



General Manager

Niki Iverson
150 E. Main Street
Hillsboro, OR 97123
503-615-6585

Board of Commissioners

City of Hillsboro

John Godsey
David Judah
Deborah Raber

City of Forest Grove

Rod Fuiten
Carl Heisler
Peter Truax

City of Beaverton

Denny Doyle
Marc San Soucie
Mark Fagin

Tualatin Valley Water District

Dick Schmidt
Jim Doane
Bernice Bagnall

HILLSBORO/FOREST GROVE/BEAVERTON/
TUALATIN VALLEY WATER DISTRICT
JOINT WATER COMMISSION (JWC)
PRELIMINARY AGENDA

City of Hillsboro
Civic Center
150 East Main St., **Room 113B**

October 11, 2019
12:30 p.m.
Regular Meeting

Assistive Listening Devices (ALD) and sign language interpreters are available, at no cost, and can be scheduled for this meeting. Please provide at least 72 hours notice prior to the meeting. To obtain these services, call (503) 681-6100 or TTY (503) 681-6284.

ALL TESTIMONY IS ELECTRONICALLY RECORDED.

The Commission lunches at 12:00 p.m.

CALL TO ORDER

Introductions.

1. 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 regular meeting minutes from Friday, July 12, 2019.

B. Approve executive meeting minutes from Wednesday, September 10, 2019.

2. COMMUNICATIONS AND NON-AGENDA ITEMS

A. None scheduled.

3. BUSINESS

A. Consider approval of Conduit Use Agreement between the Joint Water Commission and the City of Hillsboro.

General Manager Report – Niki Iverson

4. DISCUSSION ITEMS (These items may result in action by the Commission.)

A. Slayden/Jacobs Claim and Settlement Agreement Update.

Attorney/Staff Report – Casey Nokes / Kevin Meeuwsen



- B. Water Treatment Plant Expansion Project update. *Staff Report – Kevin Meeuwsen*
- C. Risk and Resiliency Plan Update. *Staff Report – Eric Hielema*
- D. Year-to-Date Financial status. *Staff Report – Mellisa Franklin*
- E. Stored water status. *Staff Report – Kristel Griffith*
- F. General Manager’s Report. *Staff Report – Niki Iverson*

5. EXECUTIVE SESSION

- A. Consider convening into Executive Session under:
 - 1. ORS 192.660(2)(e) for deliberation with persons designated by the governing body to negotiate real property transactions, and ORS 192.660(2)(f) to consider information or records that are exempt by law from public inspection; and ORS 192.660(2)(h) to consult with counsel concerning the legal rights and duties of a public body with regard to current litigation or litigation likely to be filed.
- B. Take action(s) related to Executive Session, if needed.

6. ADVICE/INFORMATION ITEMS

- A. The Joint Water Commission 85 MG Expansion Dedication will be held on October 30, 2019, at the Water Treatment Plant. Tours begin at 10:30 am, luncheon at 11:30 am, and the dedication ceremony will be held around 12:00 pm. Tours will also be held after the ceremony at 1:00 pm. Please RSVP to Tonya with preferred tour (full or expansion-only), and tour time. This is an outdoor event; please dress accordingly.
- B. The next JWC and BRJOC meetings will be held on January 10, 2020. Meetings are held at the Civic Center in Room 113B. The BRJOC meeting will be held at 12:30 p.m. with the JWC meeting following immediately after the BRJOC meeting adjourns.

HILLSBORO/FOREST GROVE/BEAVERTON
TUALATIN VALLEY WATER DISTRICT
JOINT WATER COMMISSION (JWC)

MINUTES

City of Hillsboro
Civic Center Room 509
150 East Main St.

September 10, 2019
1:30 p.m.
Executive Committee Meeting

Commissioners Present:

Hillsboro: John Godsey
Forest Grove: Peter Truax
Beaverton: Marc San Soucie
Tualatin Valley Water District: Bernice Bagnall

Staff Present:

Hillsboro: Niki Iverson, Eric Hielema, Tacy Steele, Kevin Meeuwsen, and
Tonya Bilderbeck
Tualatin Valley Water District: Tom Hickman

Other:

Cable Huston LLC Casey Nokes via conference call

The Commission lunches at 12:00 p.m.

CALL TO ORDER

Introductions.

1. BUSINESS

- A. Consider approval of the settlement agreement and mutual release of claims for the Joint Water Commission (JWC) water treatment plant concrete defect claim related to delayed ettringite formation (DEF) on new filters #15 and #16. *Staff Report – Kevin Meeuwsen*

Iverson reviewed the settlement agreement and staff report documenting the history of the project and claim.

Nokes reported all parties sat for mediation on August 2nd and the mediator was favorable to JWC's position.

He said a bridge needed to come from Jacobs and Slayden, however, the final package required a concession from the JWC. Nokes stated that Slayden bridged gaps in the system, as it was apparent the relationship was important to them. He said the overall value of the claim was \$905, 000, which included Slayden remediation work and \$80,000 in invoices from Jacobs for defective work rejected by the JWC.

Nokes said the final term at mediation resulted in a \$200,000 payment to Slayden from JWC and \$150,000 from Jacobs. Slayden will absorb the balance of the claim. JWC agreed to pay Jacobs \$20,000 of the \$80,000 invoiced.

Overall, the settlement break out of financial responsibility is as follows:

JWC	22%
Jacobs	21%
Slayden	57%

Nokes advised the Commission that he feels this was a best scenario outcome, and avoids a costly litigation, as well as maintains working relationships.

Motion made by Bagnall, seconded by San Soucie to approve the settlement agreement and mutual release of claims for the Joint Water Commission (JWC) water treatment plant concrete defect claim related to delayed ettringite formation (DEF) on new filters #15 and #16, as presented. Motion passed unanimously with Commissioners Godsey, San Soucie, Truax, and Bagnall all voting in favor.

2. ADVICE/INFORMATION ITEMS

- A. The next JWC and BRJOC meetings are scheduled on Friday, October 11, 2019. Meetings are held at the Civic Center in Room 113B. The BRJOC meeting will be held at 12:30 p.m. with the JWC meeting following immediately after the BRJOC meeting adjourns.

There being no further business to come before the Commission, the meeting adjourned at 1:50 p.m.

Chairman _____
Hillsboro/Forest Grove/ Beaverton/
TVWD Joint Water Commission

ATTEST: _____
Secretary

HILLSBORO/FOREST GROVE/BEAVERTON
TUALATIN VALLEY WATER DISTRICT
JOINT WATER COMMISSION (JWC)

MINUTES

City of Hillsboro
Civic Center Room 113B
150 East Main St.

