons Construction Group		James W. Fowler Co.		Kerr Contractors Oregon, Inc.		Kiewit Infrastructure West		Moore Excavation, Inc.		S.J. Louis Construction, Inc.		Tapani	
				Bid Unit Price	Extended Bid Price	Bid Unit Price	Extended Bid Price	Bid Unit Price	Extended Bid Price	Bid Unit Price	Extended Bid Price	Bid Unit Price	Extended Bid Price	Bid Unit Price	Extended Bid Price	Bid Unit Price	Extended Bid Price
60	Traffic Control on SW Murphy St	LS	1	\$ 15,000.00	\$ 15,000.00	\$ 1,200.00	\$ 1,200.00	\$ 4,000.00	\$ 4,000.00	\$ 7,000.00	\$ 7,000.00	\$ 8,000.00	\$ 8,000.00	\$ 25,000.00	\$ 25,000.00	\$ 10,000.00	\$ 10,000.00
61	Restoration for Wetland Areas W-W1-5 and PHS-C1	LS	1	\$ 30,000.00	\$ 30,000.00	\$ 60,000.00	\$ 60,000.00	\$ 15,000.00	\$ 15,000.00	\$ 50,000.00	\$ 50,000.00	\$ 35,000.00	\$ 35,000.00	\$ 65,000.00	\$ 65,000.00	\$ 100,000.00	\$ 100,000.00
62	Remove and Dispose of Trees	LS	1	\$ 315,000.00	\$ 315,000.00	\$ 150,000.00	\$ 150,000.00	\$ 395,000.00	\$ 395,000.00	\$ 80,000.00	\$ 80,000.00	\$ 375,000.00	\$ 375,000.00	\$ 144,342.00	\$ 144,342.00	\$ 500,000.00	\$ 500,000.00
63	Trim and Protect Trees	LS	1	\$ 100,000.00	\$ 100,000.00	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 15,000.00	\$ 15,000.00	\$ 80,000.00	\$ 80,000.00	\$ 75,000.00	\$ 75,000.00	\$ 20,000.00	\$ 20,000.00
64	Provide Pipeline Cleaning, Testing, and Disinfection of 66-inch pipe	LS	1	\$ 215,000.00	\$ 215,000.00	\$ 90,000.00	\$ 90,000.00	\$ 273,000.00	\$ 273,000.00	\$ 215,000.00	\$ 215,000.00	\$ 225,000.00	\$ 225,000.00	\$ 100,000.00	\$ 100,000.00	\$ 100,000.00	\$ 100,000.00
65	Provide Pipeline Cleaning, Testing, and Disinfection of 30-inch pipe	LS	1	\$ 160,000.00	\$ 160,000.00	\$ 55,000.00	\$ 55,000.00	\$ 18,000.00	\$ 18,000.00	\$ 165,000.00	\$ 165,000.00	\$ 60,000.00	\$ 60,000.00	\$ 25,000.00	\$ 25,000.00	\$ 20,000.00	\$ 20,000.00
66	4" Drain Tile	LF	400	\$ 8.00	\$ 3,200.00	\$ 9.00	\$ 3,600.00	\$ 16.00	\$ 6,400.00	\$ 100.00	\$ 40,000.00	\$ 45.00	\$ 18,000.00	\$ 50.00	\$ 20,000.00	\$ 25.00	\$ 10,000.00
67	6" Drain Tile	LF	600	\$ 12.00	\$ 7,200.00	\$ 10.00	\$ 6,000.00	\$ 19.00	\$ 11,400.00	\$ 100.00	\$ 60,000.00	\$ 46.00	\$ 27,600.00	\$ 55.00	\$ 33,000.00	\$ 28.00	\$ 16,800.00
68	8" Drain Tile	LF	600	\$ 18.00	\$ 10,800.00	\$ 13.00	\$ 7,800.00	\$ 22.00	\$ 13,200.00	\$ 100.00	\$ 60,000.00	\$ 52.00	\$ 31,200.00	\$ 60.00	\$ 36,000.00	\$ 30.00	\$ 18,000.00
69	Connection to PLW 1.1 pipe	LS	1	\$ 32,000.00	\$ 32,000.00	\$ 14,000.00	\$ 14,000.00	\$ 22,000.00	\$ 22,000.00	\$ 20,000.00	\$ 20,000.00	\$ 60,000.00	\$ 60,000.00	\$ 50,000.00	\$ 50,000.00	\$ 20,000.00	\$ 20,000.00
70	16" Steel Casings for future sewer installations	LF	40	\$ 1,050.00	\$ 42,000.00	\$ 1,200.00	\$ 48,000.00	\$ 81.00	\$ 3,240.00	\$ 125.00	\$ 5,000.00	\$ 300.00	\$ 12,000.00	\$ 100.00	\$ 4,000.00	\$ 250.00	\$ 10,000.00
71	Supply of Instrumentation, Controls, and Telemetry per Sections 40 61.00 and 40 61.10	LS	1	\$ 177,000.00	\$ 177,000.00	\$ 165,000.00	\$ 165,000.00	\$ 173,500.00	\$ 173,500.00	\$ 400,000.00	\$ 400,000.00	\$ 200,000.00	\$ 200,000.00	\$ 190,000.00	\$ 190,000.00	\$ 250,000.00	\$ 250,000.00
72	Temporary Access Road on SE Kinnaman Street	LS	1	\$ 125,000.00	\$ 125,000.00	\$ 79,000.00	\$ 79,000.00	\$ 180,000.00	\$ 180,000.00	\$ 150,000.00	\$ 150,000.00	\$ 160,000.00	\$ 160,000.00	\$ 10,000.00	\$ 10,000.00	\$ 50,000.00	\$ 50,000.00
73	209 th Ave/ Farminaton Turnout	LS	1	\$ 440,000.00	\$ 440,000.00	\$ 275,000.00	\$ 275,000.00	\$ 221,000.00	\$ 221,000.00	\$ 350,000.00	\$ 350,000.00	\$ 600,000.00	\$ 600,000.00	\$ 500,000.00	\$ 500,000.00	\$ 350,000.00	\$ 350,000.00
74	4" Type I Air Valve Assembly with 30" Manway and Access Vault	EA	1	\$ 125,000.00	\$ 125,000.00	\$ 80,000.00	\$ 80,000.00	\$ 130,000.00	\$ 130,000.00	\$ 100,000.00	\$ 100,000.00	\$ 100,000.00	\$ 100,000.00	\$ 100,000.00	\$ 100,000.00	\$ 80,000.00	\$ 80,000.00
				\$	30,761,202.00	\$	31,900,000.00	\$	34,637,308.00	\$	44,491,100.00	\$	32,364,310.00	\$	31,500,000.00	\$	29,419,140.00
				\$	-	\$	-	\$	(2,959,859.00)	\$	(3,234,000.00)	\$	(2,300,000.00)	\$	(1,777,000.00)	\$	(430,000.00)
	BASE BID TOTAL (INCLUDING ADJUSTMENTS):			\$	30,761,202.00	\$	31,900,000.00	\$	31,677,449.00	\$	41,257,100.00	\$	30,064,310.00	\$	29,723,000.00	\$	28,989,140.00

Willamette Water Supply System Commission

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STAFF REPORT

To: Board of Commissioners

From: Dave Kraska, P.E., Willamette Water Supply System General Manager

Date: June 4, 2020

Subject: Recommend Adoption of Revised Fiscal Year 2020-2021 Annual Work Plan and Budget and WWSP Capital Improvement Plan (Baseline 5.2)

Requested Board Action:

Consider adopting a revised Annual Work Plan and Budget for the Willamette Water Supply System (WWSS) for fiscal year 2020-21 and WWSP Capital Improvement Plan (Baseline 5.2) and requiring staff to continue working closely with the WWSS Management Committee to control overall WWSS costs and to manage exposure to cost risks.

Key Concepts:

- Willamette Water Supply Program (WWSP or Program) prepares a baseline budget and schedule each year that establishes the budget and schedule to execute the delivery of WWSP, which includes the capital outlay for WWSS.
- Baseline 4.1 is the current approved plan of record for WWSP, approved February 2019.
- TVWD, as the Managing Agency, prepares an Annual Work Plan and Budget for review, comment, and recommendation by the WWSS Finance, Operations, and Management Committees.
- The Annual Work Plan provides the proposed scope of work to be performed by the Managing Agency for the fiscal year 2020-21 (FY2021), in accordance with the WWSS Intergovernmental Agreement (IGA).
- The WWSS Commission previously adopted FY2021 Annual Work Plan and Budget of \$808,555 for operations and administration, \$125,763,556 (draft Baseline 5.1) for capital outlay, and \$80,000 for general operating contingency at the March 5, 2020 board meeting.
- WWSP staff updated the WWSP baseline (proposed Baseline 5.2) and are requesting approval of a revised FY2021 Annual Work Plan and Budget of \$948,555 for operations and administration, \$137,831,538 (proposed Baseline 5.2) for capital outlay, and \$80,000 for general operating contingency.

Background:

This report summarizes:

- WWSP's proposed Baseline 5.2, establishing the revised projected capital outlay for FY2021
- The revised FY2021 WWSS Annual Work Plan and Budget

Proposed Annual Work Plan and Budget and Baseline 5.2:

The annual WWSP baseline budget and schedule update process forecasts WWSP costs through the life of the Program and establishes the capital outlay portion of the WWSS Annual Work Plan and Budget for the upcoming fiscal year. A draft Baseline 5.0 was reviewed with the Finance, Operations, and Management Committees on January 16, 2020. At the January 16th meeting, WWSP staff provided an

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Recommend Adoption of Revised Fiscal Year 2020-2021 Annual Work Plan and Budget and WWSP Capital Improvement Plan (Baseline 5.2)

overview of the updated estimated Program costs and the changes compared to the previous baseline budget.

A revised draft Baseline 5.1 was distributed to the Finance, Operations, and Management Committees on February 7, 2020. During the February 20th Management Committee (MC) meeting, the MC agreed to recommend the adoption of the FY 2020-21 Annual Work Plan and Budget by the WWSS Board. The MC did not recommend draft Baseline 5.1 for WWSS Board approval. The WWSS Commission adopted FY2021 Annual Work Plan and Budget of \$808,555 for operations and administration, \$125,763,556 for capital outlay, and \$80,000 for general operating contingency at the March 5, 2020 board meeting.

WWSP staff and MC evaluated multiple cost management strategies that would align key stakeholder priorities into a draft Baseline 5.2. Draft Baseline 5.2 was distributed to the Finance, Operations, and Management Committees on May 5, 2020.

The most significant changes from Baseline 4.1, which was approved in February 2019, are related to the following items:

- **WTP_1.0 Water Treatment Plant:** The Project budget increased approximately \$33 million as a result of recognizing the estimated WTP_1.0 project cost increase approved in May 2019.
- **PLM_4.0 Tualatin Sherwood Area Pipeline:** The budget for PLM_4.0 increased by \$2.5 million. The additional costs are primarily the result of a change in the Highway 99W crossing, going from open cut to a trenchless installation method.
- **PLM_5.0 Scholls Area Pipeline:** A decrease of \$14.8 million as a result of modifying the alignment which reduced the length of the project and reduced the seismic improvement costs.
- **PLW_1.0 South Hillsboro Area Pipeline:** PLW_1.0's budget decreased by \$8.3 million, mostly resulting from converting approximately 4,000 feet of 66-inch diameter welded steel pipe to 30-inch ductile iron pipe. Additionally, the TVWD 209th chemical feed building, and facility were removed from the scope, and will be managed separately by TVWD.
- **PLW_2.0 Cornelius Pass Pipeline:** The budget for PLW_2.0 increased by \$7.3 million resulting from a 400-foot increase in pipe length, as well as anticipated dewatering and deep pipe installation associated with two deep creek crossings.
- **RWF_1.0 Raw Water Facility:** The project budget increase of approximately \$14 million is a result of recognizing the RWF_1.0 phase one Guaranteed Maximum Price (GMP) and projected phase two GMP.
- **MPE_1.0 Metzger Pipeline East:** The budget for MPE_1.0 increased by \$6.9 million primarily resulting from increased length in trenchless crossings for the PNWR/WES railroad tracks and Highway 217, adding the Metzger turnout, and the Beaverton-Hillsdale tie-in.
- **COB_1.0 and COH_1.0 (ancillary projects):** COB_1.0 and COH_1.0 are ancillary projects added to the Program's scope of work estimated at approximately \$19 million.
- Other collected changes to projects, some reducing estimated cost and some increasing estimated cost.

The net result of these changes would cause a draw-down on the Management Reserve Budget to a level lower than recommended by the WWSP's risk management analyses if said budget were not adjusted accordingly. The risk analyses supported a recommendation of \$57.1 million in Management Reserve

Recommend Adoption of Revised Fiscal Year 2020-2021 Annual Work Plan and Budget and
WWSP Capital Improvement Plan (Baseline 5.2)

Budget. To augment the WWSP Baseline Budget to the full Management Reserve recommendation, approximately \$20 million in additional funds was added to the WWSS budget.

The WWSS Intergovernmental Agreement (IGA) does not specifically call out the WWSP annual baseline as a Board approval item. Two items requiring Board approval per the WWSS IGA are: WWSS Annual Work Plan and Budget (a one-year lookahead, discussed in the next section), and a 4-year capital improvement plan budget. At this time, the WWSP baseline captures the 4-year capital improvement plan budget that the WWSS IGA requires.

The WWSS Management Authority Matrix (MAM) establishes Board authority over certain aspects of the WWSP annual baseline. Two items requiring Board approval per the WWSS MAM are: changing the total WWSS cost and changing any individual project budget by greater than \$500,000. Proposed Baseline 5.2 includes an increase to the total WWSS cost and increases some project budgets by greater than \$500,000.

Annual Work Plan:

Article 6.6 of the WWSS IGA specifies the powers and duties of the Managing Agency. As the Managing Agency, TVWD prepared a draft of the WWSS Annual Work Plan and associated Budget to address those duties that are expected to be required in FY2021. The WWSS Annual Work Plan and associated Budget were presented to the Management Committee on May 21, 2020.

The Annual Work Plan includes the following main tasks:

1. General Administration
2. Capital Projects Management
3. Annual Work Plan and Budget Development
4. Finance Administration
5. Operations Committee Administration
6. Management Committee Administration
7. Administer WWSS Board of Commissioners Meetings
8. Contingency

The proposed FY2021 budget for the WWSS is:

Personnel Services (WWSS)	\$0
Materials & Services (WWSS)	\$948,555
Capital Outlay (WWSP)	\$137,831,538
General Operating Contingency (WWSS)	\$80,000
Total Appropriations	\$138,860,093

The details in the materials and services category includes:

Operating Expense	\$576,055
Professional Services	\$275,000
Insurance	\$32,000
Business Expense	\$4,200
Property Maintenance	\$30,000

Recommend Adoption of Revised Fiscal Year 2020-2021 Annual Work Plan and Budget and
WWSP Capital Improvement Plan (Baseline 5.2)

Public Information	\$0
Audit	\$15,300
Locates	\$16,000
Total Materials & Services	\$948,555

The WWSS IGA provides the methodology for allocating the materials and services line items to the parties. Specifically, the IGA provides two allocation techniques: one for administration costs, the other for other operating costs. During this preoperational period, the WWSS Finance Committee has recommended that all materials and services costs be treated as Administration, until the operational plans have been completed, and costs can be segmented as either administrative or operational.

The IGA allocates Administration costs to the parties based on two weighted factors. The first weighted factor is equal shares. That is, each of the three parties is allocated one-third of the costs recovered based on equal shares. The second factor is based on percentage ownership. For Administration costs, the two factors are weighted 25% based on equal shares and 75% based on ownership. The weighted allocations factors by party are:

Party	Weighted Allocation %	Weighted Allocation \$
Beaverton	12.07%	\$114,491
Hillsboro	35.40%	\$335,788
Tualatin Valley Water District	52.53%	\$498,276

The costs for capital outlay are allocated based on the ownership shares of each party in the facility being built, per WWSS IGA Exhibit 1.

WWSS Management Committee Approval:

At its meeting held on May 21, 2020, the Management Committee recommended adoption of the revised WWSS Annual Work Plan and Budget and WWSP Baseline 5.2 for FY2021. The Annual Work Plan and Budget, as presented herein, are recommended for presentation to the WWSS Board.

Recommended WWSS Board Approval:

WWSP recommends Board adoption of the revised FY2021 Annual Work Plan and Budget, and Baseline 5.2; and requiring staff to continue working closely with the WWSS Management Committee to control overall WWSS costs and to manage exposure to cost risks.

Budget Impact:

The proposed resolution establishes the FY2021 WWSS Annual Work Plan and Budget. The impact of adopting the proposed resolution is to establish appropriations for the WWSS of \$948,555 for materials and services, \$137,831,538 for capital outlay for the WWSP, and \$80,000 for general operating contingency for the WWSS for 2020-21 fiscal year.

Staff Contact Information:

David Kraska, PE; Willamette Water Supply Program Director; 503-941-4561; david.kraska@tvwd.org

Attachments:

- Proposed resolution
- Exhibit 1: Proposed Revised Annual Work Plan

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Recommend Adoption of Revised Fiscal Year 2020-2021 Annual Work Plan and Budget and
WWSP Capital Improvement Plan (Baseline 5.2)

Exhibit 2: Budget for the 2020-21 fiscal year
Exhibit 3: Baseline 5.2

Willamette Water Supply System Commission

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RESOLUTION NO. WWSS-09-20

A RESOLUTION ADOPTING AN AMENDED WILLAMETTE WATER SUPPLY SYSTEM COMMISSION ANNUAL WORK PLAN AND BUDGET FOR THE 2020-21 FISCAL YEAR AND CAPITAL IMPROVEMENT PLAN BASELINE BUDGET 5.2

WHEREAS, pursuant to Article 5.4.4 of the Willamette Water Supply System (WWSS) Intergovernmental Agreement (IGA), the Board of Commissioners (Board) shall annually adopt a budget (Budget); and

WHEREAS, pursuant to Article 5.4.6 of the WWSS IGA, the Board shall annually adopt a work plan (Annual Work Plan) in association with the annual Budget; and

WHEREAS, pursuant to Article 5.4.7 of the WWSS IGA, the Board shall annually approve the capital improvement plan (Baseline 5.2) in association with the annual Budget; and

WHEREAS, pursuant to Article 6.6.1 of the WWSS IGA, the Managing Agency prepared a proposed Annual Work Plan and corresponding proposed annual Budget for Fiscal Year 2020-21 that was adopted by Resolution 04-20 on April 2, 2020 but were not prepared to adopt Baseline Budget 5.1; and

WHEREAS, pursuant to Article 8.3 of the WWSS IGA, the Managing Agency prepared capital improvement plan budget projections for at least the subsequent four Fiscal Years following the current fiscal year which is attached hereto as Baseline Budget 5.2; and,

WHEREAS, the development of Baseline Budget 5.2 and other data generated since the adoption of Resolution 04-20 necessitate adjustment of the previously adopted Annual Work Plan and 2020-21 Budget; and being so advised.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE WILLAMETTE WATER SUPPLY COMMISSION THAT:

Section 1: The Board of the Willamette Water Supply System Commission hereby adopts the Annual Work Plan for the 2020-21 fiscal year, attached hereto as Exhibit 1 and incorporated by reference superseding the Annual Work Plan adopted under Resolution 04-20.

Section 2: The Board of the Willamette Water Supply Commission hereby adopts the Budget for the 2020-21 fiscal year, attached hereto as Exhibit 2, and incorporated by reference superseding the Budget adopted by Resolution 04-20.

Section 3: The Board of the Willamette Water Supply Commission hereby adopts the capital outlay plan for Baseline Budget 5.2, attached hereto as Exhibit 3, and incorporated by reference.

Willamette Water Supply
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Section 4: That the Budget will be allocated to the individual WWSS Parties according to the requirements of the WWSS IGA.

Section 5: The Managing Agency will invoice the allocated amounts set forth herein from the individual WWSS Parties in accordance with the WWSS IGA.

Approved and adopted at a regular meeting held on the 4th day of June 2020.

James Duggan, Chair

Denny Doyle, Vice Chair

PROPOSED

**WILLAMETTE WATER SUPPLY SYSTEM
ANNUAL WORK PLAN – FY21 SCOPE OF WORK AND BUDGET**

June 4, 2020

INTRODUCTION

The Willamette Water Supply System (WWSS) includes all water supply system infrastructure facilities beginning at the Willamette Intake Facilities (WIF) System Separation Point and continuing to the Points of Delivery (turnouts). The WWSS comprises the raw water pump station, raw water pipeline, water treatment plant, finished water pipelines, finished water storage, and related facilities that serve potable water to TVWD, Hillsboro, Beaverton and potentially other municipal water providers. The WWSS is currently owned by three parties: the cities of Beaverton and Hillsboro and the Tualatin Valley Water District (TVWD). The WWSS Intergovernmental Agreement (IGA) establishes the general operating procedures for the WWSS Commission, including designating TVWD as its managing agency (MA).

This document is the scope of work (SOW) and budget for the MA for the 2020-21 fiscal year (FY 21). The primary objectives of this effort include:

- Prepare an annual work plan and corresponding budget for FY 22.
- Perform the duties described in this FY 21 annual work plan and other duties as directed by the Board.
- Provide leadership, administration and staffing in support of the Board and committees such as the Management Committee, Operations Committee, and Finance Committee; administration of the Board meetings; and required public meeting notices and duties.
- Maintain records in accordance with public records laws.
- Complete finance procedures for the WWSS Commission.
- Provide capital project management through WWSP for delivery of the WWSS by 2026, including the annual Capital Improvements Plan.
- Prepare chapters of the draft Operations Plan, in coordination with the Parties.
- Procure and manage appropriate insurance coverages and fidelity coverages, in accordance with the insurance requirements.
- Approve, execute and administer contracts, subject to the contracting rules and direction of the Board within the set limits.
- Acquire real property by negotiation, lease sale, or condemnation.
- Acquire IGAs and permits.
- Provide public communications and outreach, including response to public information, media or records requests and public affairs support.
- Identify, track and report on key performance indicators and level of service goals.

SCOPE OF WORK**1. General Administration**

The MA is responsible for managing the business affairs of the Commission. The MA shall perform the general administrative activities as described below:

**WILLAMETTE WATER SUPPLY SYSTEM
ANNUAL WORK PLAN – FY21 SCOPE OF WORK AND BUDGET**

June 4, 2020

- a. Administration of Infrastructure Operations and Maintenance
 - i. Plans Development - The WWSS IGA identifies six WWSS plans to be drafted by the MA: 1) Capital Improvements Plan, 2) Master Plan, 3) Operations Plan, 4) Emergency Response Plan, 5) Curtailment Plan, and 6) Overuse Plans.
 - ii. During FY 20, the MA prepared a draft of the Capital Improvements Plan. MA also led the initial outline development of the Operations Plan and began drafting chapters. All other plans will be drafted in future years.
 - iii. For FY21, the MA will continue drafting the Operations Plan (to be completed in calendar year 2023) in coordination with the Parties. All other plans will be drafted in future years.
- b. Records Management – Maintain a location for all relevant WWSS-related records on the TVWD information technology (IT) infrastructure. Follow Oregon statutes regarding records maintenance, management, and disposal.
- c. Asset Management – asset management procedures for the WWSS are included in the Operations plan and are under development. The MA will also provide system locating services and records management for completed projects as needed.
- d. Warranty Management – Follow established warranty management procedures for the WWSS and provide such services as needed.
- e. Property Management – Draft property management procedures for the WWSS and provide required services for currently owned properties.
- f. Contracts – As required during FY 21, draft and execute new contracts, manage existing contracts, and close completed contracts subject to the contracting rules and direction of the Board within the limits set forth on IGA Exhibit 5.
- g. Real Property Acquisition – The MA is responsible for securing the needed real property to facilitate system construction and maintenance. Secure real property in support of project construction.
- h. IGAs, Permits and Other Assets – The MA is responsible for negotiating the IGAs and obtaining the permits to facilitate system construction for FY 21.
- i. Responding to Requests – When requests for WWSS-related information are made by the public or the media, coordinate a response with the other WWSS Parties as appropriate. Requests for public records will be responded to in keeping with TVWD's established public information request policy. The MA will notify the WWSS Operations Committee members when a public information request is received and when it is fulfilled.
- j. Communications and Public Outreach
 - i. Responding to Requests – When requests for WWSS-related information are made by the public or the media, coordinate a response with the other WWSS Parties as appropriate.
 - ii. Public Affairs – The MA will provide intergovernmental coordination services through a private consultant.
- k. Legislative Updates
 - i. Provide quarterly updates on legislative activities relevant to water within the Willamette basin to the Management Committee.

**WILLAMETTE WATER SUPPLY SYSTEM
ANNUAL WORK PLAN – FY21 SCOPE OF WORK AND BUDGET**

June 4, 2020

- I. Legal Services
 - i. Provide legal services as required in the performance of Managing Agency duties for the WWSS Commission including supporting the preparation and execution of IGAs and project agreements.
- m. General
 - i. Maintain a current contact list of the WWSS Board and alternates, the Operations Committee, the Finance Committee, and the Management Committee.

2. Capital Projects Management

The MA is responsible for managing the capital improvement projects for the WWSS undertaken by the WWSS Commission. The WWSS has agreed to perform Ancillary Projects to allow use of MA resources to oversee and manage design and construction of a project that delivers water from a direct connection to the WWSS to that Party's water system.