July 12, 2019
12:50 p.m.
Regular Meeting

Commissioners Present:

Hillsboro:	John Godsey, David Judah and Deborah Raber
Forest Grove:	Peter Truax, Carl Heisler and Rod Fuiten
Beaverton:	Marc San Soucie and Denny Doyle
Tualatin Valley Water District:	Jim Doane, Dick Schmidt and Bernice Bagnall

Staff Present:

Hillsboro:	Niki Iverson, Chris Wilson, Sophia Hobet, Eric Hielema, Kristel Griffith, Jessica Dorsey, Nesh Mucibabic, Alexis Cooley, Kevin Meeuwsen, Mellisa Franklin, Michelle Molgaard, Tacy Steele, Robb Davis and Carrie Dale
Beaverton:	David Winship
Forest Grove:	Greg Robertson, Bryce Baker, and Derek Robbins
Tualatin Valley Water District:	Carrie Pak, Mark Knudson and Tom Hickman

Other:

Cable Huston LLC	Tommy Brooks and Casey Nokes
City of North Plains	Andy Varner

The Commission lunches at 12:00 p.m.

CALL TO ORDER

Introductions.

1. **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 regular meeting minutes from Friday, April 12, 2019.
 - B. Approve executive meeting minutes from Wednesday, June 12, 2019.

Motion made by San Soucie seconded by Doyle to approve the Consent Agenda, as presented. Motion passed with Commissioners Godsey, Judah, Raber, Fuiten, Heisler, Truax, San Soucie, Doyle, Doane, Schmidt and Bagnall all voting in favor.

2. COMMUNICATION AND NON-AGENDA ITEMS

A. None scheduled.

3. BUSINESS

A. Consider approval of an Intergovernmental Agreement between the State of Oregon Department of Environmental Quality (DEQ), and the Joint Water Commission for supplemental cyanotoxin testing at DEQ Labs. *Staff Report – Jessica Dorsey*

Dorsey outlined the proposed IGA, citing it as a valuable resource when needed. She discussed the reasons for working with a commercial lab and the limitations of only working with a DEQ lab.

Motion made by Doane, seconded by Bagnall, to approve an Intergovernmental Agreement between the State of Oregon Department of Environmental Quality (DEQ), and the Joint Water Commission, as presented. Motion passed with Commissioners Godsey, Judah, Raber, Fuiten, Heisler, Truax, San Soucie, Doyle, Doane, Schmidt and Bagnall all voting in favor.

B. Consider approval of a Shared Worker Agreement Addendum to the ORWARN Mutual Aid and Assistance Agreement. *Staff Report – Sophia Hobet*

Hobet presented information on the addendum to the original ORWARN agreement which was signed by the JWC in 2008. She reported that the addendum will allow a shared worker who is unable to travel to their place of work due to the effects of an emergency, may report to a more accessible utility.

Motion made by Truax, seconded by Raber to approve the Shared Worker Agreement Addendum, as presented. Motion passed with Commissioners Godsey, Judah, Raber, Fuiten, Heisler, Truax, San Soucie, Doyle, Doane, Schmidt and Bagnall all voting in favor.

C. Consider authorizing the Executive Committee to take final action on the following items: *Staff Report – Niki Iverson*

1. A use agreement with City of Hillsboro to allow them use of Joint Water Commission-owned conduit for the City's fiber utility.
2. Resolution of claim (Slayden & Jacobs)
3. Approval of Memorandum of Understanding for NEPA process with Bureau of Reclamation

Iverson presented the staff report and requested the Board's authorization for the Executive Committee to meet and take action as needed prior to the October JWC meeting.

Motion made by Truax, seconded by Doyle to authorize the Executive Committee to take final action on the three items listed in Agenda Item 3C, as presented. Motion passed with Commissioners Godsey, Judah, Raber, Fuiten, Heisler, Truax, San Soucie, Doyle, Doane, Schmidt and Bagnall all voting in favor.

4. DISCUSSION ITEMS (These items may result in action by the Commission.)

A. Water Treatment Plant Expansion Update. *Staff Report – Kevin Meeuwsen*

Meeuwsen updated the Commission on the Water Treatment Plant Expansion. He reviewed photos of the project progression.

B. Year-to-date Financial status. *Staff Report – Mellisa Franklin*

Franklin presented the JWC financial status as of May 31, 2019, comparing these numbers to the supplemental budget. Franklin reviewed expenditures, sharing a graph showing the monthly unit cost per ccf.

C. Stored water status – *Staff Report – Kristel Griffith*

Griffith presented the Commission with the stored water status of Scoggins Reservoir. The reservoir did fill, and we are currently releasing. Griffith reminded the Commission that the JWC is not the only entity with water rights to the reservoir. Griffith reviewed where each of the JWC partner agencies stand on stored water to date

D. General Manager's Report. – *Staff Report – Niki Iverson*

Iverson reviewed to articles provided with the meeting packet about the recent incident at Hagg Lake involving a bear who had grown domesticated due to human interference, as well as a Wapato Bridge construction article.

Iverson stated that the JWC rate and SDC study is in development and an informational newsletter including items from each of the divisions is forthcoming. Staff is working on an agreement with North Plains to update the wholesale agreement.

Iverson stated there will be a presentation of Carollo's after-action report and analysis of the winter storm event at the October meeting. Iverson shared that seven risk and resiliency proposals have been submitted and are currently being ranked by the partners. A contractor has been secured for the Fern Hill Reservoir roof repair, with work to begin in the fall of 2019.

5. EXECUTIVE SESSION

A. Consider convening into Executive Session under:

1. ORS 192.660(2)(e) for deliberation with persons designated by the governing body to negotiate real property transactions, and ORS 192.660(2)(f) to consider information or records that are exempt by law from public inspection; and ORS 192.660(2)(h) to consult with counsel concerning the legal rights and duties of a public body with regard to current litigation or litigation likely to be filed.

Motion made by Judah, seconded by Fuiten to convene into Executive Session. Motion passed with Commissioners Godsey, Judah, Raber, Fuiten, Heisler, Truax, San Soucie, Doyle, Doane, Schmidt and Bagnall all voting in favor.

B. Take action(s) related to Executive Session, if needed.

No action taken.

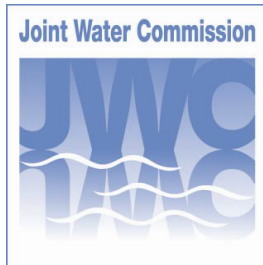
6. ADVICE/INFORMATION ITEMS

- A. The next JWC and BRJOC meetings are scheduled on Friday, October 11, 2019. Meetings are held at the Civic Center in Room 113B. The BRJOC meeting will be held at 12:30 p.m. with the JWC meeting following immediately after the BRJOC meeting adjourns.

There being no further business to come before the Commission, the meeting adjourned at 2:13 p.m.

Chairman _____
Hillsboro/Forest Grove/ Beaverton/
TVWD Joint Water Commission

ATTEST: _____
Secretary



STAFF REPORT

To: Joint Water Commission
From: Lee Lindsey, Senior Program Manager
Date: October 11, 2019
Re: Agenda Item 3A – Consider approval of the proposed JWC Conduit Use Agreement between the Joint Water Commission and the City of Hillsboro.

Recommendation:

Approve the proposed conduit use agreement between the Joint Water Commission (JWC) and the City of Hillsboro. This agreement has been reviewed and recommended for approval by the JWC Operations Committee, the JWC Finance Committee and the JWC Management Committee.

Background:

In late 2018, the City of Hillsboro requested to use a portion of conduit adjacent to the North Transmission Line (NTL). Initially, this conduit will be used to provide network access to a school, and future plans may include expanding the locations served through the proposed leased conduit. The City of Hillsboro's specific request is to enter into a 35-year use agreement for the portion of conduit (about 28%) extending from the west edge of Hillsboro to 26th Avenue in Cornelius and terminating at a Hillsboro School District school (Free Orchards Elementary).

When the NTL was constructed in 2003, a four-inch polyvinyl chloride (PVC) pipe was laid parallel to the water pipe. Most of the PVC pipe was laid outside of the cementitious poured fill (CPF) that was poured around the pipe, but there are occasions where the conduit was covered by the CPF. The original cost for the conduit installation was \$123,250 for 37,762 linear feet (LF), or about 7.2 miles. The \$123,250 initial cost was developed from a review of archived invoices and payments. Hillsboro is negotiating for 10,560 LF, so not the entire length of the conduit.

To use the conduit requires that inner duct (continuous tubing) be pulled through the conduit. Then, fiber optic cable can be pulled through the inner duct. JWC had planned to install inner duct and fiber to provide data and communication connectivity to the treatment plant. After

substantial completion in 2003, an inspection revealed that about 20% of the conduit is obstructed and unusable.

Due to the obstructions, and also because there was not a pressing need for connectivity to the treatment plant, the conduit has not been used in the 15 years since installation. The JWC currently receives network services through Comcast at a cost of about \$8,400 annually.

This proposed use agreement is for about 10,650 LF out of the 37,762 LF, or about 28% of the conduit. To install its fiber optic cabling, Hillsboro will need to bypass the obstructed portions of the conduit and will cover those costs entirely. Hillsboro would receive exclusive use of that 10,650 LF of conduit, except that JWC would reserve a right to install additional fiber in the conduit at its sole cost. If Hillsboro were to extend the fiber farther down the conduit, then JWC may approach the City about extending fiber to the treatment plant and providing network and telecom services to the JWC. However, Hillsboro's current forecast is that such an extension is probably five years or more in the future.

It is unlikely that it will ever be economically feasible for the JWC to extend its own fiber due to the high installation cost and the need to maintain and repair the fiber and related switch infrastructure. The JWC would also need to cover the additional costs related to bypassing obstructed sections of conduit. Therefore, staff recommends that the JWC continue with its current network and telecom agreement with Comcast for the next five years or longer until Hillsboro extends fiber farther west.

The usage agreement establishes standards and procedures for Hillsboro access to and maintenance of the conduit and of its fiber, to prevent damage to the pipeline and fill. The agreement requires Hillsboro to maintain an appropriate level of liability insurance, with an endorsement naming JWC, and requires Hillsboro to indemnify JWC from any damages to the pipe or appurtenances and from claims by third parties. Alternatively, the City may self-insure subject to approval by JWC. The agreement also provides that JWC is not liable to Hillsboro or to its customers for any damage to the conduit or for any damages resulting from disruption of service, if the NTL experiences a break or if repairs to the north transmission line are required.

At the JWC partners' request, staff have prepared a use cost calculation using the methodology discussed in the JWC Intergovernmental Agreement (IGA). The methodology provides that the price will be based on the "Depreciated replacement cost value of the asset amortized over the remaining book depreciation life of the asset at an interest rate equal to the Municipal Bond Index." A preliminary calculation for the conduit use agreement did not include grossing up to the replacement cost, so that calculation came in at about \$600 per year. The JWA IGA calculation methodology is explained step-by-step below, and the spreadsheet is included as an attachment to provide you with the calculations. Staff concur with the partner's recommendation to use the IGA methodology, as follows:

Cost:

Chart 1 shows that the original installation cost was \$123,250 for 37,672 LF of conduit which was part of the North Transmission Line installation. As disclosed in Exhibit D-3 to the JWC IGA,

ownership percentages for the Northside Water Transmission Facilities are 48.685% for the City of Hillsboro, 48.685% for TVWD, and 2.63% for the City of Beaverton. The “JWC Conduit” column shows the calculation for the entire length of conduit, while the “Hillsboro Use” column shows the calculation for about 28% of the conduit. Hillsboro is negotiating to lease 10,560 LF or about 28% of the conduit. Since about 20% of the conduit is unusable, the original cost has been discounted by 20%.

Chart 1

JWC Proposed Conduit Lease Calculation	JWC Conduit 37,672 LF	Hillsboro Use 10,560 LF	Percent
Original Cost Calculation:			
Original construction cost	123,250	34,549	28.0%
Discount for 20% obstruction	(24,650)	(6,910)	28.0%
Original cost discounted for 20% obstruction	98,600	27,639	28.0%

Chart 2 shows the calculation to estimate the replacement cost for the conduit asset. The Engineering News Record Construction Cost Index (ENR-CCI) for Seattle is used. The ENR-CCI at the time of installation is compared to the ENR-CCI as of the anticipated contract date to determine the inflation factor needed to bring the original cost up to a current replacement cost. The 1.41 ratio shows that the replacement cost will be about 41% higher than the original cost.

Chart 2

Replacement Cost Calculation:			
Engineering News Record Index - Month/Year Construction Complete	8,165	8,165	
Engineering News Record Index - Dec prior to Mo/Year of Lease	11,538	11,538	
Replacement cost factor	1.41	1.41	
Replacement cost	139,322	39,054	28.0%

Chart 3 calculates the accumulated depreciation to be applied to the estimated replacement cost. The conduit has a useful life of 50 years and was installed 15 years ago, so the remaining useful life is 35 years. The replacement cost is simply divided by 50 and that result is multiplied by 15 to calculate accumulated straight line depreciation.

Chart 3

Depreciated Cost Calculation:			
Year of construction	2004	2004	
Useful life	50	50	
Remaining useful life	35	35	
Depreciation per year	2,786	781	28.0%
Accumulated depreciation	41,797	11,716	28.0%
Depreciated cost	97,525	27,338	28.0%

Chart 4 shows the calculation of the annual use payment. The IGA calls out the municipal bond index as the discount rate. Applying the 2.48% discount rate to the asset value provides the annual use fee. This fee is increased by a 5.0% return on investment (ROI) to yield a \$1,236 annual payment each year for 35 years for Hillsboro's use of the section of conduit.

Chart 4

Annual Use Payment Calculation:			
Discount rate (Municipal Bond Index - Year of lease)	2.48%	2.48%	
Proposed use term in years	35	35	
Amortized use payment per year	4,201	1,178	28.0%
Add 5% return on investment (ROI)	210	59	28.0%
Annual use payment including 5% ROI	4,411	1,236	28.0%

Chart 5 calculates a discounted one-time use payment that would be made at the start of the use agreement in lieu of making 35 annual payments. Again, the municipal bond index is used as the discount factor to calculate a \$28,705 one-time payment.