- a. Capital and Ancillary Projects for FY 21:

Projects in Design	Projects in Construction
PLM_1.3 (complete design)	PLM_1.1 (complete construction)
PLM_4.1 (complete design)	PLM_1.2 (complete construction with Wilsonville)
PLM_4.2 (complete design)	PLM_1.3 (procure construction contractor)
PLM_4.3 (complete design)	PLM_4.1 (procure construction contractor with Washington Co.; begin and progress construction)
PLM_4.4 (complete design)	PLM_4.2 (procure construction contractor with Washington Co.; begin and progress construction)
PLM_5.3 (complete design)	PLM_4.3 (procure construction contractor)
PLW_1.2 (planned design suspension period)	PLM_4.4 (procure construction contractor with Washington Co.; begin and progress construction)
PLW_2.0 (complete design)	PLM_5.1 (progress construction with Washington County)
RES_1.0 (complete design)	PLM_5.2 (complete construction)
MPE_1.0 (complete design)	PLM_5.3 (prepare to procure construction contractor)
WTP_1.0 (continue design, including CM/GC participation)	PLW_1.3 (progress construction)
	PLW_2.0 (procure construction contractor; begin and progress construction)
	MPE_1.0 (procure construction contractor; begin and progress construction)
	RWF_1.0 (progress phase I construction)
	RES_1.0 (prepare to procure construction contractor)

* - WTP_1.0 includes DCS_1.0

**WILLAMETTE WATER SUPPLY SYSTEM
ANNUAL WORK PLAN – FY21 SCOPE OF WORK AND BUDGET**

June 4, 2020

3. Annual Work Plan and Budget Development

The MA is responsible for preparing and managing the Annual Work Plan and corresponding annual budget.

- a. Coordinate with the Operations and Finance committees to prepare the draft Annual Work Plan and Budget for FY 22.
- b. Prepare Management Committee Review Draft and present at a regularly scheduled meeting.
- c. Prepare Final FY 22 Annual Work Plan and Budget for Presentation to WWSS Board.

4. Finance Administration

The Finance Committee provides recommendations to the Management Committee on the proposed annual budget, capital improvement plan including resource availability and timing, and other financial policies. The MA, which is responsible for financial planning and management for the WWSS Commission, will conduct the following tasks:

- a. Coordinate with the Finance Committee in the development of financial procedures to replace the interim procedures and obtain WWSS Board approval.
- b. Prepare an annual budget preparation calendar.
- c. Prepare monthly invoices and financial reports. Financial reports will be provided to the WWSS Board as part of the Board packet for each of its meetings.
- d. Provide routine accounting and financial management including payment of accounts payable for expenses incurred on behalf of the WWSS Commission.
- e. Prepare and submit weekly remittance advices for payment of capital costs associated with constructing the WWSS.
- f. Prepare and invoice dues for each WWSS Party monthly.
- g. Provide insurance, pursuant to IGA Article 28.3 and referenced Exhibit 11, for the WWSS.
- h. Administer Committee Meetings
 - i. The Finance Committee will hold quarterly meetings with the Operations Committee.
 - ii. When the Finance Committee meets independently of the other committees, the agenda and materials will be shared with the committee members one week prior to the meeting.
- i. Annual Audit – The MA will facilitate an independent financial review of the WWSS Commission's activities up to the time of the audit. Facilitation of this audit is assumed to entail the following:
 - iii. Contract with TVWD's auditor for purposes of conducting the independent financial review.
 - iv. Oversee execution of the review, including providing access to accounting records and WWSS Commission-related transactions and reports.
 - v. Distribute and facilitate communication of the financial review findings.
 - vi. Prepare and submit required regulatory findings, if any, with the State of Oregon.

**WILLAMETTE WATER SUPPLY SYSTEM
ANNUAL WORK PLAN – FY21 SCOPE OF WORK AND BUDGET**

June 4, 2020

5. Operations Committee Administration

The Operations Committee considers issues as directed by the Management Committee as stipulated in the WWSS IGA. The MA shall be responsible for administering the Operations Committee meetings.

- a. Administer Committee Meetings – Conduct monthly meetings with Operations Committee and quarterly meetings with the Finance Committee. The MA will provide the following support for these meetings, all of which are assumed to occur at the TVWD Board Room or via MS Teams during the pandemic:
 - i. Schedule each meeting with the attendees via email. Provide email reminders for each meeting.
 - ii. Coordinate meeting logistics including meeting room set up, breakdown, and clean up.
 - iii. Prepare draft agendas for each meeting and submit to attendees for review one week prior to each meeting.
 - iv. Prepare brief meeting notes capturing only decisions and action items.

6. Management Committee Administration

The Management Committee provides input and recommendations to the MA on policies, planning, operations, capital projects, contract awards, etc. with the goal of achieving consensus recommendations within the Management Committee. The Management Committee members will also serve as the liaison to each of their governing bodies and shall be charged with authority to act on behalf of the governing body as stipulated within the WWSS IGA. The MA shall be responsible for administering the Management Committee meetings.

- a. Administer Committee Meetings – Conduct twice monthly meetings of the Management Committee. The MA will provide the following support for these meetings, all of which are assumed to occur at either the TVWD Board Room, or at a conference room at the Willamette Water Supply Program office or via MS Teams during the pandemic:
 - i. Schedule each meeting with the attendees via email. Provide email reminders for each meeting.
 - ii. Coordinate meeting logistics including meeting room set up, breakdown, and clean up.
 - iii. Prepare draft agendas for each meeting and submit to attendees for review one week prior to each meeting.
 - iv. Prepare brief meeting notes capturing only decisions and action items.

7. Administer WWSS Board of Commissioners Meetings

The Board shall manage the business and affairs of the Commission for the mutual benefit of all Parties. The powers and duties of the Board are as described in the WWSS IGA. The MA shall be responsible for conducting the Board meetings as described herein:

- a. Administration of Commission Meetings
 - i. Schedule monthly WWSS Board meetings starting in July 2020 and for each month until June 2021. All meetings are assumed to be held at the TVWD Board Room or via MS Teams during the pandemic.

WILLAMETTE WATER SUPPLY SYSTEM ANNUAL WORK PLAN – FY21 SCOPE OF WORK AND BUDGET

June 4, 2020

- ii. In coordination with the Management Committee and the WWSS Commission Board Chair, draft agendas for each meeting.
- iii. Post public notice of meetings and agendas on the Commission web page and make a public notice available to each party for posting at the party's offices.
- iv. Email calendar invites for all FY 21 meetings in July 2020 and email reminders of upcoming meetings one week prior to the meeting.
- v. Prepare and electronically distribute meeting agenda packets to the Board and Finance Committee one week prior to meetings.
- vi. Host twelve Board meetings, including coordinating meeting room set up, breakdown, and clean up.
- vii. Arrange for a boxed meal to be provided during meetings.
- viii. Draft speaking points for Board Chair.
- ix. Make an audio recording of all Board meetings.
- x. Prepare and distribute draft meeting minutes as part of the Board meeting packets.
- xi. Post meeting minutes to the WWSS Commission web page.

8. Contingency

This task provides an allowance of approximately 10 percent of the total annual budget to provide funds for WWSS Commission related work that is not identified at the time when the Annual Work Plan and Budget were prepared. In such situations, the MA will present a request to the MC to use contingency funds, including the purpose and amount of funds requested. Following approval by the MC, approval will also be obtained from the Board.

STAFFING PLAN

The proposed staffing plan for the FY 21 services is reflected in the proposed budget. This staffing plan includes five categories of labor. Specific staffing categories and representative staff positions include:

- **General Manager:** this category is limited to TVWD's Water Supply Manager and Willamette Water Supply Program Director.
- **Department Manager:** this category includes TVWD's Chief Financial Officer, General Counsel, Chief Engineer, WWSP Assistant Program Director, and WWSP Permitting and Outreach Manager.
- **Professional:** this category includes senior professional staff such as TVWD's Water Supply Operations Supervisor, Financial Operations Manager, Senior Engineer, Risk Management Coordinator, Senior Management Analyst, Water Resources Manager, WWSP Communications Supervisor, WWSP Financial Manager.
- **Technician:** this category includes a wide variety of technical and para-professional staff including Communications Coordinators, District Recorder, Engineering Associates, Management Analyst, Water Quality Specialists, and Accountants.
- **Administrative Support:** this category consists of administrative support and includes the District's Executive Assistant and Administrative Assistant positions.

WILLAMETTE WATER SUPPLY SYSTEM ANNUAL WORK PLAN – FY21 SCOPE OF WORK AND BUDGET

June 4, 2020

Not all staffing categories or positions are used for all tasks or assignments. Instead, specific staff will be engaged as needed based on the demands of the given task and the expertise of available staff. As such, TVWD's staffing resources represent a deep pool from which the Commission can efficiently draw upon. TVWD's diverse range of knowledge, skills and abilities represented by these five categories is intended to allow assignments to be completed at the lowest cost and provide the highest value for the WWSS Commission.

ASSUMPTIONS

Additional services by the MA and special projects beyond the above scope and proposed budget will be specifically directed, authorized and funded by the WWSS Commission Board.

The proposed scope of services and budget are limited to services provided in FY 21 and do not establish a baseline, cap, or precedent for services and funding requirements for future years. Future funding requirements will be based on Board-approved work plans and scopes of work.

All meetings, including but not limited to Commission Board meetings, Management Committee meetings, Finance Committee meetings, and Operations Committee meetings are assumed to be held at TVWD's office or the WWSP Program Management Office, both in Beaverton. Committee meetings shall be considered technical meetings and Commission Board meetings shall be considered public meetings.

TVWD will provide logistical support, as needed, such as meeting room set-up, audio visual equipment, and meeting room clean-up.

The level of detail and content of the Board packets and meeting minutes will generally be consistent with Willamette River Water Coalition (WRWC) and Joint Water Commission (JWC) Board meetings. Each monthly Board meeting is assumed to last about two hours. Board meeting attendance is assumed to include: twelve meetings per year, three partner agencies, and up to four attendees per agency (i.e., a Board member, a Board alternate and two staff). A boxed meal shall be provided for each of the four attendees per agency, and for up to four other attendees from the MA.

The level of effort (e.g., staff hours) will generally be consistent with the proposed MA budget for FY 21. The MA shall manage the use of budgeted labor hours and expenses as the MA deems necessary to fulfill the scope of work. The MA will control the scope of work in coordination with the Finance and Operations Committees. Any significant anticipated changes to the scope of work will first be vetted by the MA with the Finance and Operations committees. In the event the level of effort significantly exceeds the anticipated budget, the MA will coordinate with the Management Committee to identify appropriate response strategies, including supplemental budget requests, or use of contingency funds (Task 8) for consideration by the Board and MA staff.

BUDGET

The following proposed budget is based on the assumed scope of services and staffing plan as outlined above. Hours in the proposed budget include only those hours that are anticipated to be in addition to TVWD's participation in the Commission as a Party. Labor rates, by category, are based on TVWD's direct salary plus burden, direct overhead, and indirect overhead.

Willamette Water Supply System Commission

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WILLAMETTE WATER SUPPLY SYSTEM

HISTORICAL DATA			PERSONNEL SERVICES	2020-21 BUDGET	
ACTUAL FY 18	ACTUAL FY19	ADOPTED BUDGET FY20	DETAILED DESCRIPTION	PROPOSED BUDGET FY21	% CHG FROM FY20
\$0	\$0	\$0	FUND TOTAL-WWSS GENERAL SERVICES	\$0	N/A
\$0	\$0	\$0	TOTAL PERSONNEL SERVICES	\$0	N/A

HISTORICAL DATA			MATERIALS & SERVICES	2020-21 BUDGET	
ACTUAL FY 18	ACTUAL FY19	ADOPTED BUDGET FY20	DETAILED DESCRIPTION	PROPOSED BUDGET FY21	% CHG FROM FY20
\$0	\$0	\$834,788	FUND TOTAL-WWSS GENERAL SERVICES	\$948,555	13.6%
\$0	\$0	\$834,788	TOTAL MATERIALS & SERVICES	\$948,555	13.6%

HISTORICAL DATA			CAPITAL OUTLAY	2020-21 BUDGET	
ACTUAL FY 18	ACTUAL FY19	ADOPTED BUDGET FY20	DETAILED DESCRIPTION	PROPOSED BUDGET FY21	% CHG FROM FY20
\$0	\$0	\$90,289,012	FUND TOTAL-WWSS GENERAL SERVICES	\$137,831,538	52.7%
\$0	\$0	\$90,289,012	TOTAL CAPITAL OUTLAY	\$137,831,538	52.7%

HISTORICAL DATA			TRANSFERS & CONTINGENCY	2020-21 BUDGET	
ACTUAL FY 18	ACTUAL FY19	BUDGET FY20	DETAILED DESCRIPTION	PROPOSED BUDGET FY21	% CHG FROM FY20
\$0	\$0	\$83,000	GENERAL OPERATING CONTINGENCY	\$80,000	-3.6%
\$0	\$0	\$83,000	TOTAL TRANSFERS AND CONTINGENCY	\$80,000	-3.6%

HISTORICAL DATA			TOTAL APPROPRIATIONS	2020-21 BUDGET	
ACTUAL FY 18	ACTUAL FY19	ADOPTED BUDGET FY20	DETAILED DESCRIPTION	PROPOSED BUDGET FY21	% CHG FROM FY20
\$0	\$0	\$91,206,800	TOTAL FUND APPROPRIATIONS	\$138,860,093	52.2%

WILLAMETTE WATER SUPPLY SYSTEM
GENERAL SERVICES DIVISON (60-01)

HISTORICAL DATA			WWSS DIVISION SUMMARY MATERIALS & SERVICES GENERAL SERVICES DIVISION		2020-21 BUDGET	
ACTUAL FY 18	ACTUAL FY19	ADOPTED BUDGET FY20	DETAILED DESCRIPTION	GL #	PROPOSED BUDGET FY21	% CHG FROM FY20
\$0	\$0	\$549,288	OPERATING EXPENSE	45-60-01-7000	\$576,055	4.9%
\$0	\$0	\$135,000	PROFESSIONAL SERVICES	45-60-01-7310	\$275,000	103.7%
\$0	\$0	\$110,000	INSURANCE	45-60-01-7320	\$32,000	-70.9%
\$0	\$0	\$4,200	BUSINESS EXPENSE	45-60-01-7330	\$4,200	0.0%
\$0	\$0	\$8,000	PROPERTY MAINTENANCE	45-60-01-7400	\$30,000	275.0%
\$0	\$0	\$5,000	PUBLIC INFORMATION	45-60-01-7450	\$0	-100.0%
\$0	\$0	\$15,300	AUDIT	45-60-01-7490	\$15,300	0.0%
\$0	\$0	\$8,000	LOCATES	45-60-01-7680	\$16,000	100.0%
\$0	\$0	\$834,788	FUND TOTALS		\$948,555	13.6%

Exhibit 3 to Resolution No. WWSS-09-20

4D.5

Willamette Water Supply Program
Baseline 5.2_Requested

WWSP Projects	Actual Cost thru June 2019	FY 20 Actual Cost thru March, 2020	FY 2020 Forecast Remaining	FY 2021 Forecast	FY 2022 Forecast	FY 2023 Forecast	FY 2024 Forecast	FY 2025 Forecast	FY 2026 Forecast	FY 2027 Forecast	Program Total
WTP 1.0 Willamette Water Treatment Plant	5,120,872	4,337,222	1,599,650	6,348,610	12,929,513	83,809,220	108,651,559	61,490,589	23,415,625	-	307,702,860
RWF 1.0 Raw Water Facility	5,899,435	2,725,657	1,511,261	36,072,092	17,671,255	15,752,790	27,557,829	1,864,728	-	-	109,055,048
PLM 1.0 WTP to Day Road	3,852,492	3,283,410	8,012,872	5,050,337	9,497,792	24,761,155	5,215,193	-	-	-	59,673,250
PLM 2.0 Kinsman Road	5,208,717	109	41,772	-	-	-	-	-	-	-	5,250,599
PLM 3.0 SW 124th Avenue Extension	14,211,764	410,611	-	-	-	-	-	-	-	-	14,622,375
PLM 4.0 124th to Beef Bend Road	4,374,823	546,989	898,362	3,725,611	37,185,972	67,804,870	7,564,058	-	-	-	122,100,684
PLM 5.0 Beef Bend to Farmington	9,266,907	13,101,360	11,098,400	16,284,182	2,421,490	1,663,166	1,656,618	700,625	-	-	56,192,748
PLM 5.3 Grabhorn to Farmington	-	-	-	139,131	8,413,086	36,582,398	18,409,641	2,577,596	-	-	66,121,852
RES 1.0 Storage Reservoirs	98,274	50,986	1,140,729	4,588,394	13,088,035	31,745,462	23,930,171	3,469,194	-	-	78,111,245
PLW 1.0 Farmington to Frances	12,649,869	1,436,276	1,669,030	20,456,038	16,260,211	10,820,198	1,954,540	-	-	-	65,246,162
PLW 2.0 Frances to Hwy 26	18,292	1,497,214	831,915	2,481,672	28,273,693	28,615,361	2,347,350	-	-	-	64,065,496
COH_1.0 Hillsboro	-	12,420	25,506	70,871	493,372	499,830	32,727	-	-	-	1,134,726
MPE 1.0 Metzger Pipline East	1,932,988	1,223,552	1,980,950	6,243,787	24,584,996	52,064,000	20,453,495	3,390,328	-	-	111,874,095
COB_1.0 City of Beaverton	-	57,223	692,460	1,636,622	3,752,247	7,964,856	3,118,941	513,828	-	-	17,736,177
DCS 1.0 Distribution Control System	402,468	202,418	92,322	366,404	413,348	789,466	1,651,794	1,194,760	473,840	-	5,586,819
PgM Program Management	10,594,813	1,841,424	1,127,936	3,211,300	3,648,435	3,648,435	3,634,071	3,648,435	3,648,435	1,824,217	36,827,500
PC Controls	4,442,658	1,098,774	211,776	1,722,910	1,861,407	1,861,407	1,854,079	1,861,407	1,861,407	930,704	17,706,530
PA Procurement	1,195,957	229,628	115,562	352,220	483,605	483,605	481,701	483,605	-	-	3,825,884
PE Permitting	5,386,530	1,659,044	653,856	3,086,220	1,209,307	1,209,307	1,204,546	1,209,307	1,209,307	604,653	17,432,075
MI Mitigation	206,150	610,458	217,542	571,000	843,530	814,230	526,650	545,080	564,160	-	4,898,800
DM Design Management	8,668,041	2,103,356	203,964	1,942,430	1,833,959	1,833,959	1,826,739	1,833,959	1,833,959	916,979	22,997,345
CM Construction Management	2,629,251	947,722	1,154,218	1,920,250	2,113,200	2,113,200	2,104,880	2,113,200	2,113,200	1,056,600	18,265,720
RE Real Estate	15,529,190	2,058,481	2,446,011	1,185,540	560,440	388,680	399,220	410,280	15,696,650	260,460	38,934,952
RE - PLM_1.0	-	-	-	2,693,720	-	-	-	-	-	-	2,693,720
RE - PLM_4.0	-	-	-	1,104,350	-	-	-	-	-	-	1,104,350
RE - PLM_5.0	-	-	-	4,949,980	-	-	-	-	-	-	4,949,980
RE - PLW_1.0	-	-	-	-	-	-	-	-	-	-	-
RE - PLW_2.0	-	-	-	-	719,574	-	307,500	-	-	-	1,027,074
RE - RWF_1.0	-	-	-	84,000	-	-	-	-	-	-	84,000
RE - MPE_1.0	-	-	-	850,120	-	-	-	-	-	-	850,120
RE - Turnouts & Facilities (COH)	-	-	-	1,002,100	92,556	-	-	-	-	-	1,094,656
RE - Turnouts & Facilities (TVWD)	-	-	-	1,773,100	91,800	-	-	-	-	-	1,864,900
PR Public Outreach	3,694,018	605,455	545,985	941,980	1,039,917	1,039,917	1,035,823	1,039,917	1,039,917	519,959	11,502,889
LG Legal	1,049,290	272,097	167,903	467,850	292,188	292,188	291,037	292,188	292,188	146,094	3,563,021
IT Information Technology	102,363	3,729	13,371	19,170	19,132	19,132	19,057	19,132	19,132	9,566	243,783
NCE Non Capital Expenditures	6,867,932	1,331	-	-	-	-	-	-	-	-	6,869,263
SI System Integration	350,387	521,248	312,472	973,900	634,415	602,227	610,548	1,144,659	1,867,393	421,146	7,438,395
MR Management Reserve	-	-	2,188,867	11,728,983	15,554,507	12,687,494	7,053,311	2,830,271	836,567	-	52,880,000
Total	123,753,482	40,838,194	38,954,693	144,044,871	205,982,981	389,866,552	243,893,079	92,633,087	54,871,779	6,690,378	1,341,529,095

Willamette Water Supply System Commission

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Willamette Water Supply

Our Reliable Water

4.D Adopt Revised Fiscal Year 2020- 2021 Annual Work Plan and Budget and WWSP Capital Improvement Plan (Baseline 5.2)

June 4, 2020

1

Outline

- Preview of requested Board action
- Baseline background
- WWSP project contingency and management reserve
- Baseline history
- Proposed Baseline 5.2
- Proposed Revised FY 2021 WWSS Annual Work Plan and Budget
- Closing considerations and commitments
- Requested Board action

2

Preview of Requested Board Action

Consider adopting a revised Annual Work Plan and Budget for the Willamette Water Supply System (WWSS) for fiscal year 2020-21 and WWSP Capital Improvement Plan (Baseline 5.2) and requiring staff to continue working closely with the WWSS Management Committee to control overall WWSS costs and manage exposure to cost risks

3

BASELINE BACKGROUND

4

What is the Baseline?



Why adopt a Baseline and when?

- Board to adopt a capital improvement plan (IGA Section 5 & 8)
- Component of WWSS Financial Procedures (IGA Exhibit 6)
- Part of WWSS governance (WWSS MAM)
- Updated annually and modified if needed

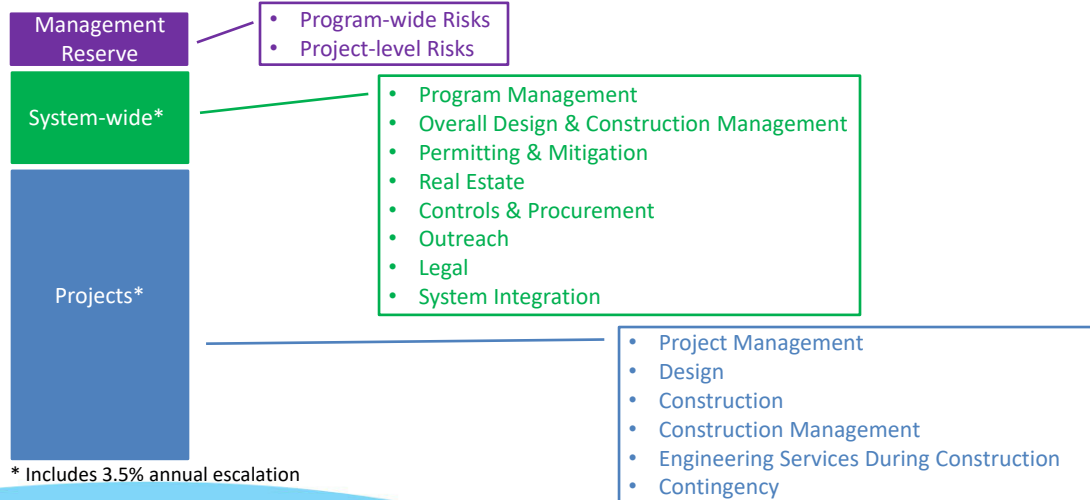
How is it used?

- Planning and managing work
- Establishing fiscal year budgets
- Detecting potential changes or variances
- Input to risk analysis and management
- Reporting to Board, Partners, WIFIA, and public
- Input to financial forecasting by Partners

Approach to annual Baseline preparation and review



The Baseline cost estimate has 3 main components



WWSP PROJECT CONTINGENCY AND MANAGEMENT RESERVE

How is uncertainty reflected in the Baseline?

Project Contingency

Changes within the scope of the project, anticipated design developments, planning/estimating evolution, and minor price fluctuations

EXAMPLE USES

- Project details established through design progression
- Minor, within-scope changes during design
- Minor market variations
- Minor, within-scope changes during construction

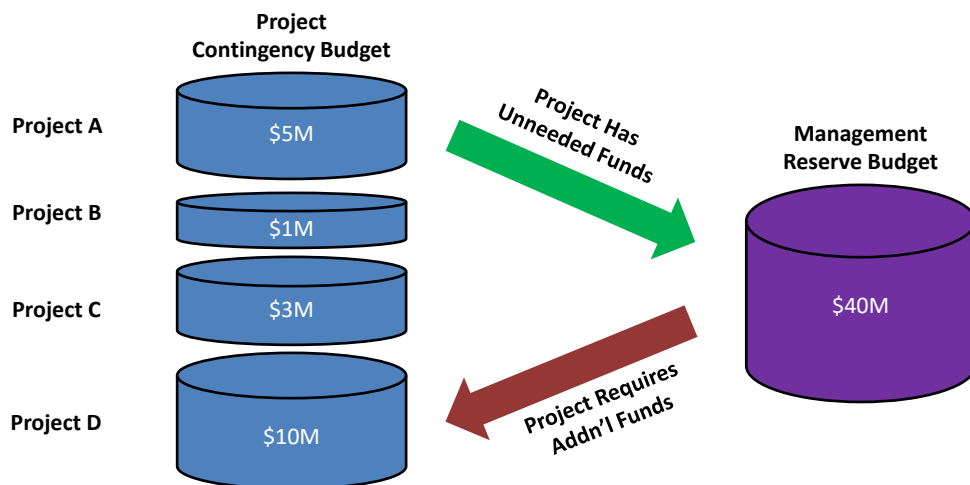
Management Reserve

Changes to WWSS projects beyond the Project Contingency intent/amount, changes to System-wide costs, and coverage of Owner's discretionary costs

EXAMPLE USES

- Unforeseen IGA adds project cost
- Property cost exceeds budget
- Major scope change during design
- Project bids above budget
- Major changes during construction
- New tax imposed
- Escalation exceeds assumed rate

How do Project Contingency budgets and the WWSS Management Reserve budget interact?