Chart 5

One Time Use Payment Calculation:			
35 years of lease payments	154,383	43,276	28.0%
Proposed Upfront Use Fee (Present value of 35 years of lease payments)	102,402	28,705	28.0%

Chart 6 calculates the partner allocations based on ownership shares in the North Transmission Line, which included installation of the fiber conduit.

Chart 6

Allocation to Partners:			Ownership
City of Hillsboro	49,854	13,975	48.685%
TVWD	49,854	13,975	48.685%
City of Beaverton	2,693	755	2.630%
Total	102,402	28,705	

Budget:

If ultimately approved by the JWC Board, the budget would be \$28,705 in revenue. This revenue will be credited back to the JWC Partners in proportion to their cost shares for the original construction of the fiber conduit.

Attachments:

- Calculation of conduit lease spreadsheet
- Conduit Agreement
- Map of Proposed Conduit Lease Area

ATTACHMENT 1 - Calculation of conduit lease spreadsheet

JWC Proposed Conduit Lease Calculation	JWC Conduit 37,672 LF	Hillsboro Use 10,560 LF	Percent
Original Cost Calculation:			
Original construction cost	123,250	34,549	28.0%
Discount for 20% obstruction	(24,650)	(6,910)	28.0%
Original cost discounted for 20% obstruction	<u>98,600</u>	<u>27,639</u>	28.0%
Replacement Cost Calculation:			
Engineering News Record Index - Month/Year Construction Complete	8,165	8,165	
Engineering News Record Index - Dec prior to Mo/Year of Lease	11,538	11,538	
Replacement cost factor	1.41	1.41	
Replacement cost	<u>139,322</u>	<u>39,054</u>	28.0%
Depreciated Cost Calculation:			
Year of construction	2004	2004	
Useful life	50	50	
Remaining useful life	35	35	
Depreciation per year	2,786	781	28.0%
Accumulated depreciation	41,797	11,716	28.0%
Depreciated cost	<u>97,525</u>	<u>27,338</u>	28.0%
Annual Use Payment Calculation:			
Discount rate (Municipal Bond Index - Year of lease)	2.48%	2.48%	
Proposed use term in years	35	35	
Amortized use payment per year	4,201	1,178	28.0%
Add 5% return on investment (ROI)	210	59	28.0%
Annual use payment including 5% ROI	<u>4,411</u>	<u>1,236</u>	28.0%
One Time Use Payment Calculation:			
35 years of lease payments	154,383	43,276	28.0%
Proposed Upfront Use Fee (Present value of 35 years of lease payments)	<u>102,402</u>	<u>28,705</u>	28.0%
Allocation to Partners:			
			Ownership
City of Hillsboro	49,854	13,975	48.685%
TVWD	49,854	13,975	48.685%
City of Beaverton	2,693	755	2.630%
Total	<u>102,402</u>	<u>28,705</u>	

Conduit Use Agreement

Between

Joint Water Commission

And

City of Hillsboro

This Conduit Use Agreement (“Agreement”) is made by and between the Joint Water Commission, an Oregon intergovernmental entity (“JWC”) and the City of Hillsboro, an Oregon municipal corporation (“City”). The JWC and City are referred to herein individually as a “Party” and collectively as the “Parties”.

RECITALS

- A. The JWC owns and controls a water pipeline for the purpose of transmitting water from its water treatment plant located in the unincorporated area of Washington County south of the City of Forest Grove to an urban area on the City’s western boundary (“North Transmission Line”).
- B. JWC installed approximately 7.2 miles of four-inch diameter conduit as part of, and adjacent to, the North Transmission Line capable of housing fiber and other communications lines (“Conduit”).
- C. The City is establishing a municipal fiber utility for high-speed internet service and desires to use the Conduit as part of that service.
- D. JWC desires to allow the City to use the Conduit under certain terms and conditions.
- E. The Parties are entering into this Agreement to memorialize the terms and conditions under which the City can use the conduit for installing, operating and maintaining fiber for its municipal fiber utility system.

AGREEMENT

Based on the foregoing Recitals, which are incorporated here by this reference, and the mutual covenant of the Parties herein, the Parties agree as follows:

Section 1. EFFECTIVE DATE, TERM

1.1. Effective Date. The effective date of this Agreement shall be the latest date both Parties have executed the Agreement as indicated in the signature blocks at the end of this Agreement.

1.2. Term. The Term of this Agreement shall commence on the Effective Date and conclude on the earlier of:

- 1.2.1. The thirty-fifth (35th) anniversary of the Effective Date; or

1.2.2. The effective date of termination as set forth in Section 8 of this Agreement.

Section 2. CONDUIT USE

2.1. Initial Conduit Use. The JWC hereby grants the City the right to access and to use the Conduit as specified in this Section 2.

2.1.1. The City may install, operate, and maintain at the City's sole expense fiber for its municipal fiber utility in the portion of the Conduit identified in the attached Exhibit A.

2.1.2. The City shall install, operate, and maintain all fiber in accordance with the standards set forth in the JWC Conduit Access Standard Operating Guidelines ("CASOG"), as those standards may be modified from time to time. A copy of the CASOG initially applicable to the City's use of the Conduit is attached as Exhibit B. Prior to any modifications to the CASOG, JWC will provide notice to the City of the modifications and provide the City a reasonable opportunity to comment on the proposed modifications.

2.2. Future Conduit Use. The Parties acknowledge that the City may desire in the future to use portions of the Conduit beyond those portions identified in Section 2.1, or to use the portions of the Conduit identified in Section 2.1 for fiber or other communication lines in addition to the municipal fiber utility lines.

2.2.1. In such event, the Parties may amend this Agreement or its exhibits to accommodate the additional line(s), provided that JWC shall retain discretion to impose additional charges or different standards for the placement of the additional line(s) to maintain the integrity of the Conduit and the North Transmission Line, and to limit the capacity of such additions subject to Sections 2.3 and 6.1.

2.2.2. Future amendments to this Agreement or its exhibits to accommodate changes in Conduit Use shall require approval by the JWC and the City.

2.3. Fiber Capacity Reservation. The Parties acknowledge that the JWC may desire in the future to use a portion of the capacity of the fiber installed within the portion of conduit identified in Section 2.1, and the JWC may choose to install fiber beyond those portions identified in Section 2.1 in order to serve the Joint Water Commission Water Treatment Plant and/or other current or future JWC facilities. In such event, the Parties may amend this Agreement or its attachments to accommodate the additional line(s) and to include the terms and conditions for the City to provide capacity within the City installed fiber, innerduct or appurtenances and utility service for the operation and maintenance of that fiber capacity. The City and JWC will work collaboratively to identify the capacity needs and develop a business case analysis to present to the Joint Water Commission for approval and implementation.

Section 3. COMPENSATION.

3.1. Annual Payment.

3.1.1. The City shall pay to JWC a one-time payment of \$28,705 for the use of the Conduit described in Section 2.1.

3.1.2. The Payment shall be made no later than 30 days after the receipt by the City of JWC's invoice for \$28,705.

3.2. Additional Payment. In the event the City places additional line(s) as contemplated in Section 2.2, the payment for the additional lines will be negotiated and approved as an amendment to this agreement.

Section 4. GENERAL FINANCIAL AND INSURANCE PROVISIONS.

4.1. Insurance.

4.1.1. The City shall maintain public liability and property damage insurance that protects the City and JWC, as well as the JWC's officers, agents, and employees, from the claims referred to in Section 5. The insurance shall provide coverage at all times of not less than \$1,000,000 combined single limit for bodily injury liability and property damage liability per occurrence with an annual aggregate limit of not less than \$2,000,000. The limits of the insurance shall be subject to any changes as to maximum statutory limits of liability imposed on municipalities of the State of Oregon during the term of the Agreement. The insurance shall be without prejudice to coverage otherwise existing and shall name as additional insureds JWC and its officers, agents, and employees. Notwithstanding the naming of additional insureds, the insurance shall protect each insured in the same manner as though a separate policy had been issued to each, but nothing herein shall operate to increase the insurer's liability as set forth elsewhere in the policy beyond the amount or amounts for which the insurer would have been liable if only one person or interest had been named as insured. The coverage must apply as to claims between insureds on the policy. The insurance shall provide that the insurance shall not be canceled or materially altered without thirty (30) days prior written notice first being given to the JWC. If the insurance is canceled or materially altered within the term of this Agreement, the City shall provide a replacement policy with the same terms. The City agrees to maintain continuous uninterrupted coverage, in the terms and amounts required, for the duration of the Agreement.

4.1.2. Upon request, the City shall provide JWC a certificate of insurance certifying the coverage required above. The adequacy of the insurance shall be subject to the approval of JWC. Failure to maintain liability insurance shall be cause for JWC to declare an Event of Default under and subject to Section 7.

- 4.1.3. In the alternative to providing a certificate of insurance to JWC certifying liability insurance coverage as required in Section 4.1.1, the City may provide JWC with an Annual statement regarding its self-insurance. The City's self-insurance shall provide at least the same amount and scope of coverage for the City and JWC, its officers, agents and employees, as otherwise required under Section 4.1.1. The adequacy of such self-insurance shall be subject to JWC's review and approval. Upon the City's election to provide self-insurance coverage under this Section 4.1.3, any failure by the City to maintain adequate self-insurance shall be cause for JWC to declare an Event of Default under and subject to Section 7.

Section 5. COVENANT TO INDEMNIFY AND HOLD JWC HARMLESS.

- 5.1. Indemnification – General. To the extent allowed by law, including the Oregon Tort Claims Act, the City hereby agrees and covenants to indemnify, defend and hold JWC, its officers, agents and employees, harmless from any claim for injury, damage, loss, liability, cost or expense, including court and appeal costs and reasonable attorney fees or expenses, arising from any casualty or accident to person or property, including JWC's North Transmission Line, by reason of any act done, or any right asserted, under this Agreement or the City's use of the Conduit, by or for the City, its agents or employees, or by reason of any neglect or omission of the City to keep the Conduit and the City's line(s) in a safe condition, but not if arising out of or by reason of any negligence or willful misconduct by JWC, its officers, agents or employees. JWC shall provide the City with prompt notice of any such claim which the City shall defend with counsel of its own choosing and no settlement or compromise of any such claim will be done without the prior written approval of the City. The City and its agents, contractors and others shall consult and cooperate with JWC while conducting its defense of JWC.

To the extent allowed by law, including the Oregon Tort Claims Act, JWC hereby agrees and covenants to indemnify, defend and hold the City, its officers, agents and employees, harmless from any claim for injury, damage, loss, liability, cost or expense, including court and appeal costs and reasonable attorney fees or expenses, arising from any casualty or accident to person or property, by reason of any act done, or any right asserted, under this Agreement or JWC's use of the Conduit, by or for JWC, its agents or employees, but not if arising out of or by reason of any negligence or willful misconduct by the City, its officers, agents or employees. The City shall provide JWC with prompt notice of any such claim which JWC shall defend with counsel of its own choosing and no settlement or compromise of any such claim will be done without the prior written approval of JWC. JWC and its agents, contractors and others shall consult and cooperate with the City while conducting its defense of the City.

- 5.2. Indemnification – Hazardous Substances. The City agrees to forever indemnify JWC,

its officers, agents and employees, from and against any claims, costs and expenses of any kind, whether direct or indirect, or pursuant to any state or federal law statute, regulation or order, for the removal or remediation of any leaks, spills, contamination or residues of hazardous substances, associated with, arising from or due to the City's use of the Conduit.

Section 6. RESERVATION OF RIGHTS, THIRD-PARTY RIGHTS

- 6.1. Non-Exclusive Use of Conduit. The rights granted to the City under this Agreement to use the Conduit shall be non-exclusive and JWC reserves the right to use the Conduit, or to allow others to use the Conduit, provided that such use by JWC or a third party does not substantially interfere with the City's use of the Conduit as contemplated in this Agreement.
- 6.2. Damage or Disruption from JWC Facilities. The City acknowledges that damage to, or the need to maintain or repair, the North Transmission Line or the Conduit may result in damage to or disruption of the City's line(s) in the Conduit. In such event, JWC's liability to the City shall be limited to the cost for repair of the Conduit and the City's line(s) in the Conduit. JWC shall not be liable for any consequential damages of any kind, including liability to the City's customers for loss of service from the City's line(s).
- 6.3. Use of Conduit on Private Property.
 - 6.3.1. The City acknowledges that portions of the Conduit are located on private property for which JWC has obtained permission to locate the Conduit. JWC has made a good-faith determination that the scope of its permissive placement of the Conduit on private property does not preclude the ability to allow the City's use of the Conduit as contemplated in this Agreement.
 - 6.3.2. Notwithstanding Section 6.3.1, JWC does not warrant that any of its rights-of-way, easements, encroachments, other property rights, or permissive use or access to any property, entitles the City to: (i) access the property underlying the Conduit; or (ii) install, operate or maintain its line(s) on that property. Where it is determined that the City does not have authority to occupy the Conduit over certain property, the City shall, at its sole cost and risk, obtain such authority, and JWC will reasonably cooperate with that effort. If, after reasonable efforts, the City is unable to obtain such authority or to otherwise bypass the disputed property, the City may amend this Agreement pursuant to Section 2 or may terminate this Agreement pursuant to Section 8.1.4. If removal of previously installed fiber, innerduct or appurtenances is required, the City shall remove at its sole cost and expense as provided in Section 8.2.3.