Amounts shown are for demonstration purposes

Examples of how changes can affect WWSP budgets

Example	Project Budget Change	Management Reserve Change	WWSP Total Baseline Change
A. Project Bids \$5M Below Budget	-\$5M	+\$5M	\$0M
B. New IGA Commitment of \$8M	+\$8M	-\$8M	\$0M
C. \$2M Expansion of Ancillary Project	+\$2M	\$0M	+\$2M
D. Annual Rebaseline Risk Analysis Indicates \$4M MR Shortfall	\$0M	+\$4M	+\$4M

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BASELINE HISTORY

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Are the Baseline estimates reliable?

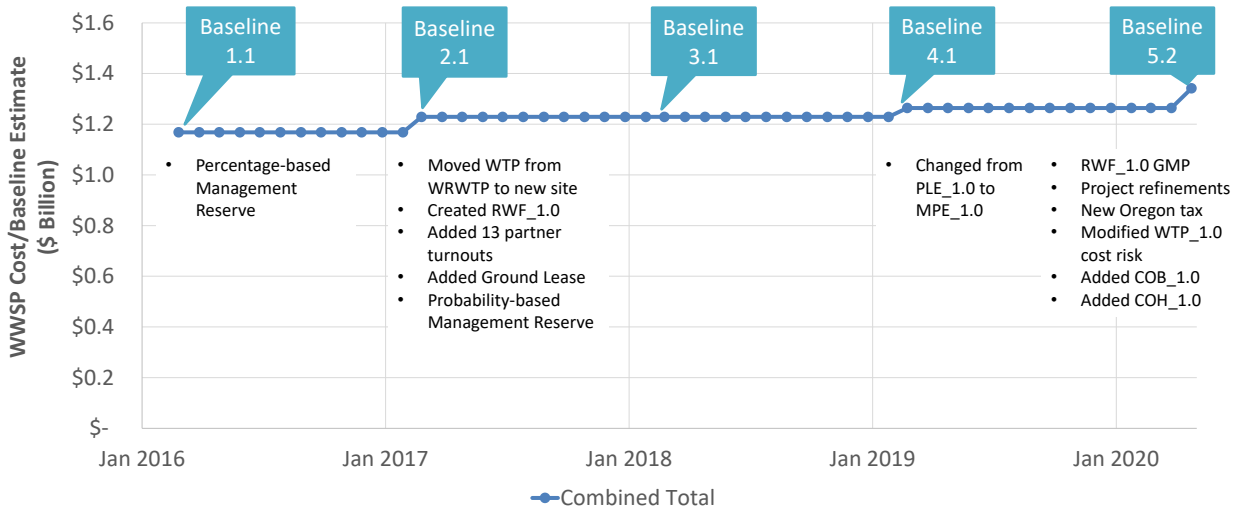
Projects Bid	WWSP Budget	Contractor's Bid & Contingency	Percent Difference from Budget	Difference
PLM_2.0	\$4,070,200	\$4,070,200	0%	\$0
PLM_3.0	\$11,628,032	\$11,361,106	-2%	\$266,926
PLW_1.1	\$6,949,989	\$6,452,248	-7%	\$497,741
PLM_5.1	\$19,221,178	\$18,096,002	-6%	\$1,125,176
PLM_5.2	\$22,549,998	\$16,395,981	-27%	\$6,154,017
PLM_1.2*	\$7,832,725	\$7,994,660	2%	(\$161,936)
PLM_1.1	\$3,968,167	\$2,872,507	-28%	\$1,095,660
RWF_1.0 Phase I GMP	\$41,779,232	\$51,095,816	22%	(\$9,316,584)
PLW_1.3**	\$35,359,893	\$31,888,054	-10%	\$3,471,839
Overall	\$153,359,414	\$150,226,575	-2%	\$3,132,839

* PLM_1.2 includes change order to add Day Road crossing

** PLW_1.3 draft Baseline 5.1 budget used for this comparison due to substantial scope differences from Baseline 4.1

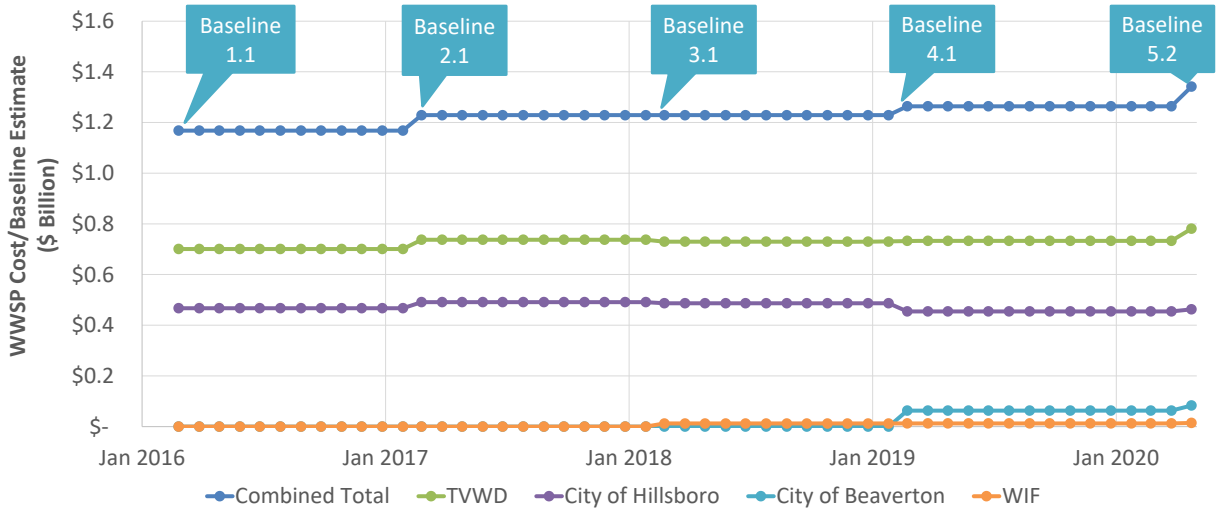
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Is the Baseline cost estimate changing over time and why?



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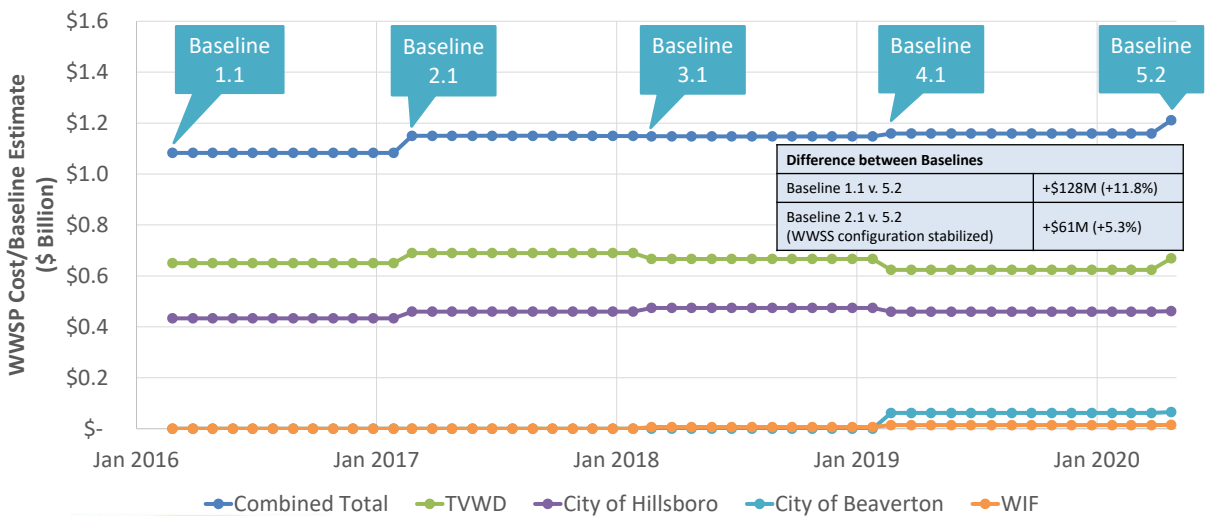
How have Baseline estimates changed by Partner?



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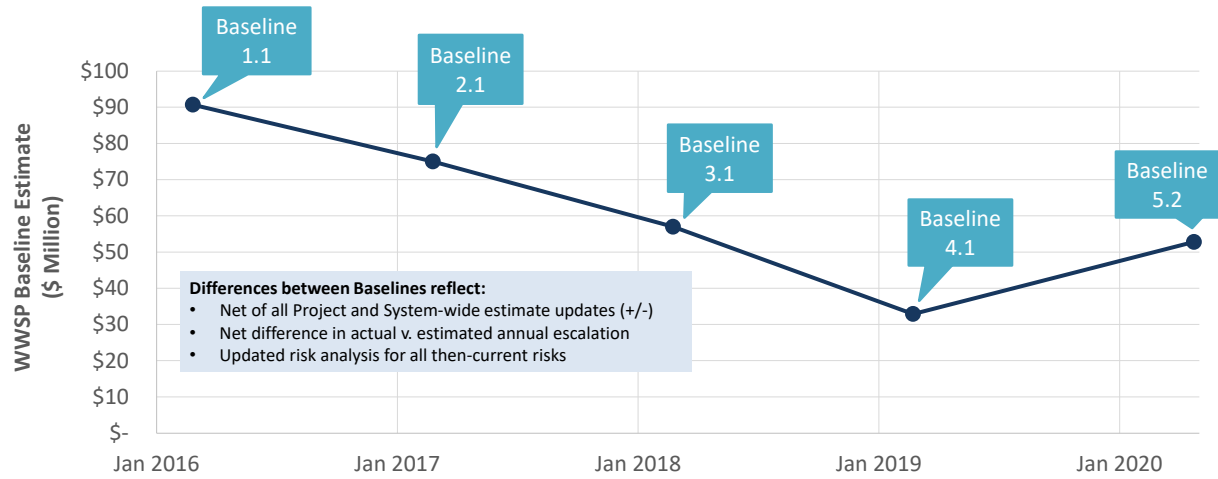
WWSS-only Baseline cost estimates by Partner

(Ancillary Projects removed; no adjustments to System-wide estimates)



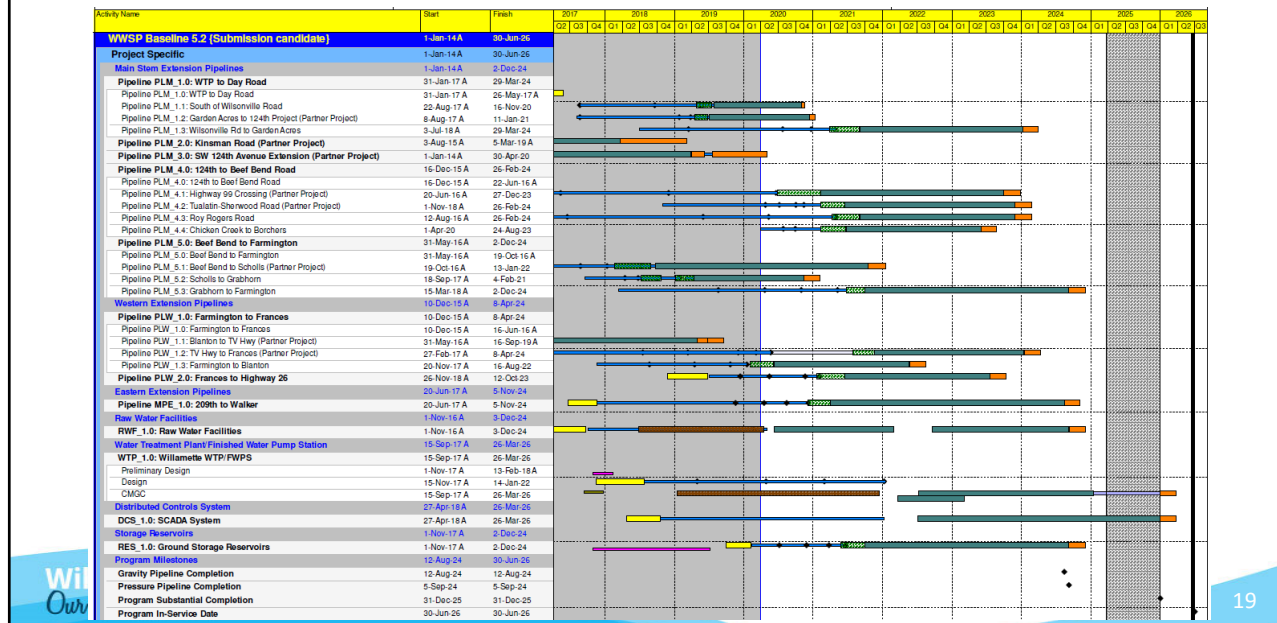
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WWSS Management Reserve estimate for each Baseline



PROPOSED BASELINE 5.2

The Baseline schedule establishes work sequencing



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Baseline 5.2 Partner Cost Summary

Partner	Baseline 4.1	Baseline 5.2 ¹	Change (\$)	Change (%)
Beaverton	\$61,764,311	\$83,247,980	\$21,483,669	35%
Hillsboro	\$459,265,062	\$462,657,631	\$3,392,569	1%
TVWD	\$729,037,856	\$780,603,831	\$51,565,975	7%
WIF	\$13,885,102	\$15,019,653	\$1,134,551	8%
Total Estimated Cost	\$1,263,952,331	\$1,341,529,095	\$77,576,764	6%

¹ Based on Program cost data and preliminary cost shares, including ancillary projects.

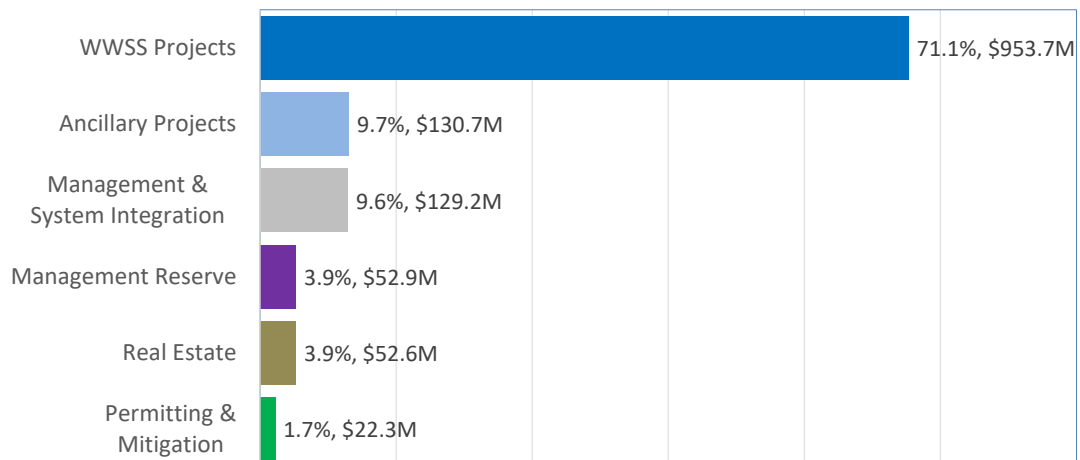
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Key changes from Baseline 4.1 to 5.2

Budget Element	Change (\$M)	Change (%)	Change Summary
RWF_1.0	\$14.3	15%	Recognizing Phase 1 GMP and projected Phase 2 GMP
WTP_1.0	\$32.6	11%	Recognizing estimated project cost increase approved in May 2019
RES_1.0	\$1.4	2%	Chemical feed facility and expected increase in rock excavation
Pipelines	-\$13.3	-3%	Net of numerous design refinements
WWSS Projects	\$35.0	4%	
MPE_1.0	\$6.9	7%	Design development, adding Metzger turnout, and changing Beaverton-Hillsdale tie-in
COH_1.0	\$1.1		Adding ancillary project
COB_1.0	\$17.7		Adding ancillary project
Ancillary Projects	\$25.7	25%	
Management Reserve	\$20.0	61%	Updated risk analysis, including WTP_1.0 cost risk
System-wide	-\$4.7	-3%	Design/construction management staff optimization and utilization of SMEs
Real Estate	\$2.2	4%	Additional easements and increased market valuation
Overall	\$78.2	6%	

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How are costs distributed within Baseline 5.2?

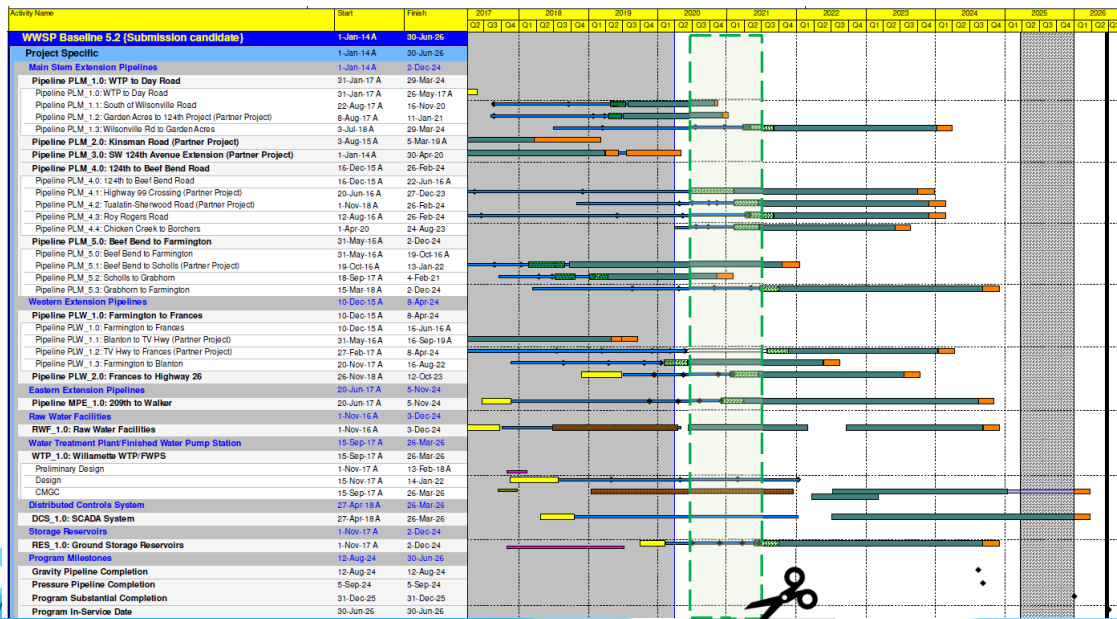


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PROPOSED REVISED FY 2021 WWSS ANNUAL WORK PLAN AND BUDGET

23

The FY 2021 Budget is a “slice” of Baseline 5.2



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Revised FY 2021 WWSS Budget

PERSONNEL SERVICES			
ADOPTED BUDGET FY20	DETAILED DESCRIPTION	REVISED BUDGET FY21	% CHG FROM FY20
\$0	TOTAL PERSONNEL SERVICES	\$0	N/A

MATERIALS & SERVICES			
ADOPTED BUDGET FY20	DETAILED DESCRIPTION	REVISED BUDGET FY21	% CHG FROM FY20
\$834,788	TOTAL MATERIALS & SERVICES	\$948,555	13.6%

CAPITAL OUTLAY			
ADOPTED BUDGET FY20	DETAILED DESCRIPTION	REVISED BUDGET FY21	% CHG FROM FY20
\$90,289,012	TOTAL CAPITAL OUTLAY	\$137,831,538	52.7%

TRANSFERS & CONTINGENCY			
ADOPTED BUDGET FY20	DETAILED DESCRIPTION	REVISED BUDGET FY21	% CHG FROM FY20
\$83,000	GENERAL OPERATING CONTINGENCY	\$80,000	-3.6%
\$83,000	TOTAL TRANSFERS AND CONTINGENCY	\$80,000	-3.6%

TOTAL APPROPRIATIONS			
ADOPTED BUDGET FY20	DETAILED DESCRIPTION	REVISED BUDGET FY21	% CHG FROM FY20
\$91,206,800	TOTAL FUND APPROPRIATIONS	\$138,860,093	52.2%

Key changes from Initial FY 2021 WWSS Budget

MATERIALS & SERVICES			
DETAILED DESCRIPTION	ADOPTED BUDGET FY21	REVISED BUDGET FY21	% CHG ADOPTED TO REVISED
TOTAL MATERIALS & SERVICES	\$808,555	\$948,555	17.3%

CAPITAL OUTLAY			
DETAILED DESCRIPTION	ADOPTED BUDGET FY21	REVISED BUDGET FY21	% CHG ADOPTED TO REVISED
TOTAL CAPITAL OUTLAY	\$125,763,556	\$137,831,538	9.6%

TOTAL APPROPRIATIONS			
DETAILED DESCRIPTION	ADOPTED BUDGET FY21	REVISED BUDGET FY21	% CHG ADOPTED TO REVISED
TOTAL FUND APPROPRIATIONS	\$126,652,111	\$138,860,093	9.6%

CLOSING CONSIDERATIONS AND COMMITMENTS

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Cost control will remain a key challenge for years to come

- WWSP understands the Partners' desire for cost certainty and will collaborate to address their concerns as they arise
- WWSP will continue to employ robust processes to maximize value and control costs
- When changes occur, WWSP will communicate as early as possible to enable their management
- Baseline is updated annually, and can be updated more frequently as necessary

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Anticipated impact of WWSP on jobs



Source: U.S. EPA Public Benefits
Report for WWSP WIFIA loans

Requested Board Action

Consider adopting a revised Annual Work Plan and Budget for the Willamette Water Supply System (WWSS) for fiscal year 2020-21 and WWSP Capital Improvement Plan (Baseline 5.2) and requiring staff to continue working closely with the WWSS Management Committee to control overall WWSS costs and manage exposure to cost risks

QUESTIONS

STAFF REPORT

To: Board of Commissioners

From: Dave Kraska, P.E., Willamette Water Supply System General Manager

Date: June 4, 2020

Subject: Resolution Declaring Public Necessity to Acquire Property Interests Over, Upon, Under, and Through Real Property for Pipeline Section PLM_4.3 for the Willamette Water Supply System

Requested Board Action:

Consider adopting an updated resolution declaring public necessity to acquire permanent and temporary construction easements over, upon, under, and through real property for pipeline section PLM_4.3 for the Willamette Water Supply System (WWSS).

Key Concepts:

The WWSS includes a section of pipeline along the Roy Rogers Road from Sherwood city limits to approximately 2,700 feet north of Beef Bend Road, in unincorporated Washington County, referred to as PLM_4.3.

- The Willamette Water Supply Program (WWSP) has progressed the design of this pipeline section to enable identification of property requirements for construction and long-term operation and maintenance of the pipeline.
- After consideration of various alignments and alternatives, the identified route will be located in a manner that will be most compatible with the greatest public good and the least private injury to property owners.
- This resolution declares the public need for the property interests and enables the WWSS Commission's agents, including the WWSP team, to begin negotiating with respective property interest holders.

Background:

The pipeline alignment for PLM_4.3 is mostly within unincorporated Washington County. The project begins at approximately 400 feet south of the northern Sherwood city limits on Roy Rogers Road and continues to follow Roy Rogers Road until the project terminates at PLM_5.1, approximately 2,700 feet north of Beef Bend Road. The project area is shown in the attached map. The pipeline will be a 66-inch diameter welded steel pipe.

PLM_4.3 will be located within and adjacent to the current Roy Rogers Road right of way (ROW) except at the Tualatin River crossing. At the river crossing, the pipeline leaves the road corridor in order to align the trenchless river crossing to avoid the bridge.

The PLM_4.3 pipeline alignment requires permanent and temporary easements to fulfill WWSP standard construction work zone requirements, particularly in the area of the Tualatin River trenchless crossing.

WWSP continues to coordinate with the City of Sherwood and Washington County during final design.

Resolution Summary

The WWSS Commission has authority to acquire real property for the WWSS. The pipeline section PLM_4.3 requires the acquisition of several temporary and permanent easements on private property. The PLM_4.3 pipeline alignment was selected through an extensive alternatives evaluation, and the preferred location was selected based the best interests of the public and the least injury to private property owners. The resolution enables the initiation of the property acquisition process, including negotiations with interest holders.

Budget Impact:

The WWSP real estate team has completed an estimate that represents, in the professional judgment of the real estate team, the budget-level cost required to acquire the easements. The total estimated cost for PLM_4.3 permanent and temporary construction easements is \$959,000. Funds for purchase of these easements are included in the WWSP baseline budget.