Section 7. DEFAULT AND REMEDIES

- 7.1. Events of Default. If either Party violates a material provision of this Agreement, the

other Party may declare an Event of Default.

7.2. Remedies. If a Party declares an Event of Default, that Party may, in its sole discretion, and after providing the notice required by Section 7.3:

7.2.1. Terminate this Agreement by providing notice to the other Party and stating the effective date of the termination.

7.2.2. Suspend this Agreement until the Event of Default is cured.

7.3. Notice and Opportunity to Cure. Prior to exercising a remedy set forth in Section 7.2, the non-defaulting Party shall give the defaulting Party thirty (30) days prior written notice of its intent to exercise its rights under this Section 7, stating the reasons for such action. If the defaulting Party cures the stated reason within the thirty (30) day notice period, or if the defaulting Party initiates efforts satisfactory to the non-defaulting Party to remedy the stated reason and the efforts continue in good faith, the non-defaulting Party shall not exercise its remedy rights. However, in no event shall either Party exercise its rights under this Section 7 if a bona fide, good faith dispute exists between the Parties and the Parties have agreed to submit or submitted the matter to mediation or other mutually agreed dispute resolution process. After exhaustion of the dispute resolution process, then a Party may exercise the remedies of Section 7.

Section 8. TERMINATION.

8.1. Termination. Notwithstanding Section 1, this Agreement shall terminate:

8.1.1. Upon mutual written Agreement between the Parties;

8.1.2. By either Party after providing twelve (12) months' notice to the other Party;

8.1.3. As set forth in Section 7 following an Event of Default; or

8.1.4. No less than twelve (12) months after a final determination that the City has not obtained authority to occupy a portion of the Conduit on private property and the Parties have determined there is no feasible way to bypass the private property, as set forth in Section 6.3.2.

8.2. Effect of Termination.

8.2.1. Termination of this Agreement shall not relieve the City of any obligation to pay JWC any amount under Section 3 incurred prior to the effective date of termination.

8.2.2. Upon termination of this Agreement pursuant to Section 8.1, the Payment required under Section 3 shall be deemed to have been prorated on a monthly

basis and JWC shall return to the City an amount equivalent to the prorated portion of the Payment attributable to the period of time between the effective date of termination and the end of the original Term established in Section 1.2.1.

8.2.3. Upon termination, the City shall remove all fiber, innerduct and related appurtenances unless otherwise established by mutual written agreement of the Parties.

Section 9. MISCELLANEOUS PROVISIONS.

- 9.1. Compliance with Laws. The Parties shall comply with all applicable federal and state Laws.
- 9.2. Severability. If any section, provision or clause of this Agreement is held by a court of competent jurisdiction to be invalid or unenforceable, or is preempted by federal or state laws or regulations, the remainder of this Agreement shall not be affected, unless the JWC's or the City's governing body determines such section, provision, or clause was material to the Agreement.
- 9.3. Choice of Forum. Any litigation between JWC and the City arising under or regarding this Agreement shall occur, if in the state courts, in the Washington County Circuit Court, and if in the federal courts, in the United States District Court for the District of Oregon, Portland.
- 9.4. Choice of Law. This Agreement shall be governed by and construed in accordance with the laws of the State of Oregon.
- 9.5. Notice. Any notice provided for under this Agreement shall be sufficient if in writing and (1) delivered personally to the following addressee or deposited in the United States mail, postage prepaid, certified mail, return receipt requested, (2) sent by overnight or commercial air courier (such as Federal Express), or (3) sent by facsimile transmission addressed as follows, or to such other address as the receiving party hereafter shall specify in writing:

If to JWC:

Joint Water Commission
c/o Hillsboro Water Dept.
150 E. Main St.
Hillsboro, OR 97123-4028
Fax: 503-615-6595

If to the City:

City of Hillsboro
150 E. Main St.
Hillsboro, OR 97123-4028
Fax: 503-681-5450

(A) Any such notice, communication or delivery shall be deemed effective and delivered upon the earliest to occur of actual delivery, three (3) business days after depositing in the United States mail as aforesaid, one (1) business day after shipment by commercial air courier as aforesaid or the same day as facsimile transmission (or the first business day thereafter if faxed on a Saturday, Sunday or legal holiday).

9.6. Captions. Throughout this Agreement, captions to sections are intended solely to facilitate reading and to reference the sections and provisions of this Agreement. The captions shall not affect the meaning and interpretation of this Agreement.

9.7 Successors and Assigns/Other Third Party Users. City may not assign, transfer or sublease its interest in this Agreement without the written consent of the JWC, which consent shall not be unreasonably withheld.

SIGNATURE BLOCKS

Joint Water Commission:

City of Hillsboro:

Signed

Signed

Printed Name

Printed Name

Date

Date

EXHIBIT A – Conduit Map

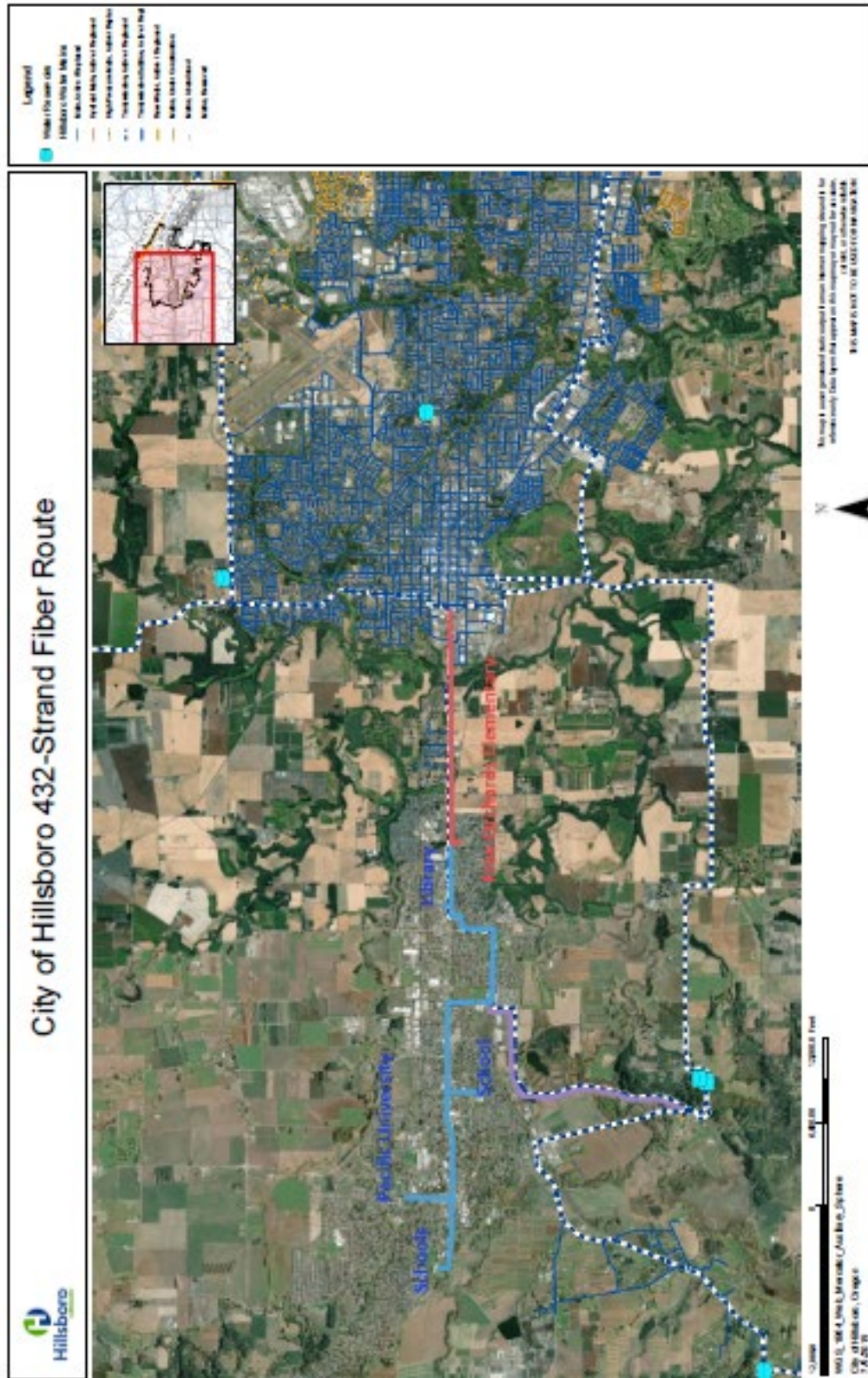


EXHIBIT B - JWC Conduit Access Standard Operating Guidelines

Scope

Due to the critical nature of the JWC transmission system as an essential lifeline asset, the JWC requires the following procedures apply to all construction, maintenance or ground disturbing activities performed by the City, including work by the City's contractors, consultants and staff, related to the JWC Conduits as identified in the Conduit Use Agreement. The City will be responsible for all coordination with other affected agencies, property owners and jurisdictions including but not limited to Washington County, ODOT, Clean Water Services, and private property owners. The City will be responsible for securing all required permits and approvals including but not limited to approvals related to traffic control, erosion control, safety, and others as applicable.

Notification

The JWC shall be notified no less than ten (10) business days before the start of any construction, maintenance, or ground disturbing activities within the JWC utility area, as established in the Conduit Use Agreement. Such notification shall include the intended location, scope and schedule of the planned activities, as well as name, phone number and email of the primary contact person of the City's project representative. Similarly, the City shall be notified by the JWC, through the Hillsboro water department, if the JWC has planned activities that will abut or involve City assets. Notification of unplanned activities, including but not limited to emergency repairs, will be made in a timely manner, with all work closely coordinated with the other party. City shall work with the JWC to develop notification workflows.

Permitting

RIGHT OF ENTRY PERMIT - The City shall obtain a Right of Entry permit from the JWC prior to any work on or near JWC owned facilities. Any planned work shall not proceed until the JWC has provided approval of the Right of Entry Permit. This will allow the JWC to coordinate inspection for work being performed in close proximity to critical infrastructure, if appropriate. The JWC shall establish appropriate requirements for permitting and inspection of all work performed in proximity to JWC assets.

Locates

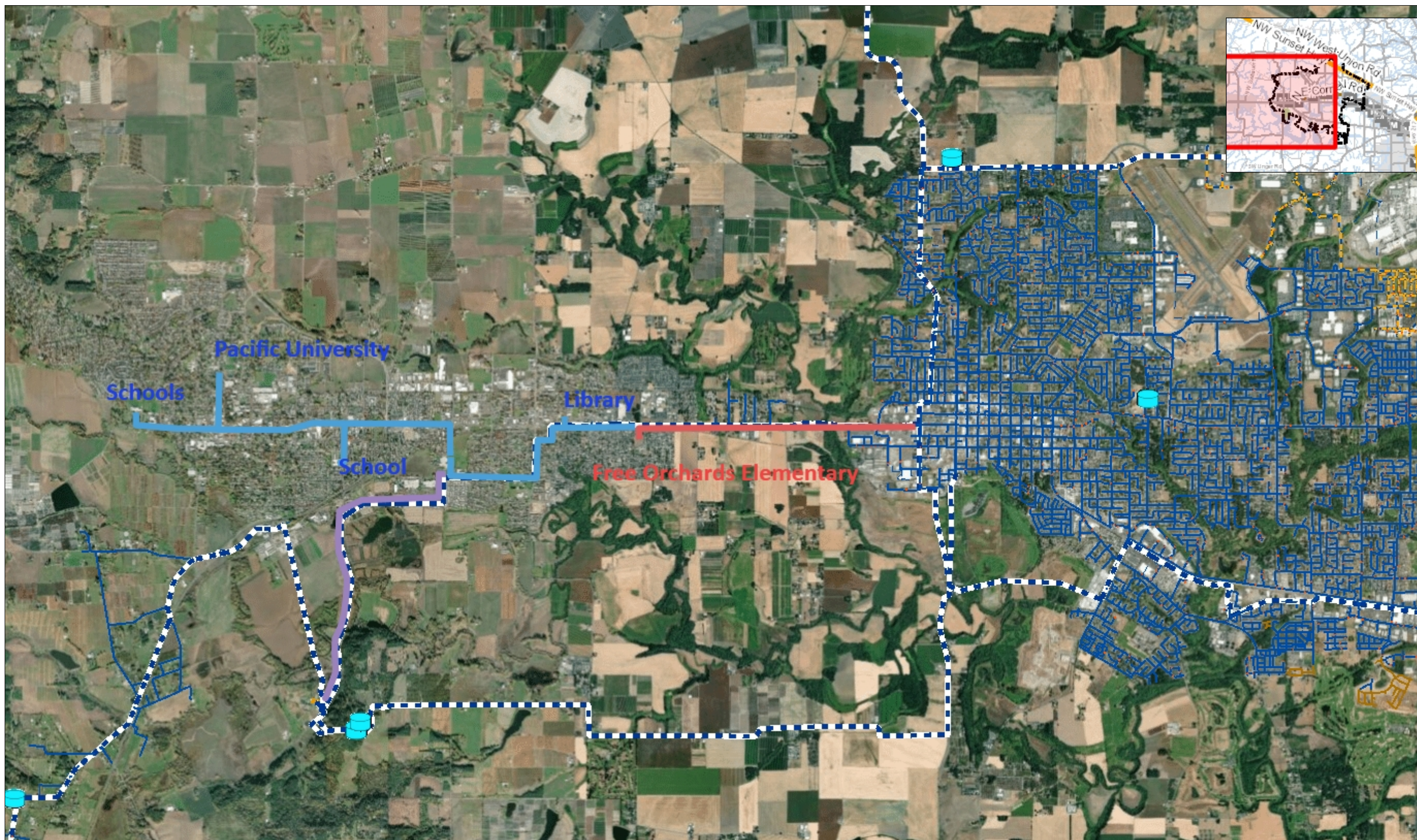
The City shall become a member of the One-Call Registry System. The JWC, through the Water Department Operations Division, provides locate services for JWC assets. The City shall provide all locating services for City fiber assets, including the JWC fiber conduits, including contracting with a third party or developing an agreement with the Water Department to provide locate services.