Staff Contact Information:

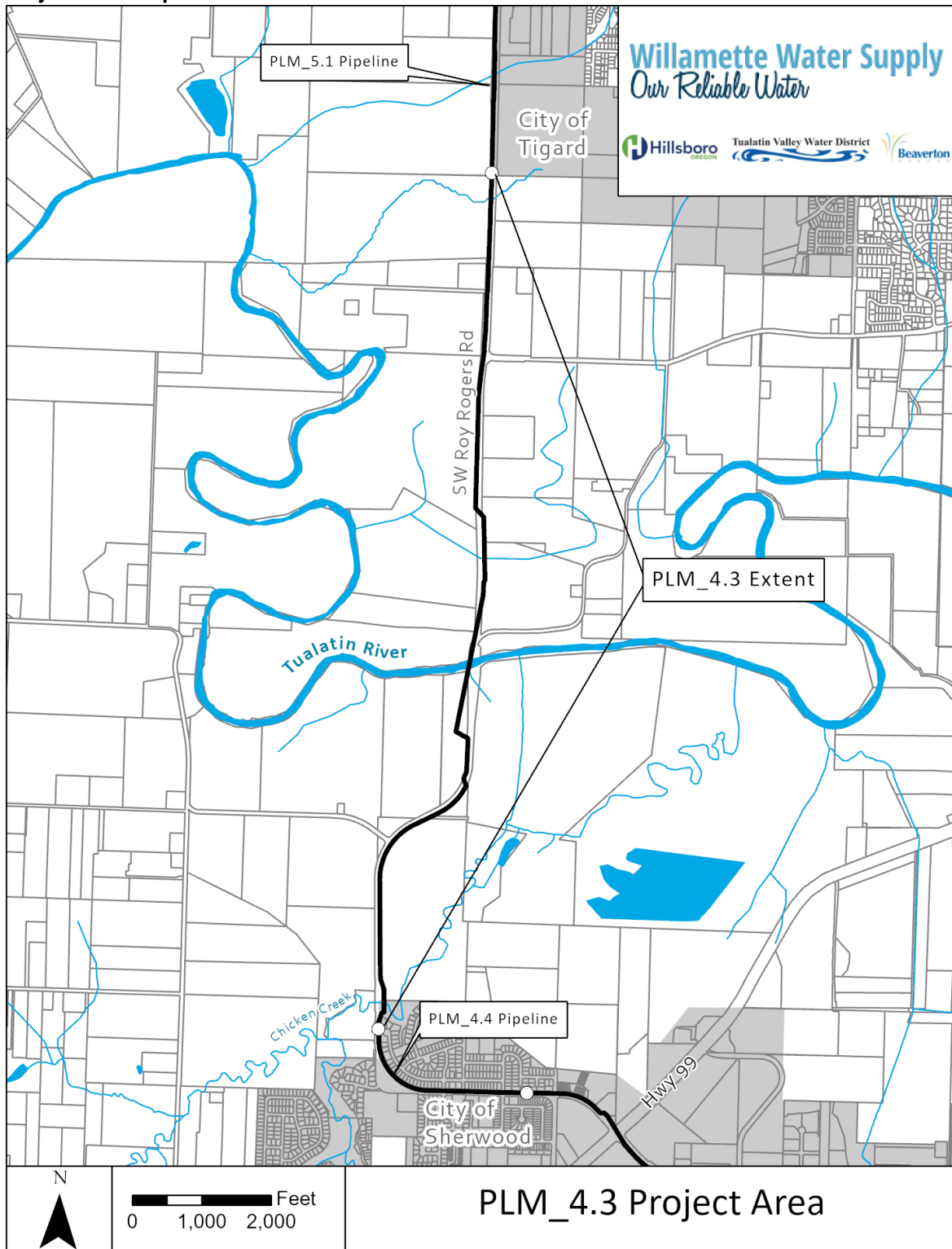
Dave Kraska, WWSS General Manager, 503-941-4561, david.kraska@tvwd.org
Clark Balfour, General Counsel, 503-848-3061, clark.balfour@tvwd.org

Attachments:

Project area map
Proposed Resolution
Exhibit 1: Property Interests (including Exhibit A Legal Descriptions and Exhibit B Acquisition Maps)

Resolution Declaring Public Necessity to Acquire Property Interests for WWSP Pipeline Section PLM_4.3

Project area map:



Willamette Water Supply System Commission

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RESOLUTION NO. WWSS-10-20

RESOLUTION DECLARING PUBLIC NECESSITY TO ACQUIRE PROPERTY INTERESTS OVER, UPON, UNDER AND THROUGH REAL PROPERTY FOR PIPELINE SECTION PLM_4.3 FOR THE WILLAMETTE WATER SUPPLY SYSTEM.

WHEREAS, the above-entitled matter came before the Willamette Water Supply System Commission (WWSS Commission) at its regular meeting on June 4, 2020; and,

WHEREAS, the Willamette Water Supply System Intergovernmental Agreement (Agreement) between Tualatin Valley Water District (TVWD), the City of Hillsboro (Hillsboro), and the City of Beaverton (Beaverton) (collectively, Members) created the WWSS Commission, an ORS Chapter 190 intergovernmental entity, effective July 1, 2019, to exercise the powers and duties set forth in the Agreement; and,

WHEREAS, pursuant to the Agreement, TVWD has been designated as the Managing Agency of the WWSS Commission; and,

WHEREAS, the Willamette Water Supply System (WWSS) includes, but is not limited to, an expanded and improved water intake on the Willamette River in the City of Wilsonville currently owned by TVWD and the City of Wilsonville, along with a new raw water pipeline, potable water treatment plant, finished water pipelines, pumping, storage, and other necessary water system facilities to enable the WWSS to utilize existing water rights to provide water system ownership and reliability to the Members' water system users; and,

WHEREAS, the WWSS Commission has been delegated authority by its Members under the Agreement and ORS Chapter 190 pursuant to City Charters, ORS 223.005 to 223.105, ORS 264.240 and Oregon Revised Statutes Chapter 35 to acquire real property by purchase or through eminent domain proceedings; and,

WHEREAS, the WWSS Commissioners determine, consistent with the powers and purposes of the WWSS Commission, that it is necessary for the economic well-being, public health, safety and welfare of the WWSS Commission and the Members' water system users, to acquire fee title to certain real property, as well as necessary rights-of-way, easements, and other property interests, in order to design, locate, construct, operate, and implement the WWSS; and,

WHEREAS, after investigation of various routes for a water pipeline and related water system facilities, the WWSS Commission has determined that certain property interests, are necessary for the construction, location, and operation of the WWSS, and in particular, pipeline section PLM_4.3, and that such use is planned and located in a manner that is most compatible with the greatest public benefit and the least private injury; and,

WHEREAS, such property interests are preliminarily described on Exhibits A and depicted for illustration purposes only on Exhibits B attached hereto and incorporated by reference, with final legal descriptions and easement documents as be determined by TVWD staff, including the Willamette Water

Supply Program (WWSP) and its consultants, as the Managing Agency and on behalf of the WWSS Commission, to be reasonably necessary to accommodate the design and operation of the WWSS (the Easement Interests); and,

WHEREAS, the WWSS Commission finds that declaration by resolution to acquire the Easement Interests for the WWSS is necessary and being so advised.

NOW, THEREFORE, BE IT RESOLVED BY THE WILLAMETTE WATER SUPPLY SYSTEM COMMISSION THAT:

Section 1: The above recitals shall form an integral part of this resolution and shall have the same force and effect as if fully stated herein.

Section 2: It is necessary for the preservation of economic well-being, public health, safety and welfare of the public served by the Members and the WWSS that the WWSS Commission commence the acquisition process for the Easement Interests through exercise of the power of eminent domain.

Section 3: TVWD staff, including the WWSP, and counsel are authorized to retain real estate appraisers, negotiators, and other consultants, with said appraisals to be prepared under the auspices of WWSS Commission counsel, for initiation of proceedings as described below.

Section 4: TVWD staff, including WWSP, consultants, and counsel, are authorized to negotiate in good faith necessary agreements to acquire the Easement Interests on behalf of and in the name of the WWSS Commission and to pay just compensation and applicable compensable damages in accordance with applicable law, including to the extent just compensable and applicable compensable damages are equal to or greater than \$150,000, without necessity of approval by the WWSS Management Committee or further approval by the WWSS Commission.

Section 5: TVWD staff, including WWSP, and counsel, are authorized to file complaints in condemnation, on behalf of and in the name of the WWSS Commission, and to take other steps as they determine necessary as the Managing Agency, and to prosecute to final determination such actions to acquire title to the Easement Interests if negotiations fail.

Section 6: Upon the trial of any suit or action instituted to acquire the Easement Interests, counsel acting for and on behalf of the WWSS Commission are authorized to make such stipulation, agreement or admission as in their judgment may be for the best interest of the WWSS Commission and to take possession of the Easement Interests at such time as appropriate in their judgment without necessity of further WWSS Commission approval.

Approved and adopted at a regular meeting held on the 4th day of June 2020.

James Duggan, Chair

Denny Doyle, Vice Chair

Exhibits A & B (1 of 13) to Resolution No. WWSS-10-20

Easement Descriptions
 WWSP PLM 4.3
 Washington County, Oregon
 April 16, 2020
 Project No. 0458-020
 Ref: 2S1180001404

EXHIBIT A

Tract 1 (Permanent Easement):

A tract of land lying in the Southeast 1/4 Section 18, Township 2 South, Range 1 West of the Willamette Meridian, in Washington County, Oregon; being a portion of that property described in a Deed to Alois A. Amstad and DeeAnn G. Amstad, Trustees of the Tony and DeeAnn Amstad Revocable Trust dated August 9, 2004 recorded as Doc. No. 2004-146737, Washington County Deed Records; and being more particularly described as follows:

Beginning at **Point 'A'** being on the east Right-of-Way line of SW Roy Rogers Road, as established in the Right-of-Way Survey by Oregon Department of Transportation filed April 2002 as Washington County Survey Number 28,892, that is easterly 45.28 feet and perpendicular to centerline "L" station 139+92.61;

thence along said Right-of-Way line, N 01° 52' 39" E, 101.18 feet to the beginning of a curve;

thence along a curve to the left, having a radius of 5048.56 feet through a central angle of 01° 57' 01" (the chord of which bears N 00° 54' 08" E, 171.85 feet) an arc length of 171.86 feet;

thence leaving said Right-of-Way line, S 84° 53' 30" E, 12.01 feet;

thence, N 05° 06' 30" E, 90.99 feet;

thence, N 90° 00' 00" W, 20.98 feet to a point on the east Right-of-Way line of SW Roy Rogers Road that is easterly 45.27 feet and perpendicular to centerline "L" station 136+32.35, said point being on a curve;

thence along said curve to the left, having a radius of 5048.55 feet through a central angle of 00° 20' 06" (the chord of which bears N 01° 15' 24" W, 29.51 feet) an arc length of 29.51;

thence leaving said Right-of-Way line, N 90° 00' 00" E, 13.79 feet to the beginning of a non-tangential curve, being parallel with and 13.79 feet east from, when measured at right angles to, the easterly Right-of-Way line of SW Roy Rogers Road;

thence along said curve to the left, having a radius of 5062.34 feet through a central angle of 00° 59' 22" (the chord of which bears N 01° 54' 54" W, 87.41 feet) an arc length of 87.41 feet;

thence, N 87° 35' 25" E, 6.56 feet to the beginning of a non-tangential curve, being parallel with and 20.35 feet east from, when measured at right angles to, the easterly Right-of-Way line of SW Roy Rogers Road;

thence along said curve to the left, having a radius of 5068.90 feet through a central angle of 00° 16' 08" (the chord of which bears N 02° 32' 39" W, 23.80 feet) an arc length of 23.80 feet to a point of tangency;

thence continuing along a line being parallel with and 20.35 feet east from, when measured at right angles to, the easterly Right-of-Way line of SW Roy Rogers Road, N 02° 40' 43" W, 481.27 feet, more or less, to the north line of said Amstad tract;

thence along said north line, N 89° 27' 46" E, 30.02 feet;

thence, S 02° 40' 43" E, 613.44 feet;

thence, S 05° 06' 30" W, 102.87 feet;

thence, S 84° 53' 30" E, 5.00 feet;

thence, S 05° 06' 30" W, 39.64 feet;

thence, S 09° 41' 44" W, 24.02 feet;

thence, N 80° 18' 16" W, 10.00 feet;

thence, S 09° 41' 44" W, 210.30 feet, more or less, to **Point 'A'** the Point of Beginning;

Containing 28,514 square feet, more or less.

Bearings based on Oregon Coordinate Reference System, Portland Zone.

Tract 2 (Temporary Construction Easement):

A tract of land lying in the Southeast 1/4 Section 18, Township 2 South, Range 1 West of the Willamette Meridian, in Washington County, Oregon; being a portion of that property described in a Deed to Alois A. Amstad and DeeAnn G. Amstad, Trustees of the Tony and DeeAnn Amstad Revocable Trust dated August 9, 2004 recorded as Doc. No. 2004-146737, Washington County Deed Records; and being more particularly described as follows:

Commencing at **Point 'A'** being on the east Right-of-Way line of SW Roy Rogers Road, as established in the Right-of-Way Survey by Oregon Department of Transportation filed April 2002 as Washington County Survey Number 28,892, that is easterly 45.28 feet and perpendicular to centerline "L" station 139+92.61;

thence, N 09° 41' 44" E, 174.97 feet to the **True Point of Beginning**;

thence, N 09° 41' 44" E, 35.33 feet;

thence, S 80° 18' 16" E, 10.00 feet;

thence, N 09° 41' 44" E, 24.02 feet;

thence, N 05° 06' 30" E, 39.64 feet;

thence, N 84° 53' 30" W, 5.00 feet;

thence, N 05° 06' 30" E, 102.87 feet;

thence, N 02° 40' 43" W, 613.44 feet, more or less, to the north line of said Amstad tract;

thence along said north line, N 89° 27' 46" E, 45.03 feet;

thence, S 02° 40' 43" E, 623.04 feet;

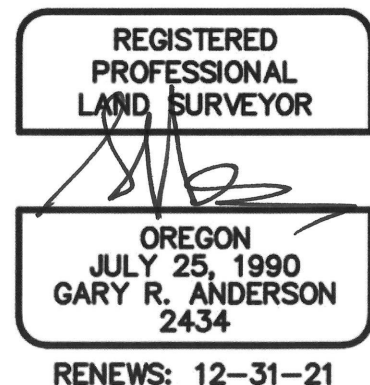
thence, N 90° 00' 00" E, 2.62 feet to the beginning of a non-tangential curve, being parallel with and 100.00 feet east from, when measured at right angles to, the easterly Right-of-Way line of SW Roy Rogers Road;

thence along said curve to the right, having a radius of 5148.55 feet through a central angle of 02° 07' 14" [the chord of which bears S 00° 00' 28" E, 190.54 feet] an arc length of 190.55 feet;

thence, N 89° 36' 55" W, 75.69 feet to the **True Point of Beginning**.

Containing 39,069 square feet, more or less.

Bearings based on Oregon Coordinate Reference System, Portland Zone.



Willamette Water Supply System Commission

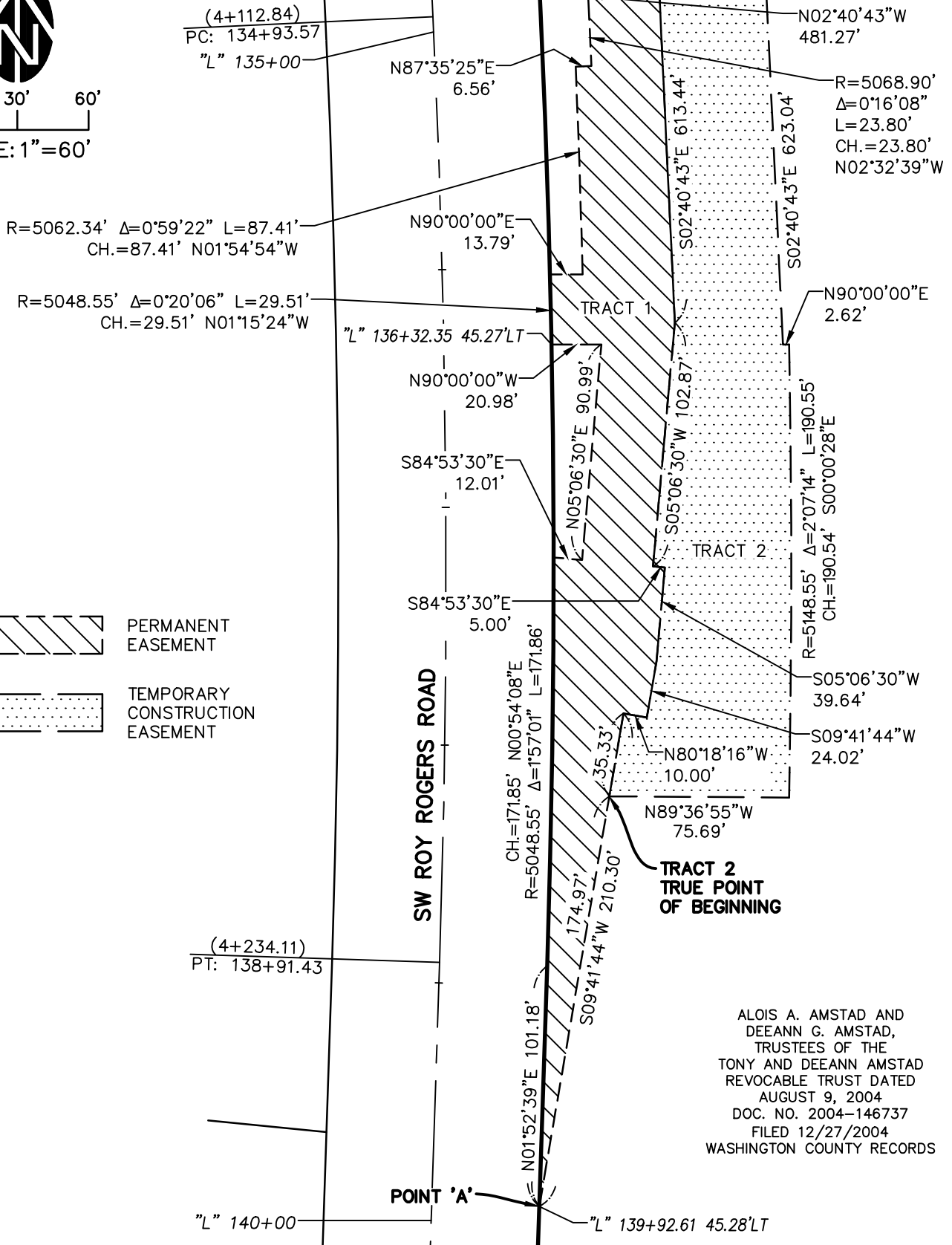
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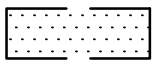


0 30' 60'
SCALE: 1"=60'

SEE SHEET 2 OF 2



PERMANENT EASEMENT



TEMPORARY CONSTRUCTION EASEMENT

ALOIS A. AMSTAD AND
 DEEANN G. AMSTAD,
 TRUSTEES OF THE
 TONY AND DEEANN AMSTAD
 REVOCABLE TRUST DATED
 AUGUST 9, 2004
 DOC. NO. 2004-146737
 FILED 12/27/2004
 WASHINGTON COUNTY RECORDS

EXHIBIT B
PAGE 1 OF 2

LOCATED IN THE SE 1/4 OF SECTION 18
 TOWNSHIP 2S, RANGE 1W, W.M.
 WASHINGTON COUNTY, OREGON

DATE	04/16/2020
DRAWN BY	KEL
CHECKED BY	GRA
REVISION	0
JOB NO.	0458-020



WESTLAKE
CONSULTANTS INC.

ENGINEERING ♦ SURVEYING ♦ PLANNING

PACIFIC CORPORATE CENTER
 15115 S.W. SEQUOIA PARKWAY, SUITE 150 (503) 684-0652
 TIGARD, OREGON 97224 FAX (503) 624-0157

C:\TEMP\AC\PUBLISH_1221610458-020X.PLM 4.3 EASEMENTS.DWG 2020-04-16 9:52 AM - KEL



0 30' 60'
SCALE: 1"=60'

"L" 130+00

"L" 130+12.30 65.62'LT

"L" 130+13.42 95.62'LT

N89°27'46"E

30.02'

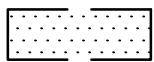
45.03'

SW ROY ROGERS ROAD

"L" LINE
(SN28892)



PERMANENT
EASEMENT



TEMPORARY
CONSTRUCTION
EASEMENT

N02°40'43"W 481.27'

TRACT 1

TRACT 2

S02°40'43"E 613.44'

S02°40'43"E 623.04'

N87°35'25"E
6.56'

(4+112.84)
PC: 134+93.57

"L" 135+00

ALOIS A. AMSTAD AND
DEEANN G. AMSTAD,
TRUSTEES OF THE
TONY AND DEEANN AMSTAD
REVOCABLE TRUST DATED
AUGUST 9, 2004
DOC. NO. 2004-146737
FILED 12/27/2004
WASHINGTON COUNTY RECORDS

R=5068.90'
Δ=0°16'08"
L=23.80'
CH.=23.80'
N02°32'39"W

SEE SHEET 1 OF 2

EXHIBIT B

PAGE 2 OF 2

LOCATED IN THE SE 1/4 OF SECTION 18
TOWNSHIP 2S, RANGE 1W, W.M.
WASHINGTON COUNTY, OREGON

DATE	04/16/2020
DRAWN BY	KEL
CHECKED BY	GRA
REVISION	0
JOB NO.	0458-020



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ENGINEERING ♦ SURVEYING ♦ PLANNING

PACIFIC CORPORATE CENTER
15115 S.W. SEQUOIA PARKWAY, SUITE 150 (503) 684-0652
TIGARD, OREGON 97224 FAX (503) 624-0157

Exhibits A & B (2 of 13) to Resolution No. WWSS-10-20

Easement Descriptions
WWSP PLM 4.3
Washington County, Oregon
May 13, 2020
Project No. 0458-020
Ref: 2S1170000400

EXHIBIT A

Tract 1 (Permanent Easement):

A tract of land lying in the Southeast 1/4 Section 18, Township 2 South, Range 1 West of the Willamette Meridian, in Washington County, Oregon; being a portion of that property described in a Deed to Arthur A. Hasuike, Daniel T. Hasuike, Steve Y. Hasuike, Betty H. Young and Grace A. Hasuike recorded as Doc. No. 2018-085182, Washington County Deed Records; and being more particularly described as follows:

Beginning at **Point 'A'** being on the east Right-of-Way line of SW Roy Rogers Road, as established in the Right-of-Way Survey by Oregon Department of Transportation filed April 2002 as Washington County Survey Number 28,892, that is easterly 45.27 feet and perpendicular to centerline "L" station 125+76.47;

thence leaving said Right-of-Way line, S 43° 20' 24" E, 77.14 feet to the beginning of a line, being parallel with and 50.35 feet east from, when measured at right angles to, the easterly Right-of-Way line of SW Roy Rogers Road;

thence along said line, S 02° 40' 43" E, 378.18 feet, more or less, to the South line of said property;

thence along said South line, S 89° 27' 46" W, 30.02 feet to a line parallel with and 20.35 feet east from, when measured at right angles to, the easterly Right-of-Way line of SW Roy Rogers Road;

thence along said parallel line, N 02° 40' 43" W, 348.26 feet;

thence leaving said line, S 87° 19' 17" W, 13.13 feet;

thence, N 02° 40' 43" W, 32.97 feet;

thence, N 43° 20' 24" W, 11.07 feet, more or less, to a point on the east Right-of-Way line of SW Roy Rogers Road that is easterly 45.27 feet and perpendicular to centerline "L" station 126+22.68;

thence along said east Right-of-Way line, N 02° 40' 43" W, 17.30 feet to the beginning of a curve;

thence along said curve to the right, having a radius of 4,958.01 feet through a central angle of 00° 19' 52" (the chord of which bears N 02° 30' 47" W, 28.65 feet) an arc length of 28.65 feet to **Point 'A'** the Point of Beginning.

Containing 13,121 square feet, more or less.

Bearings based on Oregon Coordinate Reference System, Portland Zone.

Tract 2 (Temporary Construction Easement):

A tract of land lying in the Southeast 1/4 Section 18, Township 2 South, Range 1 West of the Willamette Meridian, in Washington County, Oregon; being a portion of that property described in a Deed to Arthur A. Hasuike, Daniel T. Hasuike, Steve Y. Hasuike, Betty H. Young and Grace A. Hasuike recorded as Doc. No. 2018-085182, Washington County Deed Records; and being more particularly described as follows:

Beginning at **Point 'A'** being on the east Right-of-Way line of SW Roy Rogers Road, as established in the Right-of-Way Survey by Oregon Department of Transportation filed April 2002 as Washington County Survey Number 28,892, that is easterly 45.27 feet and perpendicular to centerline "L" station 125+76.47;

thence along said Right-of-Way line, also being a curve to the right, having a radius of 4,958.01 feet through a central angle of 00° 47' 12" (the chord of which bears N 01° 57' 15" W, 68.07 feet) an arc length of 68.07 feet;

thence leaving said Right-of-Way line, S 43° 20' 24" E, 144.88 feet to the beginning of a line, being parallel with and 95.35 feet east from, when measured at right angles to, the easterly Right-of-Way line of SW Roy Rogers Road;

thence along said line, S 02° 40' 43" E, 95.64 feet;

thence, S 87° 19' 17" W, 45.00 feet to a line, being parallel with and 50.35 feet east from, when measured at right angles to, the easterly Right-of-Way line of SW Roy Rogers Road;

thence along said parallel line, N 02° 40' 43" W, 78.97 feet;

thence leaving said line, N 43° 20' 24" W, 77.14 feet to **Point 'A'** the Point of Beginning.

Containing 8,929 square feet, more or less.

Bearings based on Oregon Coordinate Reference System, Portland Zone.

Tract 3 (Long Term Monitoring Easement):

A tract of land lying in the Southeast 1/4 Section 18, Township 2 South, Range 1 West of the Willamette Meridian, in Washington County, Oregon; being a portion of that property described in a Deed to Arthur A. Hasuike, Daniel T. Hasuike, Steve Y. Hasuike, Betty H. Young and Grace A. Hasuike recorded as Doc. No. 2018-085182, Washington County Deed Records; and being more particularly described as follows:

Beginning at **Point 'A'** being on the east Right-of-Way line of SW Roy Rogers Road, as established in the Right-of-Way Survey by Oregon Department of Transportation filed April 2002 as Washington County Survey Number 28,892, that is easterly 45.27 feet and perpendicular to centerline "L" station 125+76.47;

thence along said Right-of-Way line, also being a curve to the right, having a radius of 4,958.01 feet through a central angle of 00° 47' 12" (the chord of which bears N 01° 57' 15" W, 68.07 feet) an arc length of 68.07 feet;

thence leaving said Right-of-Way line, S 43° 20' 24" E, 144.88 feet to the beginning of a line, being parallel with and 95.35 feet east from, when measured at right angles to, the easterly Right-of-Way line of SW Roy Rogers Road;

thence along said line, S 02° 40' 43" E, 396.53 feet, more or less, to the South line of said property;

thence along said South line, S 89° 27' 46" W, 45.03 feet to a line parallel with and 50.35 feet east from, when measured at right angles to, the easterly Right-of-Way line of SW Roy Rogers Road;

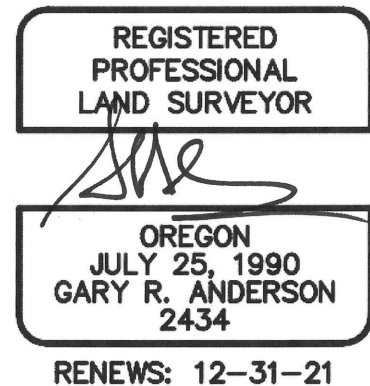
thence along said parallel line, N 02° 40' 43" W, 378.18 feet;

thence leaving said line, N 43° 20' 24" W, 77.14 feet to **Point 'A'** the Point of Beginning.

Excepting therefrom that portion of said tract described above as Tract 2.

Containing 13,502 square feet, more or less.

Bearings based on Oregon Coordinate Reference System, Portland Zone.



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0 30' 60'
SCALE: 1"=60'

R=4958.01'
Δ=0°47'12"
L=68.07'
CH.=68.07'
N01°57'15"W

ARTHUR A. HASUIKE,
DANIEL T. HASUIKE,
STEVE Y. HASUIKE,
BETTY H. YOUNG AND
GRACE A. HASUIKE
DOC. NO. 2018-085182
FILED 12/20/2018
WASHINGTON COUNTY RECORDS

"L" 125+76.47 45.27'LT
R=4958.01' Δ=0°19'52" L=28.65'
CH.=28.65' N02°30'47"W
(3+842.12 m)
PT: 126+05.38
N02°40'43"W
17.30'
"L" 126+22.68 45.27'LT

POINT 'A'

N43°20'24"W 11.07'
N02°40'43"W 32.97'
S87°19'17"W 13.13'

"L" LINE
(SN28892)

SW ROY ROGERS ROAD

"L" 125+07.78 45.28'LT
S43°20'24"E 144.88'
77.14'
S43°20'24"E
78.97'
95.64'
S87°19'17"W 45.00'
TRACT 2
TRACT 1
TRACT 3
N02°40'43"W 348.26'
S02°40'43"E 378.18'
378.18'
300.89'
S02°40'43"E 396.53'
30.02'
45.03'
S89°27'46"W 75.05'

- PERMANENT EASEMENT
- TEMPORARY CONSTRUCTION EASEMENT
- LONG TERM MONITORING EASEMENT

EXHIBIT B
PAGE 1 OF 1

LOCATED IN THE SE 1/4 OF SECTION 18
TOWNSHIP 2S, RANGE 1W, W.M.
WASHINGTON COUNTY, OREGON

DATE	05/13/2020
DRAWN BY	KEL
CHECKED BY	GRA
REVISION	0
JOB NO.	0458-020

WESTLAKE
CONSULTANTS INC.

ENGINEERING ♦ SURVEYING ♦ PLANNING

PACIFIC CORPORATE CENTER
15115 S.W. SEQUOIA PARKWAY, SUITE 150 (503) 684-0652
TIGARD, OREGON 97224 FAX (503) 624-0157

Exhibits A & B (3 of 13) to Resolution No. WWSS-10-20

Easement Descriptions
WWSP PLM 4.3
Washington County, Oregon
April 8, 2020
Project No. 0458-020
Ref: 2S1190000201

EXHIBIT A

Tract 1 (Permanent Easement):

A tract of land lying in the Northeast 1/4 Section 19, Township 2 South, Range 1 West of the Willamette Meridian, in Washington County, Oregon; being a portion of that property described in a Deed to River Scholls Farms, LLC recorded as Doc. No. 2018-066510, Washington County Deed Records; the said tract being that portion of said property included in a strip of land 10.00 feet in width, lying southeasterly of and adjacent to the southeast Right-of-Way line of SW Roy Rogers Road.

Except therefrom that portion of said tract lying within the existing Right-of-Way of Elsner Road (C.R. 330).

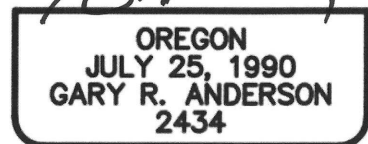
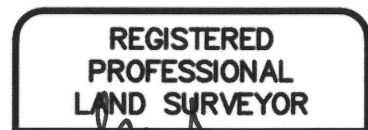
Containing 742 square feet, more or less.

Tract 2 (Temporary Construction Easement):

A tract of land lying in the Northeast 1/4 Section 19, Township 2 South, Range 1 West of the Willamette Meridian, in Washington County, Oregon; being a portion of that property described in a Deed to River Scholls Farms, LLC recorded as Doc. No. 2018-066510, Washington County Deed Records; the said tract being that portion of said property lying southeasterly of the southeast Right-of-Way line of SW Roy Rogers Road.

Except therefrom that portion of said tract lying within the existing Right-of-Way of Elsner Road (C.R. 330), and except that portion of said tract described above as Tract 1.

Containing 815 square feet, more or less.



RENEWS: 12-31-21

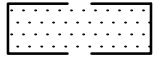
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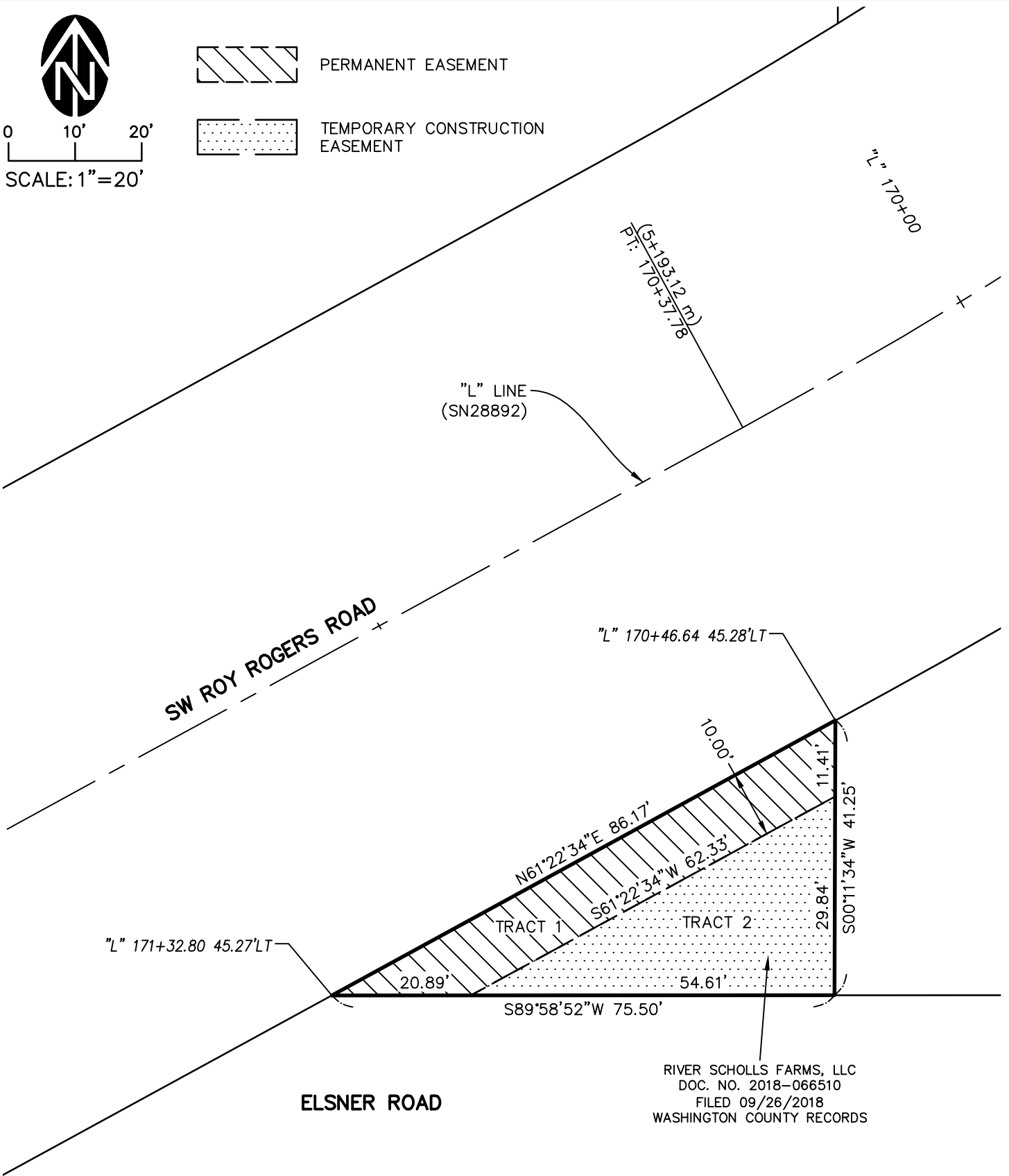
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SCALE: 1"=20'



PERMANENT EASEMENT



TEMPORARY CONSTRUCTION EASEMENT



RIVER SCHOLLS FARMS, LLC
DOC. NO. 2018-066510
FILED 09/26/2018
WASHINGTON COUNTY RECORDS

EXHIBIT B

PAGE 1 OF 1

LOCATED IN THE NE 1/4 OF SECTION 19
TOWNSHIP 2S, RANGE 1W, W.M.
WASHINGTON COUNTY, OREGON

DATE	04/08/2020
DRAWN BY	KEL
CHECKED BY	GRA
REVISION	0
JOB NO.	0458-020



WESTLAKE
CONSULTANTS INC.

ENGINEERING ♦ SURVEYING ♦ PLANNING

PACIFIC CORPORATE CENTER
15115 S.W. SEQUOIA PARKWAY, SUITE 150 (503) 684-0652
TIGARD, OREGON 97224 FAX (503) 624-0157

Exhibits A & B (4 of 13) to Resolution No. WWSS-10-20

Easement Descriptions
WWSP PLM 4.3
Washington County, Oregon
May 29, 2020
Project No. 0458-020
Ref: 2S1190001004

EXHIBIT A

Tract 1 (Permanent Easement):

A tract of land lying in the Northeast 1/4 Section 19, Township 2 South, Range 1 West of the Willamette Meridian, in Washington County, Oregon; being a portion of that property described in a Deed to Nelson C. Wetzel, Cheryl D. Wetzel, Lloyd G. Wetzel and Glen T. Wetzel recorded as Doc. No. 2014-031556, and as to a conveyance of Nelson C. Wetzel's share to Adam Z. Wetzel and Annette A. Freetage in Doc. No. 2020-033448, both Washington County Deed Records; and being more particularly described as follows:

Beginning at **Point 'A'** being on the southeast Right-of-Way line of SW Roy Rogers Road, as established in the Right-of-Way Survey by Oregon Department of Transportation filed April 2002 as Washington County Survey Number 28,892, that is southeasterly 45.28 feet and perpendicular to centerline "L" station 170+46.64 and on the east line of that tract conveyed to River Scholls Farms, LLC by Document Number 2018-066510, Washington County Deed Records;

thence along said Right-of-Way line, N 61° 22' 34" E, 8.86 feet to the beginning of a curve;

thence along said curve to the left, having a radius of 849.08 feet through a central angle of 37° 42' 20" (the chord of which bears N 42° 31' 24" E, 548.74 feet) an arc length of 558.77 feet;

thence leaving said Right-of-Way line, S 00° 46' 57" W, 99.85 feet;

thence, S 46° 33' 12" W, 165.46 feet to the beginning of a non-tangential curve, being parallel with and 10.00 feet SE from, when measured at right angles to, the southeasterly Right-of-Way line of SW Roy Rogers Road;

thence along said curve to the right, having a radius of 859.08 feet through a central angle of 21° 10' 31" (the chord of which bears S 50° 47' 18" W, 315.69 feet) an arc length of 317.50 feet to a point on a tangential line;

thence, S 61° 22' 34" W, 14.36 feet to the east line of said River Scholls Farms tract;

thence along said east line, N 00° 11' 34" E, 11.41 feet to **Point 'A'** the Point of Beginning;

Containing 8,963 square feet, more or less.

Bearings based on Oregon Coordinate Reference System, Portland Zone.

Tract 2 (Temporary Construction Easement):

A tract of land lying in the Northeast 1/4 Section 19, Township 2 South, Range 1 West of the Willamette Meridian, in Washington County, Oregon; being a portion of that property described in a Deed to Nelson C. Wetzel, Cheryl D. Wetzel, Lloyd G. Wetzel and Glen T. Wetzel recorded as Doc. No. 2014-031556, and as to a conveyance of Nelson C. Wetzel's share to Adam Z. Wetzel and Annette A. Freetage in Doc. No. 2020-033448, both Washington County Deed Records; and being more particularly described as follows:

Beginning at **Point 'A'** being on the southeast Right-of-Way line of SW Roy Rogers Road, as established in the Right-of-Way Survey by Oregon Department of Transportation filed April 2002 as Washington County Survey Number 28,892, that is southeasterly 45.28 feet and perpendicular to centerline "L" station 170+46.64 and on the east line of that tract conveyed to River Scholls Farms, LLC by Document Number 2018-066510, Washington County Deed Records;

thence along said Right-of-Way line, N 61° 22' 34" E, 8.86 feet to the beginning of a tangential curve;

thence along said curve to the left, having a radius of 849.08 feet through a central angle of 37° 42' 20" (the chord of which bears N 42° 31' 24" E, 548.74 feet) an arc length of 558.77 feet;

thence continuing along said curve, through a central angle of 02° 45' 40" (the chord of which bears N 22° 17' 24" E, 40.91 feet) an arc length of 40.92;

thence leaving said Right-of-Way line, S 00° 46' 57" W, 172.16 feet;

thence, S 46° 33' 12" W, 150.40 feet to the beginning of a non-tangential curve, being parallel with and 45.00 feet SE from, when measured at right angles to, the southeasterly Right-of-Way line of SW Roy Rogers Road;

thence along a curve to the right, having a radius of 894.08 feet through a central angle of 21° 02' 58" (the chord of which bears S 50° 51' 05" W, 326.63 feet) an arc length of 328.47 feet to a point on a tangential line;

thence, S 61° 22' 34" W, 12.50 feet to a point on the north Right-of-Way line of SW Elsner Road;

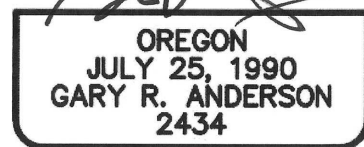
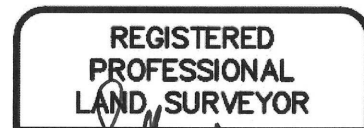
thence along said line, S 89° 58' 52" W, 18.50 feet to the east line of said River Scholls Farms tract;

thence along said east line, N 00° 11' 34" E, 41.25 feet to **Point 'A'** the Point of Beginning;

Excepting therefrom that portion of tract described above as Tract 3.

Containing 19,611 square feet, more or less.

Bearings based on Oregon Coordinate Reference System, Portland Zone.

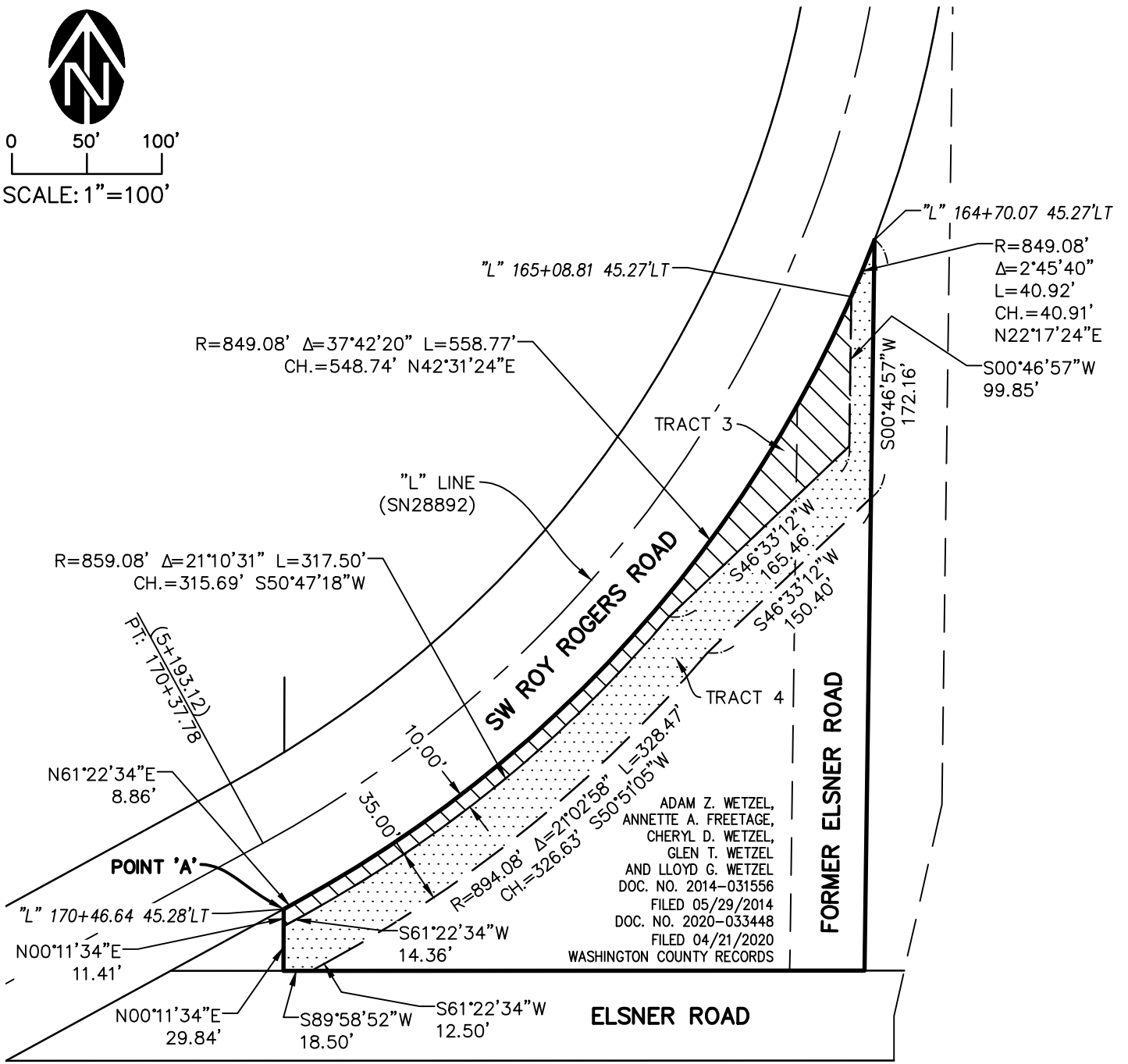


RENEWS: 12-31-21

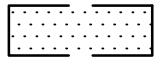
\\WCIDC\PROJECTS\0458-020\16\SURVEY\CAD\DWG_A_PHASE\0458-020X_PLM 4.3 EASEMENTS.DWG 2020-05-29 8:46 AM - KEL



0 50' 100'
SCALE: 1"=100'



PERMANENT EASEMENT



TEMPORARY CONSTRUCTION EASEMENT

EXHIBIT B
PAGE 1 OF 1

LOCATED IN THE NE 1/4 OF SECTION 19
TOWNSHIP 2S, RANGE 1W, W.M.
WASHINGTON COUNTY, OREGON

DATE	05/29/2020
DRAWN BY	KEL
CHECKED BY	GRA
REVISION	0
JOB NO.	0458-020

WESTLAKE
CONSULTANTS INC.

ENGINEERING ♦ SURVEYING ♦ PLANNING

PACIFIC CORPORATE CENTER
15115 S.W. SEQUOIA PARKWAY, SUITE 150 (503) 684-0652
TIGARD, OREGON 97224 FAX (503) 624-0157

Willamette Water Supply System Commission

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Exhibits A & B (5 of 13) to Resolution No. WWSS-10-20

Easement Descriptions
WWSP PLM 4.3
Washington County, Oregon
May 29, 2020
Project No. 0458-020
Ref: 2S1190001005

EXHIBIT A

Tract 1 (Permanent Easement):

A tract of land lying in the Northeast 1/4 Section 19, Township 2 South, Range 1 West of the Willamette Meridian, in Washington County, Oregon; being a portion of that property described in a Deed to Nelson C. Wetzel, Cheryl D. Wetzel, Lloyd G. Wetzel and Glen T. Wetzel recorded as Doc. No. 2014-031556, and as to a conveyance of Nelson C. Wetzel's share to Adam Z. Wetzel and Annette A. Freetage in Doc. No. 2020-033448, both Washington County Deed Records; and being more particularly described as follows:

Beginning at **Point 'A'** being on the west Right-of-Way line of SW Roy Rogers Road, as established in the Right-of-Way Survey by Oregon Department of Transportation filed April 2002 as Washington County Survey Number 28,892, that is westerly 55.19 feet and perpendicular to centerline "L" station 158+56.83;

thence leaving said Right-of-Way line, N 62° 39' 57" W, 176.64 feet;

thence, N 90° 00' 00" W, 29.81 feet;

thence, N 00° 00' 00" E, 50.00 feet;

thence, N 90° 00' 00" E, 14.05 feet;

thence, N 09° 41' 44" E, 980.10 feet to a point on the west Right-of-Way line of SW Roy Rogers Road that is westerly 90.50 feet and perpendicular to centerline "L" station 147+60.90;

thence along said Right-of-Way line, S 01° 41' 45" W, 161.67 feet;

thence, S 01° 34' 55" E, 38.35 feet;

thence leaving said Right-of-Way line, S 09° 41' 44" W, 777.27 feet;

thence, N 90° 00' 00" E, 5.51 feet;

thence, S 00° 00' 00" W, 26.67 feet;

thence, S 62° 39' 57" E, 155.01 feet to a point on the west Right-of-Way line of SW Roy Rogers Road that is westerly 55.00 feet and perpendicular to centerline "L" station 158+23.55;

thence, S 01° 41' 36" W, 33.28 feet to **Point 'A'** the Point of Beginning;

Containing 33,423 square feet, more or less.

Bearings based on Oregon Coordinate Reference System, Portland Zone.

Tract 2 (Temporary Construction Easement):

A tract of land lying in the Northeast 1/4 Section 19, Township 2 South, Range 1 West of the Willamette Meridian, in Washington County, Oregon; being a portion of that property described in a Deed to Nelson C. Wetzel, Cheryl D. Wetzel, Lloyd G. Wetzel and Glen T. Wetzel recorded as Doc. No. 2014-031556, and as to a conveyance of Nelson C. Wetzel's share to Adam Z. Wetzel and Annette A. Freetage in Doc. No. 2020-033448, both Washington County Deed Records; and being more particularly described as follows:

Beginning at **Point 'A'** being on the west Right-of-Way line of SW Roy Rogers Road, as established in the Right-of-Way Survey by Oregon Department of Transportation filed April 2002 as Washington County Survey Number 28,892, that is westerly 55.19 feet and perpendicular to centerline "L" station 158+56.83;

thence along said Right-of-Way line, S 01° 41' 36" W, 304.50 feet;

thence, S 00° 47' 04" W, 157.43 feet to the beginning of a non-tangential curve to the right;

thence along said curve, having a radius of 758.53 feet through a central angle of 10° 13' 14" (the chord of which bears S 15° 47' 44" W, 135.13 feet) an arc length of 135.31 feet;

thence leaving said Right-of-Way line, N 00° 47' 04" E, 288.23 feet;

thence, N 01° 41' 36" E, 288.30 feet;

thence, N 62° 39' 57" W, 108.50 feet;

thence, N 90° 00' 00" W, 63.89 feet;

thence, N 00° 00' 00" E, 110.00 feet;

thence, N 90° 00' 00" E, 85.00 feet;

thence, S 00° 00' 00" W, 36.48 feet;

thence, S 62° 39' 57" E, 78.39 feet;

thence, N 84° 17' 37" E, 43.58 feet to a point on the west Right-of-Way line of SW Roy Rogers Road that is westerly 54.76 feet and perpendicular to centerline "L" station 157+80.56;

thence along said Right-of-Way line, S 01° 41' 36" W, 42.99 feet;

thence, S 01° 41' 36" W, 33.28 feet to **Point 'A'** and the Point of Beginning.

Excepting therefrom that portion of tract described above as Tract 1.

Containing 29,624 square feet, more or less.

Bearings based on Oregon Coordinate Reference System, Portland Zone.



RENEWS: 12-31-21



0 100' 200'
SCALE: 1"=200'

ADAM Z. WETZEL,
ANNETTE A. FREETAGE,
CHERYL D. WETZEL,
GLEN T. WETZEL
AND LLOYD G. WETZEL
DOC. NO. 2014-031556
FILED 05/29/2014
DOC. NO. 2020-033448
FILED 04/21/2020
WASHINGTON COUNTY RECORDS

SEE SHEET 2 OF 2
FOR DETAIL



PERMANENT EASEMENT



TEMPORARY CONSTRUCTION
EASEMENT

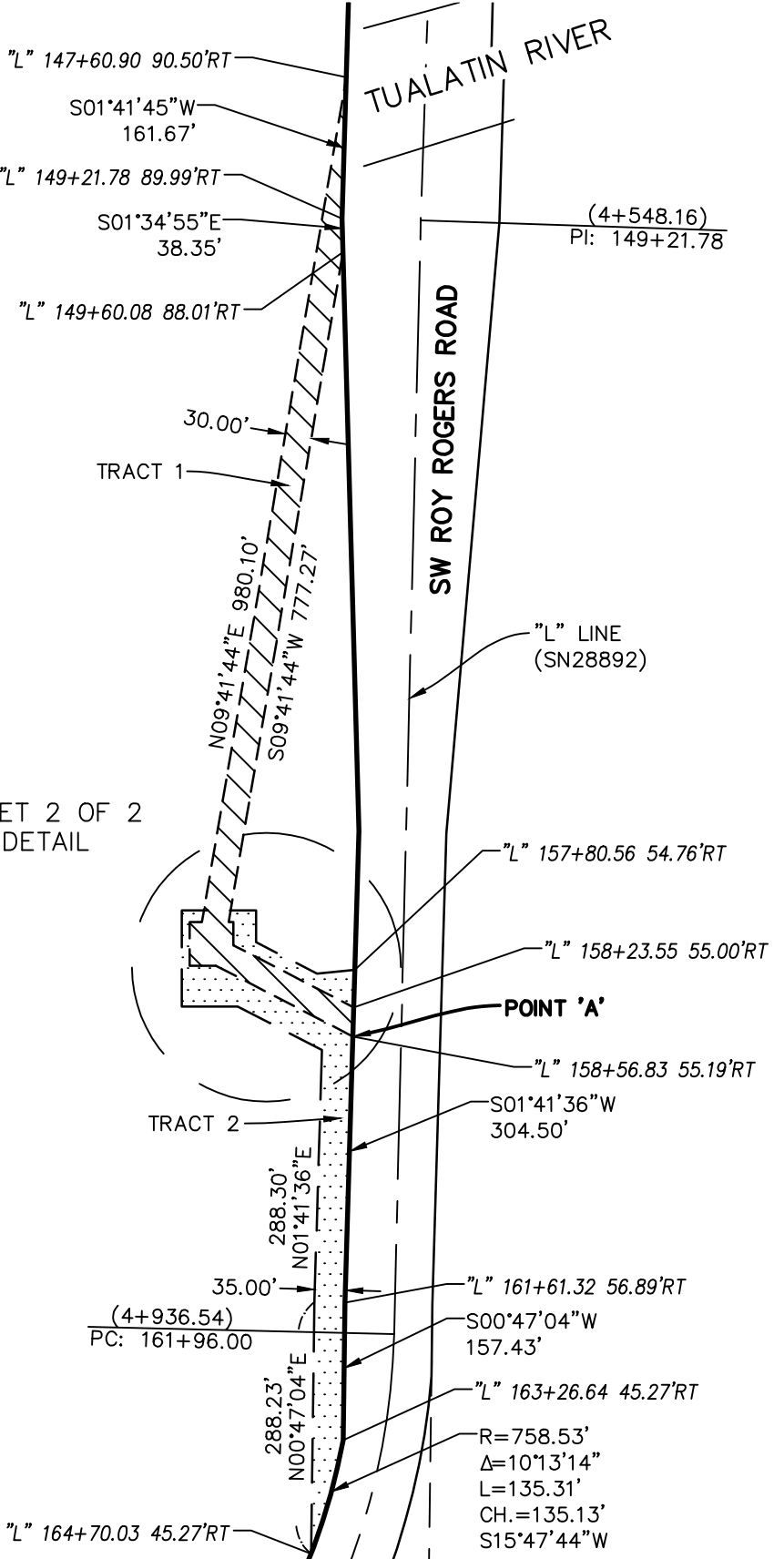


EXHIBIT B
PAGE 1 OF 2

LOCATED IN THE NE 1/4 OF SECTION 19
TOWNSHIP 2S, RANGE 1W, W.M.
WASHINGTON COUNTY, OREGON

DATE	05/29/2020
DRAWN BY	KEL
CHECKED BY	GRA
REVISION	0
JOB NO.	0458-020



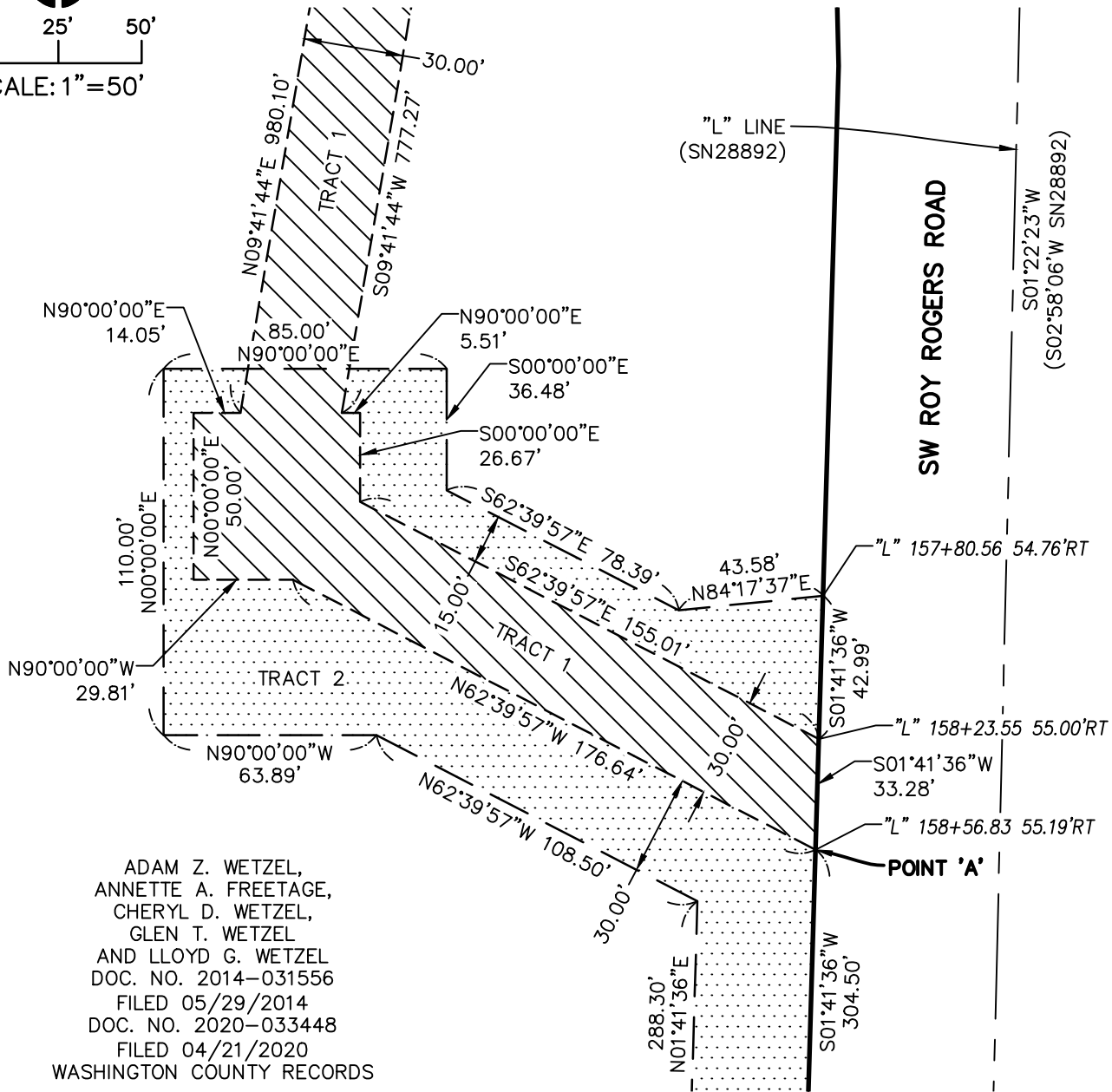
WESTLAKE
CONSULTANTS INC.

ENGINEERING ♦ SURVEYING ♦ PLANNING

PACIFIC CORPORATE CENTER
15115 S.W. SEQUOIA PARKWAY, SUITE 150 (503) 684-0652
TIGARD, OREGON 97224 FAX (503) 624-0157



0 25' 50'
SCALE: 1"=50'

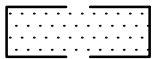


ADAM Z. WETZEL,
ANNETTE A. FREETAGE,
CHERYL D. WETZEL,
GLEN T. WETZEL
AND LLOYD G. WETZEL
DOC. NO. 2014-031556
FILED 05/29/2014
DOC. NO. 2020-033448
FILED 04/21/2020
WASHINGTON COUNTY RECORDS

DETAIL
(SEE SHEET 1 OF 2)



PERMANENT EASEMENT



TEMPORARY CONSTRUCTION
EASEMENT

EXHIBIT B
PAGE 2 OF 2

LOCATED IN THE NE 1/4 OF SECTION 19
TOWNSHIP 2S, RANGE 1W, W.M.
WASHINGTON COUNTY, OREGON

DATE	05/29/2020
DRAWN BY	KEL
CHECKED BY	GRA
REVISION	0
JOB NO.	0458-020



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CONSULTANTS INC.

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TIGARD, OREGON 97224 FAX (503) 624-0157

Exhibits A & B (6 of 13) to Resolution No. WWSS-10-20

Easement Descriptions
WWSP PLM 4.3
Washington County, Oregon
May 13, 2020
Project No. 0458-020
Ref: 2S130AB12600

EXHIBIT A

Tract 1 (Permanent Easement):

A tract of land lying in the Northeast 1/4 Section 30, Township 2 South, Range 1 West of the Willamette Meridian, in Washington County, Oregon; being a portion of that property described in a Deed to The City of Sherwood, a Municipal Corporation recorded as Doc. No. 2003-150573, Washington County Deed Records; and being more particularly described as follows:

Beginning at **Point 'A'** being on the east Right-of-Way line of SW Roy Rogers Road, as established in the Right-of-Way Survey by Oregon Department of Transportation filed April 2002 as Washington County Survey Number 28,892, that is easterly 45.28 feet and perpendicular to centerline "L" station 203+81.73;

thence leaving said east line, North 23°48'58" East, 174.56 feet;

thence, North 66°11'02" West, 10.00 feet;

thence, North 23°48'58" East, 14.50 feet, more or less, to the north line of said City of Sherwood property;

thence along said line, North 89°28'46" East, 54.88 feet to **Point 'B'**;

thence leaving said line, South 23°48'58" West, 37.12 feet;

thence, North 66°11'02" West, 10.00 feet;

thence, South 23°48'58" West, 220.36 feet, more or less, to a point on the most westerly south line of said property;

thence along said line, North 53°59'44" West, 10.92 feet to a point on a curve, also being on the east Right-of-Way line of SW Roy Rogers Road;

thence along said curve to the left, having a radius of 1521.81 feet through a central angle of 01°47'30" (the chord of which bears North 00°08'29" West, 47.59 feet) an arc length of 47.59 feet to **Point 'A'** the Point of Beginning.

Containing 7,418 square feet, more or less.

Bearings based on Oregon Coordinate Reference System, Portland Zone.

Tract 2 (Temporary Construction Easement):

A tract of land lying in the Northeast 1/4 Section 30, Township 2 South, Range 1 West of the Willamette Meridian, in Washington County, Oregon; being a portion of that property described in a Deed to The City of Sherwood, a Municipal Corporation recorded as Doc. No. 2003-150573, Washington County Deed Records; and being more particularly described as follows:

Beginning at **Point 'B'** as established above in Tract 1, said point being on the north line of said City of Sherwood property;

thence along said east line, North 89°28'46" East, 32.93 feet;

thence leaving said east line, South 23°48'58" West, 36.00 feet;

thence, North 36°01'31" West, 34.70 feet;

thence, North 23°48'58" East, 5.00 feet to **Point 'B'** the Point of Beginning.

Containing 615 square feet, more or less.

Bearings based on Oregon Coordinate Reference System, Portland Zone.

Tract 3 (Long Term Monitoring Easement):

A tract of land lying in the Northeast 1/4 Section 30, Township 2 South, Range 1 West of the Willamette Meridian, in Washington County, Oregon; being a portion of that property described in a Deed to The City of Sherwood, a Municipal Corporation recorded as Doc. No. 2003-150573, Washington County Deed Records; and being more particularly described as follows:

Commencing at **Point 'A'** being on the east Right-of-Way line of SW Roy Rogers Road, as established in the Right-of-Way Survey by Oregon Department of Transportation filed April 2002 as Washington County Survey Number 28,892, that is easterly 45.28 feet and perpendicular to centerline "L" station 203+81.73;

Thence leaving said east line, North 23°48'58" East, 161.56 feet to the **True Point of Beginning**;

thence, North 66°11'02" West, 40.00 feet;

thence, North 23°48'58" East, 13.94 feet, more or less, to the north line of said City of Sherwood property;

thence along said line, North 89°28'46" East, 120.73 feet;

thence leaving said line, South 23°48'58" West, 63.69 feet;

thence, North 66°11'02" West, 70.00 feet to the **True Point of Beginning**.

Excepting therefrom those portions of tracts described above as Tract 1 and Tract 2.

Containing 1,974 square feet, more or less.

Bearings based on Oregon Coordinate Reference System, Portland Zone.



\\WCIDC\PROJECTS\0458-020\16\SURVEY\CAD\DWG_A_PHASE\0458-020X_PLM 4.3 EASEMENTS.DWG 2020-05-13 11:06 AM - KEL



0 15' 30'
SCALE: 1"=30'

SW ROY ROGERS ROAD

"L" LINE
(SN28892)

(6+207.89)
PC: 203+67.09

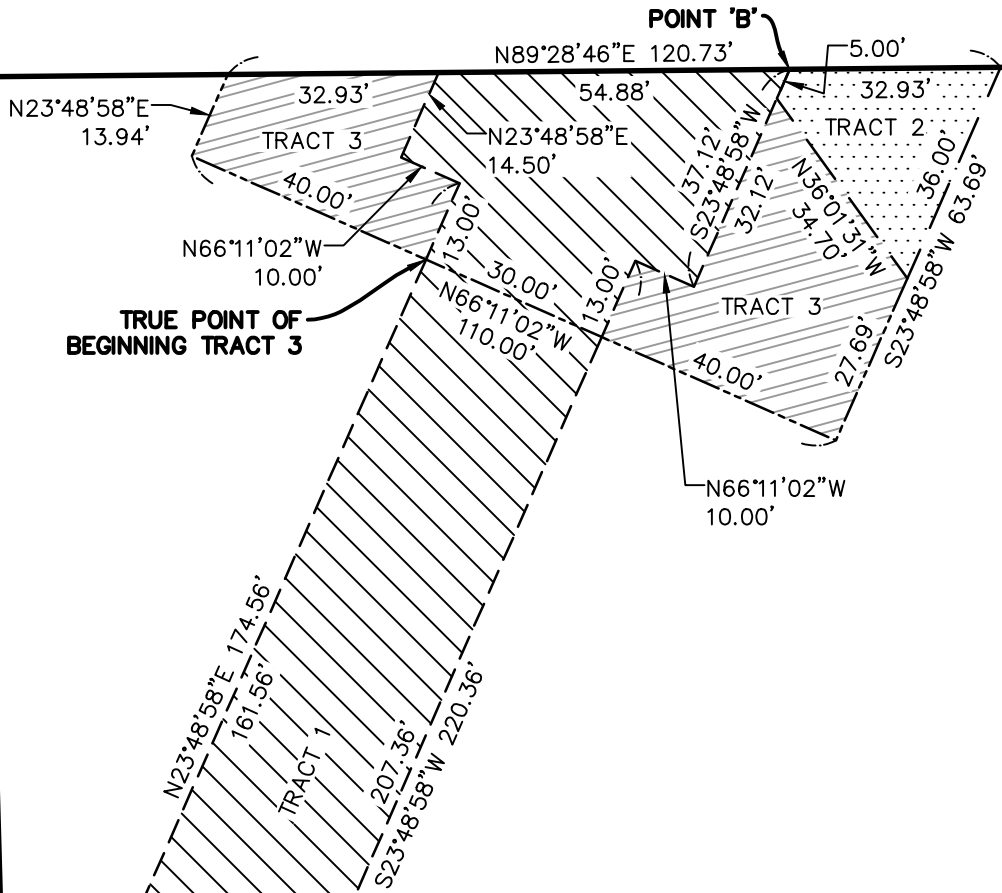
POINT 'A'

"L" 203+81.73 45.28'LT

R=1521.81'
 $\Delta=1^{\circ}47'30''$
L=47.59'
CH.=47.59'
N00°08'29"W

"L" 204+27.90 45.28'LT

N53°59'44"W
10.92'



THE CITY OF SHERWOOD
DOC. NO. 2003-150573
FILED 09/04/2003
WASHINGTON COUNTY RECORDS

- PERMANENT EASEMENT
- TEMPORARY CONSTRUCTION EASEMENT
- LONG TERM MONITORING EASEMENT

EXHIBIT B

PAGE 1 OF 1

LOCATED IN THE NE 1/4 OF SECTION 30
TOWNSHIP 2 S, RANGE 1 W, W.M.
WASHINGTON COUNTY, OREGON

DATE	05/13/2020
DRAWN BY	KEL
CHECKED BY	GRA
REVISION	0
JOB NO.	0458-020

WESTLAKE
CONSULTANTS INC.

ENGINEERING ♦ SURVEYING ♦ PLANNING

PACIFIC CORPORATE CENTER
15115 S.W. SEQUOIA PARKWAY, SUITE 150 (503) 684-0652
TIGARD, OREGON 97224 FAX (503) 624-0157

Exhibits A & B (7 of 13) to Resolution No. WWSS-10-20

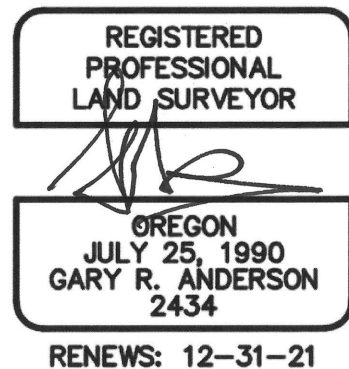
Easement Descriptions
WWSP PLM 4.3
Washington County, Oregon
April 17, 2020
Project No. 0458-020
Ref: 2S1180000601

EXHIBIT A

Tract 1 (Temporary Construction Easement):

A tract of land lying in the Northeast 1/4 Section 18, Township 2 South, Range 1 West of the Willamette Meridian, in Washington County, Oregon; being a portion of that property described in a Deed to William B. Kenny and Norma B. Kenny recorded as Doc. No. 79031885, Washington County Deed Records; the said tract being that portion of said property included in a strip of land 20.00 feet in width, lying westerly of and adjacent to the west Right-of-Way line of SW Roy Rogers Road as established in Washington County Survey Number 33,029.

Containing 18,738 square feet, more or less.

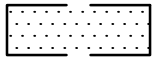


\\WCID\PROJECTS\0458-020\16\SURVEY\CAD\DWG_A_PHASE\0458-020X_PLM_4.3 EASEMENTS.DWG 2020-04-17 2:14 PM - KEL



0 75' 150'
SCALE: 1"=150'

WILLIAM B. KENNY AND
NORMA B. KENNY
DOC. NO. 79031886
FILED 08/09/1979
WASHINGTON COUNTY RECORDS



TEMPORARY
CONSTRUCTION
EASEMENT

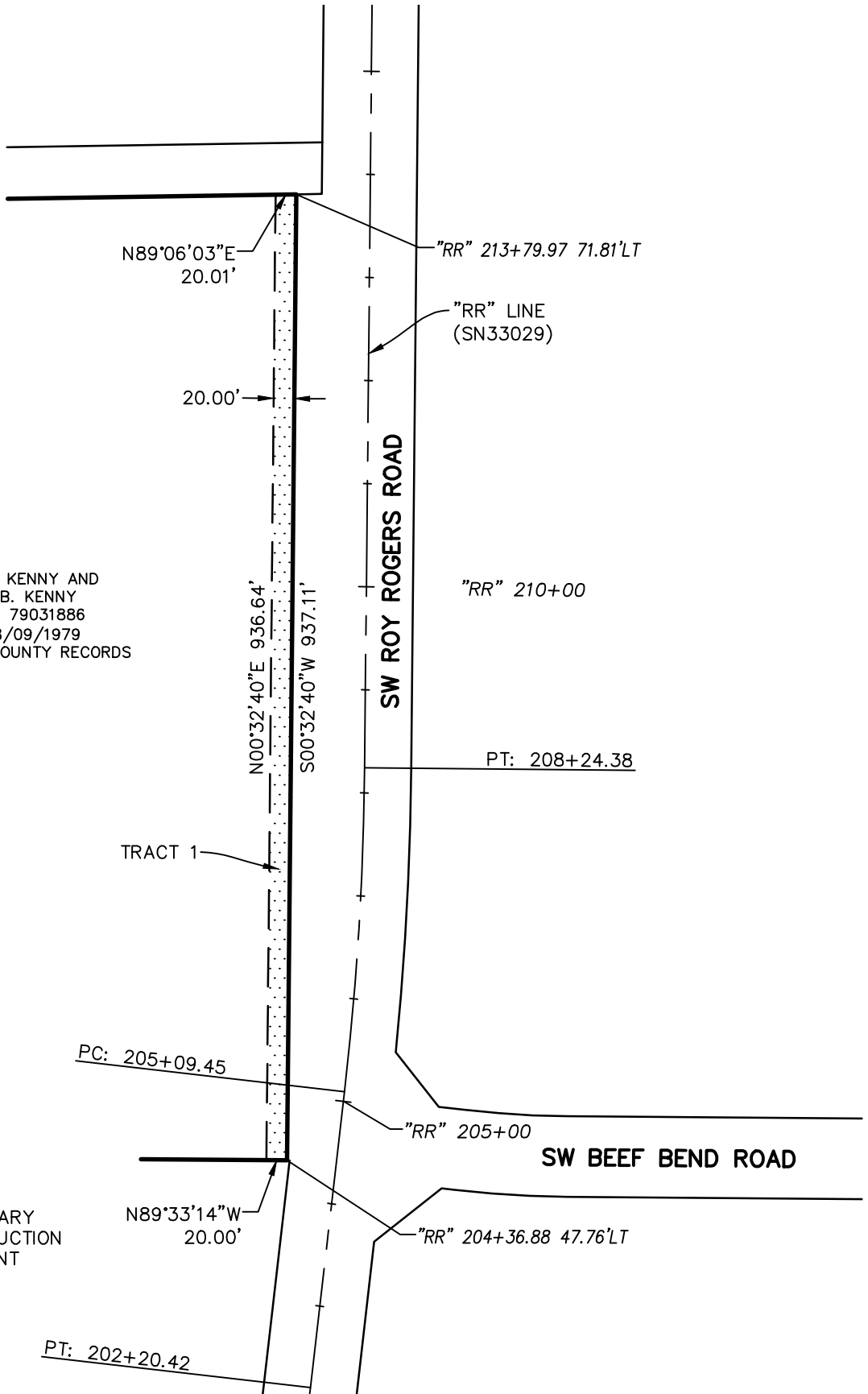


EXHIBIT B

PAGE 1 OF 1

LOCATED IN THE NE 1/4 OF SECTION 18
TOWNSHIP 2S, RANGE 1W, W.M.
WASHINGTON COUNTY, OREGON

DATE	04/17/2020
DRAWN BY	KEL
CHECKED BY	GRA
REVISION	0
JOB NO.	0458-020



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CONSULTANTS INC.

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PACIFIC CORPORATE CENTER
15115 S.W. SEQUOIA PARKWAY, SUITE 150 (503) 684-0652
TIGARD, OREGON 97224 FAX (503) 624-0157

Exhibits A & B (8 of 13) to Resolution No. WWSS-10-20

Easement Descriptions
WWSP PLM 4.3
Washington County, Oregon
April 17, 2020
Project No. 0458-020
Ref: 2S1180000300

EXHIBIT A

Tract 1 (Permanent Easement):

A tract of land lying in the Northeast 1/4 Section 18 and the Southeast 1/4 Section 7, Township 2 South, Range 1 West of the Willamette Meridian, in Washington County, Oregon; being a portion of that property described in a Deed to Valeri N. Valev and Reina O. Jamus recorded as Doc. No. 2019-025931, Washington County Deed Records; the said tract being that portion of said property included in a strip of land 10.00 feet in width, lying westerly of and adjacent to the west Right-of-Way line of SW Roy Rogers Road as established in Washington County Survey Number 33,029.

Containing 4,002 square feet, more or less.

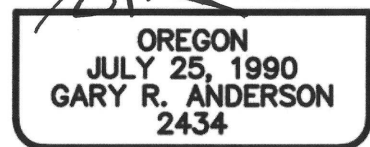
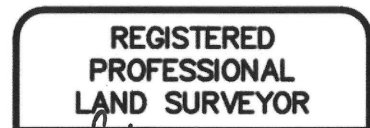
Tract 2 (Temporary Construction Easement):

A tract of land lying in the Northeast 1/4 Section 18 and the Southeast 1/4 Section 7, Township 2 South, Range 1 West of the Willamette Meridian, in Washington County, Oregon; being a portion of that property described in a Deed to Valeri N. Valev and Reina O. Jamus recorded as Doc. No. 2019-025931, Washington County Deed Records; the said tract being that portion of said property included in a strip of land variable in width, lying westerly of and adjacent to the west Right-of-Way line of SW Roy Rogers Road, as established in Washington County Survey Number 33,029. The widths of said strip of land are as follows:

<u>STATION</u>	<u>WIDTH ON WEST SIDE OF SW ROY ROGERS ROAD RIGHT-OF-WAY</u>
From "RR" 214+20.00 To "RR" 215+85.52	30.00 feet
From "RR" 215+85.52 To "RR" 218+40.00	45.00 feet

Excepting therefrom that portion of said tract described above as Tract 1.

Containing 11,673 square feet, more or less.



RENEWS: 12-31-21

\\WCID\PROJECTS\0458-020\16\SURVEY\CAD\DWG_A_PHASE\0458-020X_PLM 4.3 EASEMENTS.DWG 2020-04-17 2:22 PM - KEL

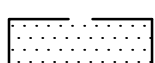


0 25' 50'
SCALE: 1"=50'

VALERI N. VALEV AND
REINA O. JAMUS
DOC. NO. 2019-025931
FILED 04/30/2019
WASHINGTON COUNTY RECORDS



PERMANENT
EASEMENT



TEMPORARY
CONSTRUCTION
EASEMENT

EXHIBIT B

PAGE 1 OF 1

LOCATED IN THE SE 1/4 OF SECTION 7
& THE NE 1/4 OF SECTION 18
TOWNSHIP 2S, RANGE 1W, W.M.
WASHINGTON COUNTY, OREGON

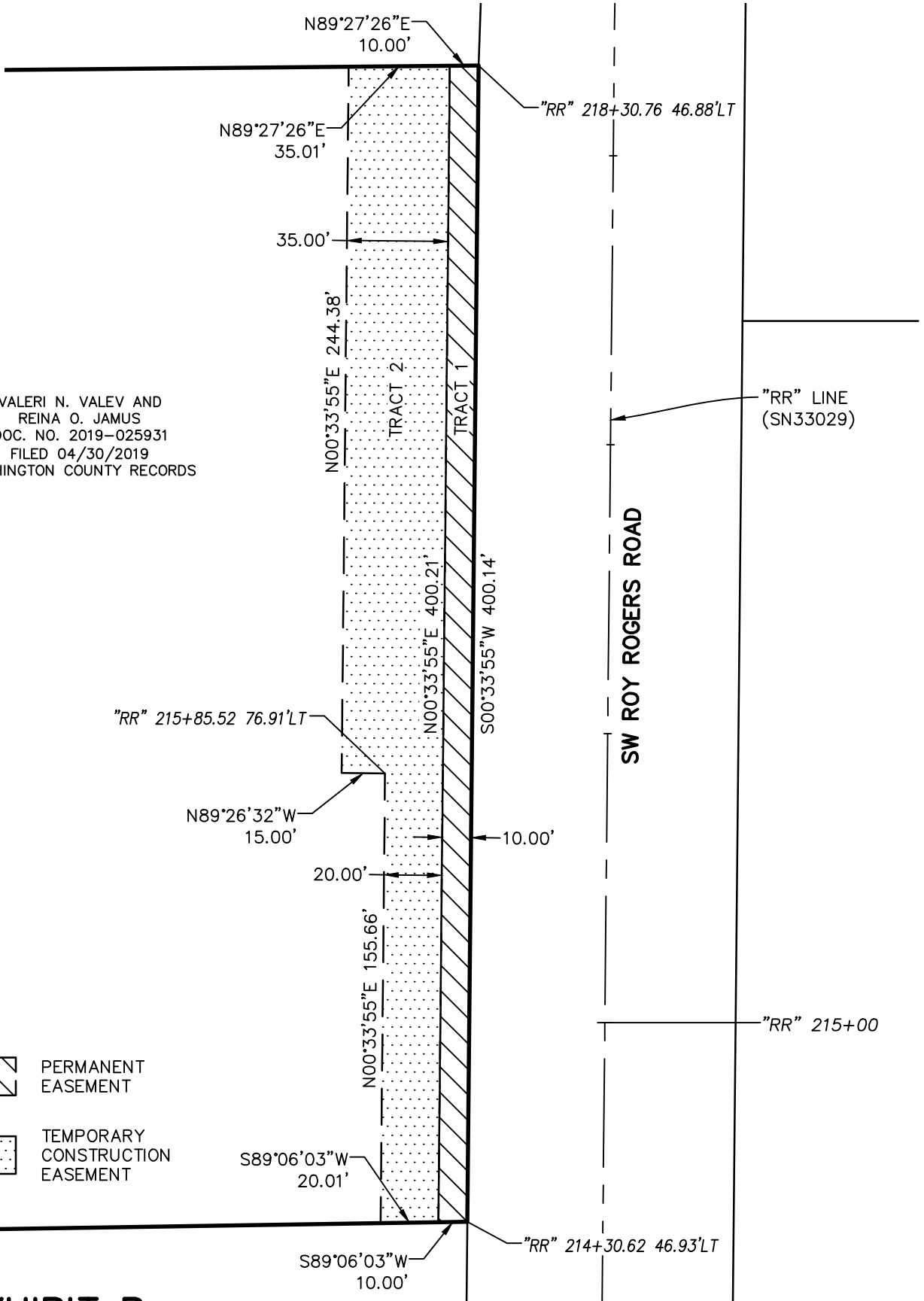
DATE	04/17/2020
DRAWN BY	KEL
CHECKED BY	GRA
REVISION	0
JOB NO.	0458-020



WESTLAKE
CONSULTANTS INC.

ENGINEERING ♦ SURVEYING ♦ PLANNING

PACIFIC CORPORATE CENTER
15115 S.W. SEQUOIA PARKWAY, SUITE 150 (503) 684-0652
TIGARD, OREGON 97224 FAX (503) 624-0157



Exhibits A & B (9 of 13) to Resolution No. WWSS-10-20

Easement Descriptions
WWSP PLM 4.3
Washington County, Oregon
May 18, 2020
Project No. 0458-020
Ref: 2S1070001401

EXHIBIT A

Tract 1 (Permanent Easement):

A tract of land lying in the Southeast 1/4 Section 7, Township 2 South, Range 1 West of the Willamette Meridian, in Washington County, Oregon; being a portion of that property described in a Deed to 15801 Roy Rogers Road, LLC recorded as Doc. No. 2016-097560, Washington County Deed Records; and being more particularly described as follows:

Beginning at **Point 'A'** being on the west Right-of-Way line of SW Roy Rogers Road, as established in Washington County Survey Number 33,029, that is westerly 45.67 feet and perpendicular to centerline "RR" station 218+83.97, also being the southeast corner of said property;

thence along the south line of said property, S 87° 02' 40" W, 10.04 feet to the beginning of a line, being parallel with and 10.00 feet west from, when measured at right angles to, the westerly Right-of-Way line of SW Roy Rogers Road;

thence along said parallel line, N 01° 51' 35" E, 17.93 feet to an angle point therein;

thence, N 00° 33' 28" E, 592.85 feet;

thence leaving said parallel line, N 44° 26' 32" W, 23.31 feet;

thence, N 00° 33' 48" E, 289.75 feet;

thence, N 45° 33' 48" E, 23.21 feet to the beginning of a non-tangential curve, being parallel with and 10.00 feet west from, when measured at right angles to, the westerly Right-of-Way line of SW Roy Rogers Road;

thence along said curve to the left, having a radius of 9951.28 feet through a central angle of 00° 41' 58" (the chord of which bears N 00° 02' 34" E, 121.50 feet) an arc length of 121.50 feet;

thence, N 00° 18' 26" W, 70.50 feet;

thence leaving said parallel line, N 09° 52' 23" E, 33.95 feet to the beginning of a line, being parallel with and 4.00 feet west from, when measured at right angles to, the westerly Right-of-Way line of SW Roy Rogers Road;

thence, N 00° 18' 25" W, 16.73 feet, more or less, to a point on the north line of said property;

thence along said north line, N 89° 25' 39" E, 4.00 feet to northwest corner of said property, also being a point on the west Right-of-Way line of SW Roy Rogers Road that is westerly 45.28 feet

and perpendicular to centerline "RR" station 230+59.75;

thence along said Right-of-Way line, S 00° 18' 26" E, 120.66 feet to the beginning of a curve;

thence along said curve to the right, having a radius of 9961.28 feet through a central angle of 00° 51' 53" [the chord of which bears S 00° 07' 31" W, 150.35 feet] an arc length of 150.35;

thence, S 00° 33' 28" W, 886.90 feet;

thence, S 01° 51' 35" W, 17.20 feet to **Point 'A'** the Point of Beginning;

Containing 16,594 square feet, more or less.

Bearings based on Oregon Coordinate Reference System, Portland Zone.

Tract 2 (Long Term Monitoring Easement):

A tract of land lying in the Southeast 1/4 Section 7, Township 2 South, Range 1 West of the Willamette Meridian, in Washington County, Oregon; being a portion of that property described in a Deed to 15801 Roy Rogers Road, LLC recorded as Doc. No. 2016-097560, Washington County Deed Records; the said tract being that portion of said property included in a strip of land 45.00 feet in width, lying westerly of and adjacent to the west Right-of-Way line of SW Roy Rogers Road between centerline "RR" station 224+49.12 and "RR" station 228+45.69, as established in Washington County Survey Number 33,029.

Excepting therefrom that portion of said tract described above as Tract 1.

Containing 8,826 square feet, more or less.

Tract 3 (Temporary Construction Easement):

A tract of land lying in the Southeast 1/4 Section 7, Township 2 South, Range 1 West of the Willamette Meridian, in Washington County, Oregon; being a portion of that property described in a Deed to 15801 Roy Rogers Road, LLC recorded as Doc. No. 2016-097560, Washington County Deed Records; the said tract being that portion of said property included in a strip of land 45.00 feet in width, lying westerly of and adjacent to the west Right-of-Way line of SW Roy Rogers Road as established in Washington County Survey Number 33,029.

Excepting therefrom those portions of said tracts described above as Tract 1 and Tract 2.

Containing 27,501 square feet, more or less.

REGISTERED
PROFESSIONAL
LAND SURVEYOR



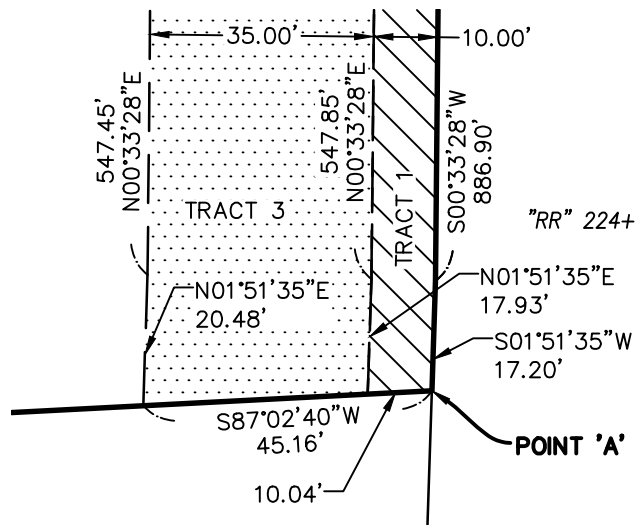
OREGON
JULY 25, 1990
GARY R. ANDERSON
2434

RENEWS: 12-31-21



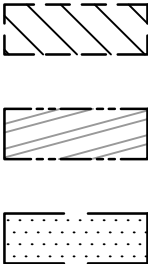
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SCALE: 1"=100'

SEE SHEET 2 OF 2



DETAIL
SCALE: 1"=30'

15801 ROY ROGERS ROAD, LLC
DOC. NO. 2016-097560
FILED 11/25/2016
WASHINGTON COUNTY RECORDS



PERMANENT EASEMENT
LONG TERM MONITORING EASEMENT
TEMPORARY CONSTRUCTION EASEMENT

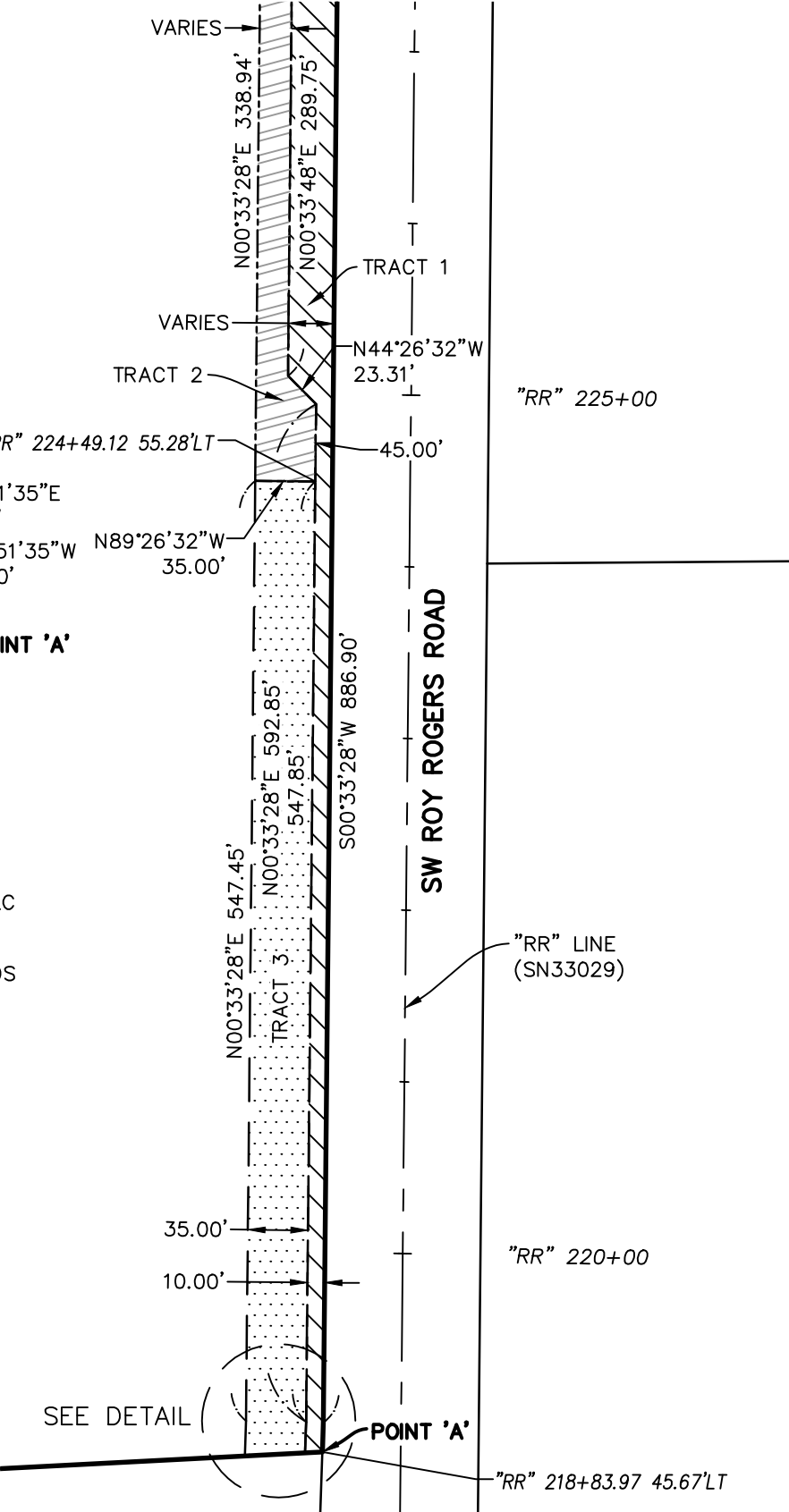


EXHIBIT B
PAGE 1 OF 2

LOCATED IN THE SE 1/4 OF SECTION 7
TOWNSHIP 2S, RANGE 1W, W.M.
WASHINGTON COUNTY, OREGON

DATE	05/18/2020
DRAWN BY	KEL
CHECKED BY	GRA
REVISION	0
JOB NO.	0458-020



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PACIFIC CORPORATE CENTER
15115 S.W. SEQUOIA PARKWAY, SUITE 150 (503) 684-0652
TIGARD, OREGON 97224 FAX (503) 624-0157

C:\TEMP\AC\PUBLISH_12952\0458-020X PLM 4.3 EASEMENTS.DWG 2020-05-21 3:27 PM - KEL



0 25' 50'
SCALE: 1"=50'

15801 ROY ROGERS ROAD, LLC
DOC. NO. 2016-097560
FILED 11/25/2016
WASHINGTON COUNTY RECORDS

R=9916.28'
Δ=0°32'02"
L=92.40'
CH.=92.40'
N00°02'24"W

R=9951.28'
Δ=0°32'05"
L=92.89'
CH.=92.89'
S00°02'23"E

"RR" 228+45.69
55.28'LT

S89°30'47"E
35.00'

R=9951.28'
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L=28.61'
CH.=28.61'
S00°18'37"W

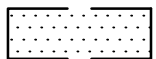
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CH.=57.27'
N00°23'32"E



PERMANENT EASEMENT



LONG TERM MONITORING EASEMENT

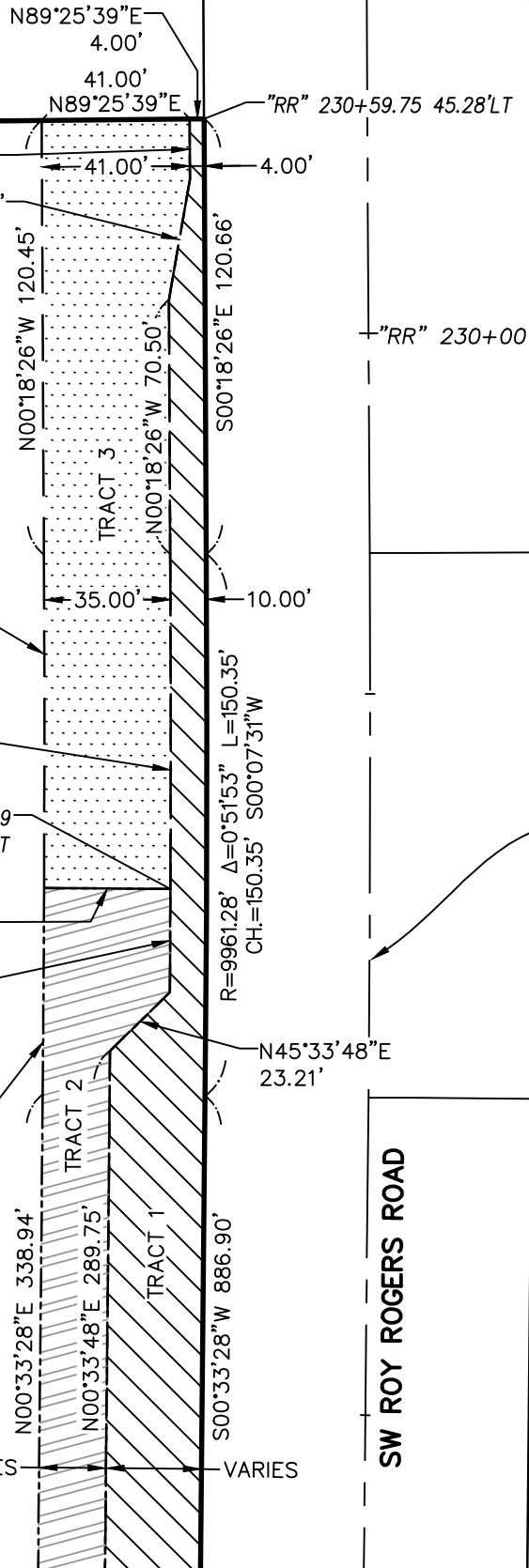


TEMPORARY CONSTRUCTION EASEMENT

VARIES

VARIES

SW ROY ROGERS ROAD



SEE SHEET 1 OF 2

EXHIBIT B
PAGE 2 OF 2

LOCATED IN THE SE 1/4 OF SECTION 7
TOWNSHIP 2S, RANGE 1W, W.M.
WASHINGTON COUNTY, OREGON

DATE	05/18/2020
DRAWN BY	KEL
CHECKED BY	GRA
REVISION	0
JOB NO.	0458-020



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TIGARD, OREGON 97224 FAX (503) 624-0157

Exhibits A & B (10 of 13) to Resolution No. WWSS-10-20

Easement Descriptions
WWSP PLM 4.3
Washington County, Oregon
April 17, 2020
Project No. 0458-020
Ref: 2S1180000602

EXHIBIT A

Tract 1 (Permanent Easement):

A tract of land lying in the Northeast 1/4 Section 18, Township 2 South, Range 1 West of the Willamette Meridian, in Washington County, Oregon; being a portion of that property described in a Deed to Herbert Frank and Florence M. Frank recorded as Doc. No. 86041929, Washington County Deed Records; the said tract being that portion of said property included in a strip of land 10.00 feet in width, lying westerly of and adjacent to the west Right-of-Way line of SW Roy Rogers Road as established in Washington County Survey Number 33,029.

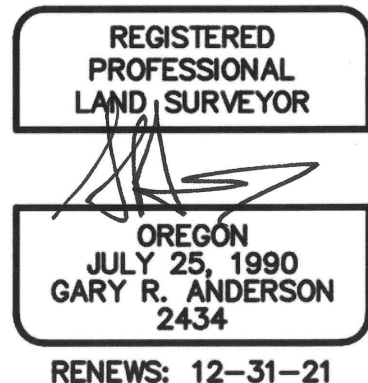
Containing 500 square feet, more or less.

Tract 2 (Temporary Construction Easement):

A tract of land lying in the Northeast 1/4 Section 18, Township 2 South, Range 1 West of the Willamette Meridian, in Washington County, Oregon; being a portion of that property described in a Deed to Herbert Frank and Florence M. Frank recorded as Doc. No. 86041929, Washington County Deed Records; the said tract being that portion of said property included in a strip of land 30.00 feet in width, lying westerly of and adjacent to the west Right-of-Way line of SW Roy Rogers Road as established in Washington County Survey Number 33,029.

Excepting therefrom that portion of said tract described above as Tract 1.

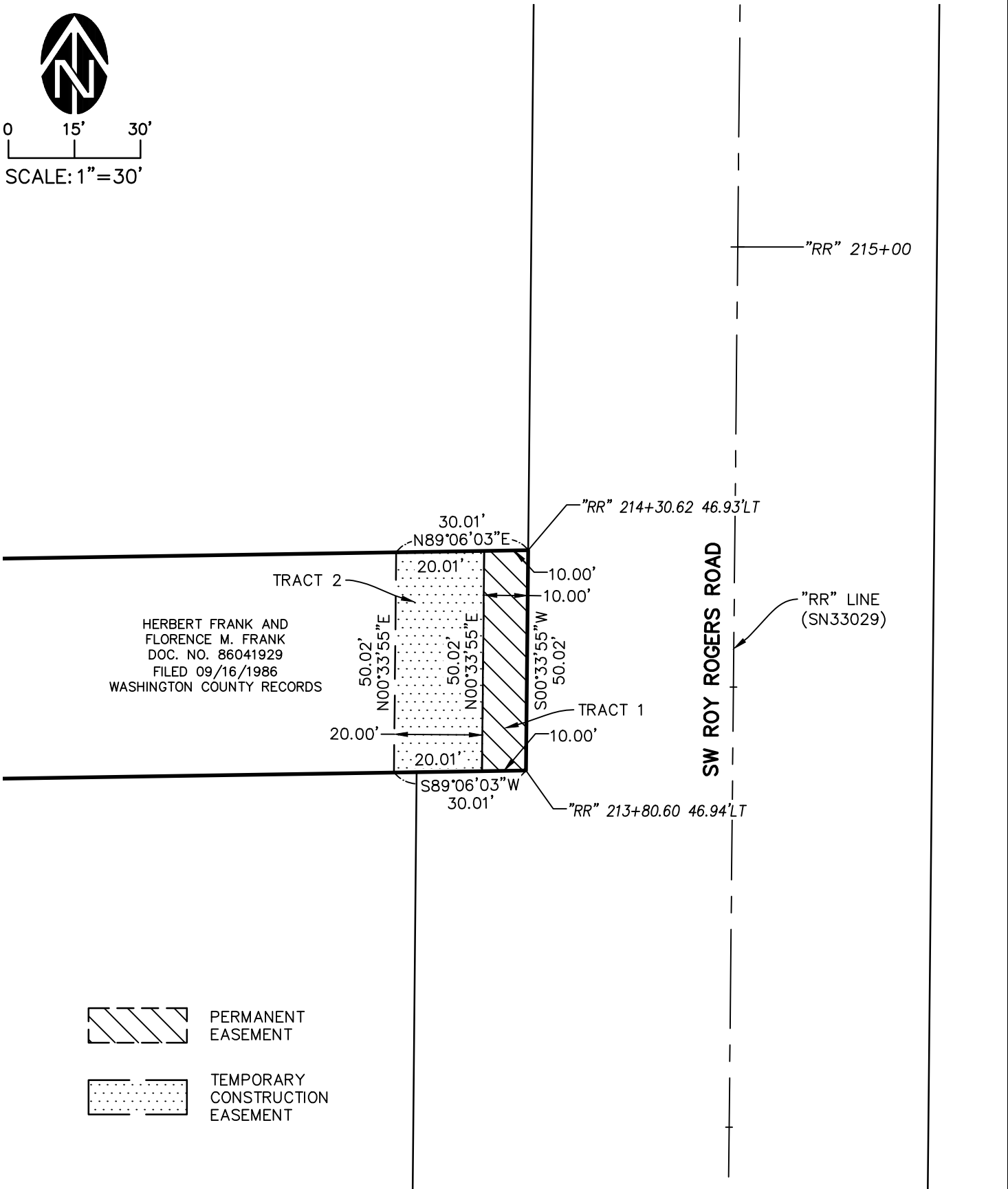
Containing 1,000 square feet, more or less.



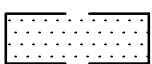
\\WCID\PROJECTS\0458-020\16\SURVEY\CAD\DWG_A_PHASE\0458-020X PLM 4.3 EASEMENTS.DWG 2020-04-17 2:17 PM - KEL



0 15' 30'
SCALE: 1" = 30'



PERMANENT EASEMENT



TEMPORARY CONSTRUCTION EASEMENT

EXHIBIT B
PAGE 1 OF 1

LOCATED IN THE NE 1/4 OF SECTION 18
TOWNSHIP 2S, RANGE 1W, W.M.
WASHINGTON COUNTY, OREGON

DATE	04/17/2020
DRAWN BY	KEL
CHECKED BY	GRA
REVISION	0
JOB NO.	0458-020



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TIGARD, OREGON 97224 FAX (503) 624-0157

Exhibits A & B (11 of 13) to Resolution No. WWSS-10-20

Easement Descriptions
WWSP PLM 4.3
Washington County, Oregon
April 21, 2020
Project No. 0458-020
Ref: 2S1070001500

EXHIBIT A

Tract 1 (Permanent Easement):

A tract of land lying in the Southeast 1/4 Section 7, Township 2 South, Range 1 West of the Willamette Meridian, in Washington County, Oregon; being a portion of that property described in a Deed to Alois A. Amstad and DeeAnn G. Amstad, Trustees of the Tony and DeeAnn Amstad Revocable Trust dated August 9, 2004 recorded as Doc. No. 2004-146737, Washington County Deed Records; the said tract being that portion of said property included in a strip of land 3.96 feet in width, lying westerly of and adjacent to the west Right-of-Way line of SW Roy Rogers Road as established in Washington County Survey Number 33,029 between centerline "RR" station 230+50.00 and station 231+16.13.

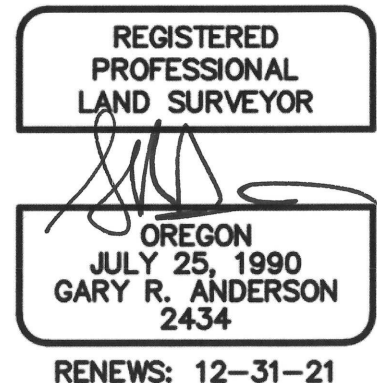
Containing 223 square feet, more or less.

Tract 2 (Temporary Construction Easement):

A tract of land lying in the Southeast 1/4 Section 7, Township 2 South, Range 1 West of the Willamette Meridian, in Washington County, Oregon; being a portion of that property described in a Deed to Alois A. Amstad and DeeAnn G. Amstad, Trustees of the Tony and DeeAnn Amstad Revocable Trust dated August 9, 2004 recorded as Doc. No. 2004-146737, Washington County Deed Records; the said tract being that portion of said property included in a strip of land 45.00 feet in width, lying westerly of and adjacent to the west Right-of-Way line of SW Roy Rogers Road as established in Washington County Survey Number 33,029 between centerline "RR" station 230+50.00 and station 231+16.13.

Excepting therefrom that portion of said tract described above as Tract 1.

Containing 2,319 square feet, more or less.

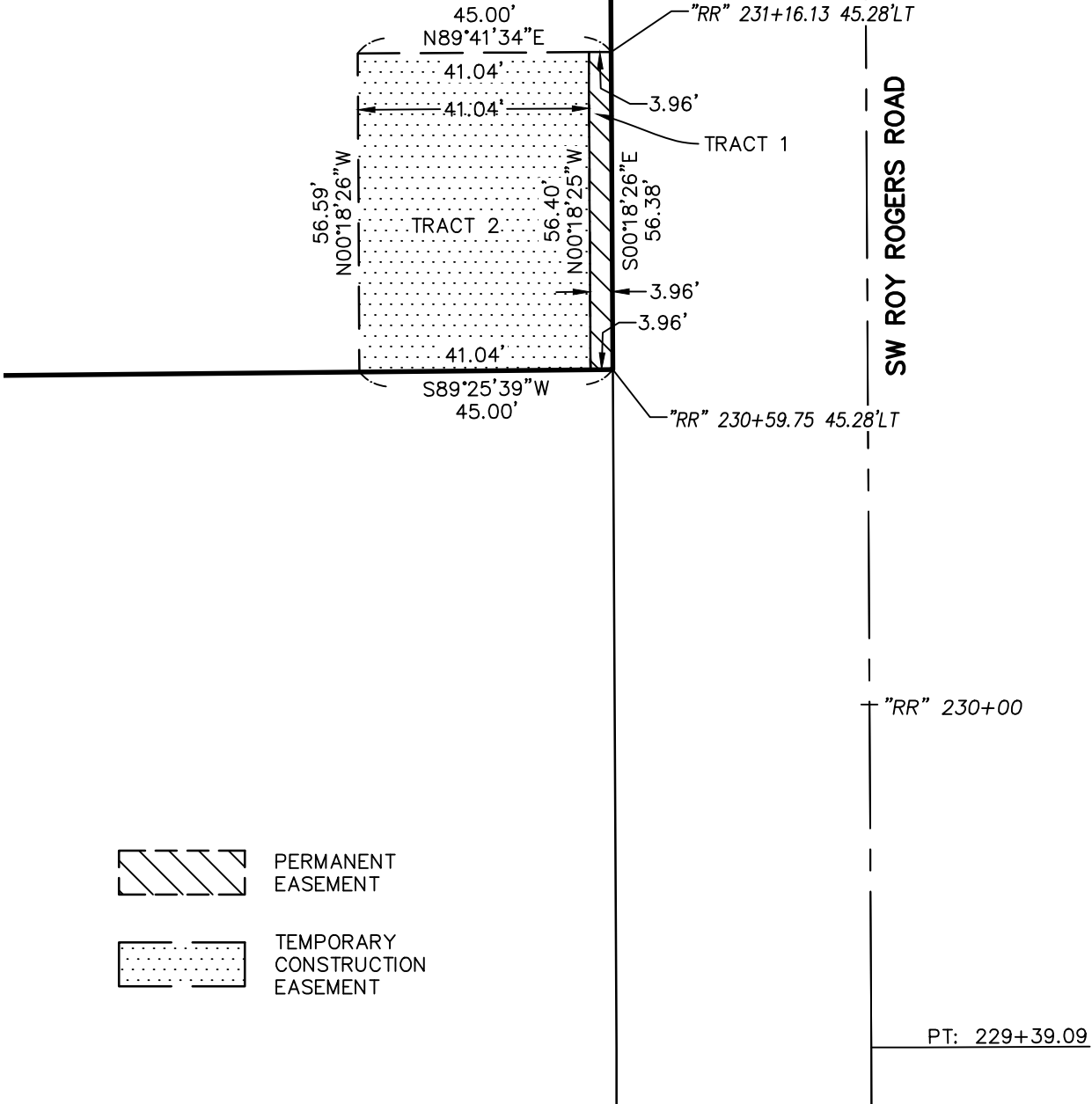


\\WCIDC\PROJECTS\0458-020\6\SURVEY\CAD\DWG_A_PHASE\0458-020X_PLM 4.3 EASEMENTS.DWG 2020-04-21 9:08 AM - KEL

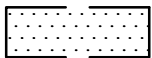


0 15' 30'
SCALE: 1" = 30'

ALOIS A. AMSTAD AND
DEEANN G. AMSTAD,
TRUSTEES OF THE
TONY AND DEEANN AMSTAD
REVOCABLE TRUST DATED
AUGUST 9, 2004
DOC. NO. 2004-146737
FILED 12/27/2004
WASHINGTON COUNTY RECORDS



PERMANENT EASEMENT



TEMPORARY CONSTRUCTION EASEMENT

EXHIBIT B

PAGE 1 OF 1

LOCATED IN THE SE 1/4 OF SECTION 7
TOWNSHIP 2S, RANGE 1W, W.M.
WASHINGTON COUNTY, OREGON

DATE	04/21/2020
DRAWN BY	KEL
CHECKED BY	GRA
REVISION	0
JOB NO.	0458-020



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Exhibits A & B (12 of 13) to Resolution No. WWSS-10-20

Easement Descriptions
WWSP PLM 4.3
Washington County, Oregon
April 17, 2020
Project No. 0458-020
Ref: 2S1180000400

EXHIBIT A

Tract 1 (Permanent Easement):

A tract of land lying in the Southeast 1/4 Section 7, Township 2 South, Range 1 West of the Willamette Meridian, in Washington County, Oregon; being a portion of that property described in a Deed to Gerald A. Baggenstos Trust and Jacqueline M. Baggenstos Trust recorded as Doc. No. 2016-105052, Washington County Deed Records; the said tract being that portion of said property included in a strip of land 10.00 feet in width, lying westerly of and adjacent to the west Right-of-Way line of SW Roy Rogers Road as established in Washington County Survey Number 33,029.

Containing 530 square feet, more or less.

Tract 2 (Temporary Construction Easement):

A tract of land lying in the Northeast 1/4 Section 7, Township 2 South, Range 1 West of the Willamette Meridian, in Washington County, Oregon; being a portion of that property described in a Deed to Gerald A. Baggenstos Trust and Jacqueline M. Baggenstos Trust recorded as Doc. No. 2016-105052, Washington County Deed Records; the said tract being that portion of said property included in a strip of land 45.00 feet in width, lying westerly of and adjacent to the west Right-of-Way line of SW Roy Rogers Road as established in Washington County Survey Number 33,029.

Excepting therefrom that portion of said tract described above as Tract 1.

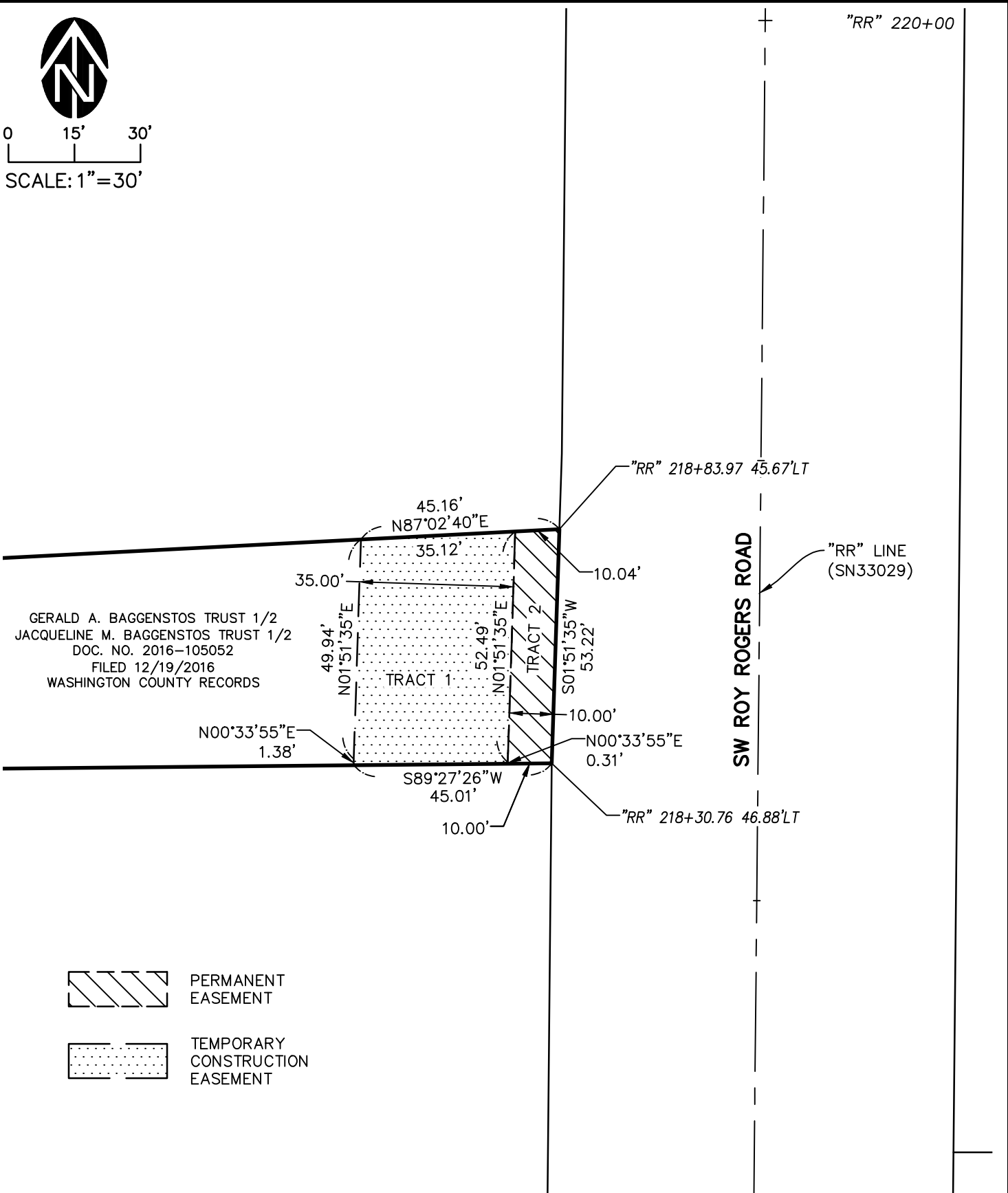
Containing 1,822 square feet, more or less.



\\WCID\PROJECTS\0458-020\16\SURVEY\CAD\DWG_A_PHASE\0458-020X_PLM 4.3 EASEMENTS.DWG 2020-04-17 2:26 PM - KEL



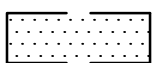
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GERALD A. BAGGENSTOS TRUST 1/2
JACQUELINE M. BAGGENSTOS TRUST 1/2
DOC. NO. 2016-105052
FILED 12/19/2016
WASHINGTON COUNTY RECORDS



PERMANENT EASEMENT



TEMPORARY CONSTRUCTION EASEMENT

EXHIBIT B

PAGE 1 OF 1

LOCATED IN THE SE 1/4 OF SECTION 7
TOWNSHIP 2S, RANGE 1W, W.M.
WASHINGTON COUNTY, OREGON

DATE	04/17/2020
DRAWN BY	KEL
CHECKED BY	GRA
REVISION	0
JOB NO.	0458-020



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TIGARD, OREGON 97224 FAX (503) 624-0157

Exhibits A & B (13 of 13) to Resolution No. WWSS-10-20

Easement Descriptions
WWSP PLM 4.3
Washington County, Oregon
May 13, 2020
Project No. 0458-020
Ref: 2S130AB07600

EXHIBIT A

Tract 1 (Permanent Easement):

A tract of land lying in the Northeast 1/4 Section 30, Township 2 South, Range 1 West of the Willamette Meridian, in Washington County, Oregon; being a portion of that property described in a Deed to Jonathan Jay Homer and Kiersten Homer recorded as Doc. No. 2006-148376, Washington County Deed Records; and being more particularly described as follows:

Beginning at **Point 'A'** being on the east Right-of-Way line of SW Roy Rogers Road, as established in the Right-of-Way Survey by Oregon Department of Transportation filed April 2002 as Washington County Survey Number 28,892, that is easterly 45.28 feet and perpendicular to centerline "L" station 204+27.90, also being the northwest corner of said property;

thence along the north line of said property, South 53°59'44" East, 10.92 feet;

thence leaving said line, South 23°48'58" West, 23.42 feet to a point on the east Right-of-Way line of SW Roy Rogers Road, said point being on a curve;

thence along said curve to the left, having a radius of 1522.10 feet through a central angle of 01°02'55" (the chord of which bears North 01°16'45" East, 27.85 feet) an arc length of 27.86 feet to **Point 'A'** the point of beginning.

Containing 124 square feet, more or less.

Bearings based on Oregon Coordinate Reference System, Portland Zone.

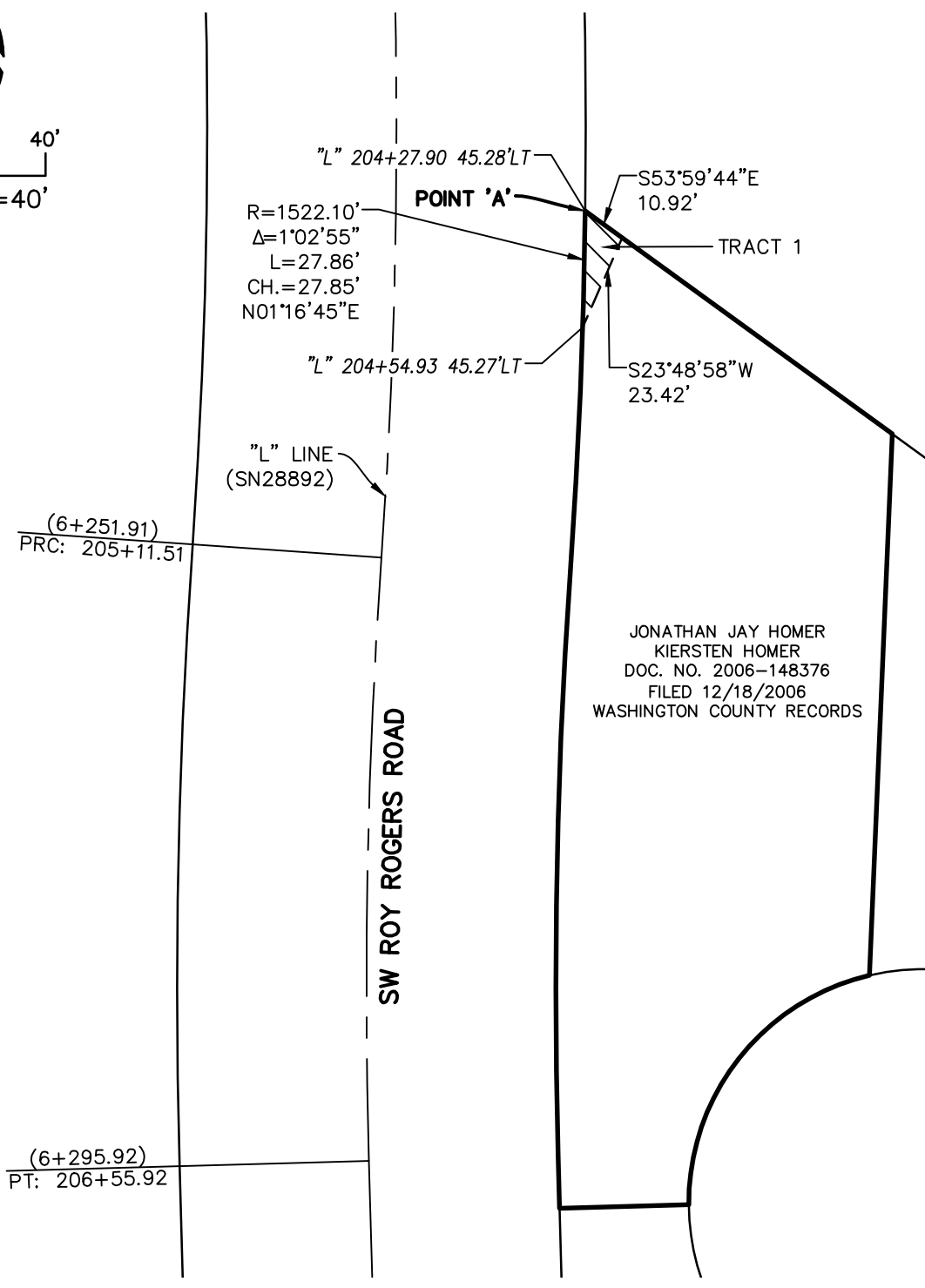


RENEWS: 12-31-21

\\WCIDC\PROJECTS\0458-020\16\SURVEY\CAD\DWG_A_PHASE\0458-020X_PLM 4.3 EASEMENTS.DWG 2020-05-13 11:46 AM - KEL



0 20' 40'
SCALE: 1"=40'



JONATHAN JAY HOMER
KIERSTEN HOMER
DOC. NO. 2006-148376
FILED 12/18/2006
WASHINGTON COUNTY RECORDS



PERMANENT EASEMENT

EXHIBIT B

PAGE 1 OF 1

LOCATED IN THE NE 1/4 OF SECTION 30
TOWNSHIP 2 S, RANGE 1 W, W.M.
WASHINGTON COUNTY, OREGON

DATE	05/13/2020
DRAWN BY	KEL
CHECKED BY	GRA
REVISION	0
JOB NO.	0458-020



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TIGARD, OREGON 97224 FAX (503) 624-0157

STAFF REPORT

To: WWSS Board of Commissioners
From: David Kraska, PE, Willamette Water Supply Program Director
Date: June 4, 2020
Subject: Resolution Establishing Fiscal Year 2020-21 Board Meeting Dates

Requested Action:

Consider adopting a resolution establishing regular meeting dates of the Board of Commissioners for fiscal year 2020-21.

Key Concepts:

This action will provide specific dates for monthly meetings of the Board to conduct Commission business (per Willamette Water Supply System (WWSS) Intergovernmental Agreement (IGA) Article 5.2).

Background:

To conduct regular business for the WWSS Commission, the Board of Commissioners needs to set regular business meeting dates. The IGA requires at least quarterly meetings per year and anticipates monthly meetings during the construction of the WWSS. The attached resolution establishes the Board meeting dates for fiscal year 2020-21. The Board of Commissioners has the ability to meet more frequently as needed or to change meeting dates.

Budget Impact:

There are no budgetary impacts from this action.

Staff Contact Information:

David Kraska, PE; Willamette Water Supply Program Director; 503-941-4561; david.kraska@tvwd.org
Clark Balfour, TVWD General Counsel; 503-848-3961; clark.balfour@tvwd.org

Attachments:

Proposed resolution

Willamette Water Supply System Commission

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RESOLUTION NO. WWSS-11-20

A RESOLUTION ESTABLISHING REGULAR MONTHLY MEETING DATES OF THE WILLAMETTE WATER SUPPLY SYSTEM BOARD OF COMMISSIONERS FOR FISCAL YEAR 2020-21.

WHEREAS, **Article 5.2** of the Willamette Water Supply System Intergovernmental Agreement requires the Board of Commissioners to generally meet monthly, but in no event less than quarterly; and,

WHEREAS, the Board of Commissioners wishes to set its regular meeting calendar by resolution, and being advised,

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE WILLAMETTE WATER SUPPLY SYSTEM COMMISSION:

Section 1: The regular meetings of the Commission shall be held on the following dates:

July 2, 2020
 August 6, 2020
 September 3, 2020
 October 1, 2020
 November 5, 2020
 December 3, 2020
 January 7, 2021
 February 4, 2021
 March 4, 2021
 April 2, 2021
 May 6, 2021
 June 3, 2021

Section 2: Regular meeting dates may be changed by a motion of the Board. Special meetings may be called by the Chair or by any two Commission members.

Section 3: The regular or special meetings shall be held at the Tualatin Valley Water District, Administrative Office, located at 1850 SW 170th Avenue, Beaverton, Oregon 97003.

Section 4: All Commission meetings will be advertised as required and conducted in accordance with the Oregon Public Meetings law, ORS 192.610 to 192.710.

Approved and adopted at a regular meeting held on the 4th day of June 2020.

James Duggan, Chair

Denny Doyle, Vice Chair

Willamette Water Supply System Commission

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STAFF REPORT

To: Willamette Water Supply System Board of Commissioners
From: David Kraska, P.E., Willamette Water Supply System General Manager
Date: June 4, 2020
Subject: Anticipated Business Agenda Items for the July 2, 2020, Meeting of the Willamette Water Supply System Board of Commissioners

Key Concepts:

The next Willamette Water Supply System (WWSS) Commission Board meeting agenda is anticipated to include staff recommendations to approve the following business agenda items:

1. PLM_5.3 Resolution of Public Necessity
2. Findings for Exemption from Competitive Bidding for RES_1.0, PLM_5.3
3. WWSS IGA Exhibit 1 Amendment to Update Ownership on the North Transmission Line and South Transmission Line Emergency Connections and Complete other Minor Updates
4. Add a City of Beaverton Hall Boulevard 16-inch pipeline to COB_1.0

Background:

The following actions are anticipated business agenda items for the July 2, 2020, meeting of the WWSS Board of Commissioners. Due to the dynamic nature of the WWSS work, request for approval of some items may be delayed or new items may emerge on the business agenda next month. WWSS staff strive to provide preliminary information one month prior to requesting action, and a full staff report describing the recommended action during the appropriate month.

1. PLM_5.3 Resolution of Public Necessity Approval Recommendation

The WWSS includes a section of pipeline along SW Grabhorn Road, across private property from the RES_1.0 location to near Clark Hill Road, and across private property to the connection point with PLW_1.3 at SW Rosedale Road and the future Cornelius Pass Road. The majority of this pipeline is located in unincorporated Washington County. The WWSP has progressed the design of this pipeline section to enable identification of property requirements for construction and long-term operation and maintenance of the pipeline. The pipeline alignment was selected through an extensive alternatives evaluation, and the preferred location was selected based upon the best interests of the public and the least private injury to private property owners. The proposed resolution will enable the initiation of the property acquisition process, including negotiations with the Property owner and any other applicable interest holders.

At the July WWSS Board meeting, WWSP staff will present the project area and easement needs, with a recommendation to the Board to adopt the Resolution of Public Necessity to allow WWSP staff to begin the process to acquire permanent and temporary construction easements for PLM_5.3.

2. Findings for Exemption from Competitive Bidding for RES_1.0, PLM_5.3

At the May WWSS Board of Commissioners meeting, the Board, acting as the Local Contracting Review Board (LCRB), approved a draft resolution declaring an exemption from competitive bidding for RES_1.0 Storage Reservoirs and approving the use of the Construction Manager/General Contractor (CM/GC) delivery method for construction. In the meantime, WWSP has requested oral testimony or written comments from the public in response to the proposed procurement exemption. Staff will provide the public comment and if appropriate, ask the Board, again acting as the LCRB, to adopt the final resolution through a second reading at the July 2, 2020 Board meeting.

3. WWSS IGA Exhibit 1 Amendment to Update Ownership on the North Transmission Line and South Transmission Line Emergency Connections and Complete other Minor Updates

Several Exhibit 1 recommended updates related to the WWSS turnouts are currently under discussion:

- Change the ownership indicated in the turnout tables for the WWSS emergency connections to the North Transmission Line and South Transmission Line
- Revise other information to correct minor inaccuracies such as turnout name changes and revised turnout capacities (minor changes with no impact to transmission pipeline capacity) and an error in Finished Water Pipeline – Pumped ownership percentage

WWSP staff expect to bring the WWSS IGA Exhibit 1 amendment to the July WWSS Board meeting with a recommendation to adopt the resolution.

4. Intergovernmental Agreement Between the City of Beaverton and the Willamette Water Supply Commission Design of SW Nimbus/Scholls Ferry to SW Beaverton-Hillsdale Highway Pipe Project (COB_1.0 Design IGA) Amendment 1 to add a City of Beaverton Hall Boulevard 16-inch Pipeline Approval Recommendation

The City of Beaverton has requested an additional ancillary project be added to the COB_1.0 work that is currently coordinated with TVWD's MPE_1.0 project under the executed Intergovernmental Agreement Between the City of Beaverton and the Willamette Water Supply Commission Design of SW Nimbus/Scholls Ferry to SW Beaverton-Hillsdale Highway Pipe Project (COB_1.0 Design IGA). The additional project is a 16-inch pipeline, approximately 2,500 feet, to be located in SW Hall Boulevard from SW Scholls Ferry Road to SW Oleson Road. The requested change is progressing through WWSP Change Committee review and then Management Committee review. Adding the project requires an amendment to the COB_1.0 Design IGA.

WWSS and Beaverton staff are finalizing the details and expect to bring an amendment approval recommendation to the July WWSS Board meeting.

Budget Impact:

Anticipated costs for all of the actions described are reflected in the WWSP 2020 budget. The cost changes for ancillary projects and additional equipment (such as a turnout) are borne entirely by the requesting Partner.

Page 3 of 3

June 4, 2020

Anticipated Business Agenda Items for the July 2, 2020, Meeting of the Willamette Water Supply System Board of Commissioners

Staff Contact Information:

Dave Kraska, P.E., WWSS General Manager, 503-941-4561, david.kraska@tvwd.org

Joelle Bennett, P.E., WWSP Assistant Program Director, 503-941-4577, joelle.bennett@tvwd.org

Attachments:

None.