City of Hillsboro 432-Strand Fiber Route

Legend

- Water Reservoirs
- Hillsboro Water Mains**
- Main, Active / Replaced
- Hydrant Main, Active / Replaced
- High Pressure Main, Active/ Replac
- Transmission, Active / Replaced
- Transmission Subline, Active / Repl
- Raw Water, Active / Replaced
- Mains, Under Construction
- Mains, Abandoned
- Mains, Removed



12,000.0 0 6,000.00 12,000.0 Feet

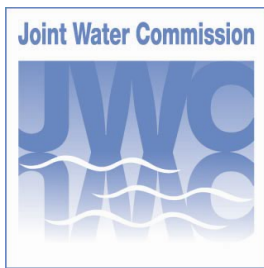
WGS_1984_Web_Mercator_Auxiliary_Sphere

City of Hillsboro, Oregon
7/9/2019



This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

THIS MAP IS NOT TO BE USED FOR NAVIGATION



STAFF REPORT

To: Joint Water Commission
From: Kevin Meeuwsen, Project Engineer
Date: October 11, 2019
RE: Agenda Item 4A - JWC WTP Expansion DEF Claim and Settlement Agreement for Slayden and CH2M/Jacobs.

Settlement Agreement:

During a session of the Joint Water Commission (JWC) Executive Committee September 5, 2019, the JWC formally approved the settlement agreement and mutual release of claims for the JWC water treatment plant concrete defect claim related to delayed ettringite formation (DEF) on new filters #15 and #16. The approved settlement agreement and mutual release of claims is the product of a mediation between JWC, Slayden, and Jacobs that took place on August 2, 2019, at the Portland offices of Cable-Huston. Significant coordination between legal counsel, JWC Management, and Jacobs' senior project management team was necessary to convert the conditional deal in principle developed at the August mediation to a fully executed agreement. The long-form settlement terms were finalized September 17, 2019, and are attached in Appendix A.

Terms of the settlement agreement and mutual release of claims require a payment of \$200,000 from JWC to Slayden and a no-cost extension of substantial completion deadline to October 30, 2019. The JWC agrees to pay Jacobs \$25,000 for settlement of \$80,131 in previously invoiced DEF-related engineering services for the analysis of DEF risks and design of DEF repairs. Additionally, the JWC and Jacobs agree that construction oversight charges for extended project duration in excess of the original project schedule shall not exceed \$55,000 – or approximately two months at current utilization rates. Lastly, Jacobs shall pay Slayden \$150,000, which results in Slayden internalizing \$555,494 of the original \$905,494 claim amount.

Basis for Settlement:

During regular quarterly meetings and executive sessions, the JWC has expressed a desire to minimize the costs associated with overcoming DEF risks at new filters #15 and #16. The JWC rejected all responsibility for DEF risk mitigation by Slayden (slab removal and replacement) and conformance with project specifications. Consistent with the belief the JWC is not responsible for actual and ancillary costs associated with slab removal, replacement, or delays, the JWC rejected Slayden's request to use project contingency for the costs associated with removal and replacement of DEF-impacted slabs (\$905,494). Additionally, the JWC sought \$135,131 from Jacobs in DEF-related design and engineering services, and extended construction duration cost credits *in addition* to the roughly \$200,000 the JWC proposed CH2M/Jacobs contribute to the \$905,494 removal and replacement cost.

Despite the JWC holding a firm position rejecting any and all responsibility for DEF defects, costs to litigate through trial the rejected Slayden claim in Washington County court were estimated to be in the range of \$150,000 to \$250,000. This estimate did not include a potential, partial judgement awarded to Slayden on its assertion that the Contract's Package 2 GMP Assumptions provided a clear basis for JWC to pay for "corrective action" on non-conforming concrete from the Contingency. Additionally, the costs to litigate would likely be expanded in order to seek compensation from Jacobs due to contractual separation of JWC-Slayden and JWC-Jacobs.

The JWC, its general manager, and legal counsel reasoned a \$200,000 offer to Slayden was appropriate as it recognized expenses that would otherwise be paid in the course of a litigation spurred by a failed mediation, and instead offered the benefit of attempting to maintain a collegial working relationship with Slayden by contributing to their costs for DEF-concrete removal and replacement. Maintaining a good relationship with Slayden is important and continues to offer value to the JWC as we pursue project completion this fall.

Settlement with Jacobs ultimately incorporated a \$25,000 concession to Jacobs on \$80,131 in total DEF-related engineering services. The JWC's primary complaint with Jacobs was focused on their failure to timely analyze temperature data from filter slabs #4 and #7 (6/21/2018) and prevent a subsequent failure the following week on filter slabs #3 and #6 (6/28/2018). Additionally, a timely review and evaluation of submitted temperatures (two weeks or less) would have enabled the JWC to extract a sample core from the structure and definitively test for the presence of DEF – potentially avoiding all need for removal and replacement. Once the concrete had cured for two weeks, the ability to specifically test for DEF was lost. The only remaining options for evaluating DEF risks involved a significant margin of error and relied on the guarantee that materials used in the casting of representative cement mortar samples were the same as those in the concrete used on-site. Significant uncertainty was present during the sourcing of representative Portland cement and slag.

Although not responsible for the DEF defects in filter slab #4 and #7, the JWC maintains that Jacobs' failure with respect to concrete temperature submittal review effectively doubled the scope, duration, and expense of DEF concrete removal and replacement. Therefore, the JWC was willing to acknowledge the \$80,131 in DEF-related engineering services charged to JWC could not be fully rejected and would have been necessary to some degree even if their submittal review of temperature data had been sufficient to prevent the defective installation of filter slabs #3 and #6 -- and assuming a core sample was positive for DEF on filter slabs #4 and #7. In the same manner, the JWC recognizes that extended duration construction oversight costs associated with DEF-removal and replacement cannot be completely assigned to Jacobs' failure to prevent a subsequent, defective pour. Therefore, the JWC and Jacobs agreed that extended duration construction oversight expenses beyond the original project timeline shall not exceed \$55,000 and represents a compromise on the costs associated with construction oversight and inspections.

Background:

The JWC WTP expansion project was impacted by the failures of Slayden and CH2M/Jacobs to install, maintain, and monitor thickened slab pours with respect to maximum internal temperatures for filter #15 and #16. Thickened slab pours achieved temperatures of 180° F, 174° F, and 169°, well in excess of the 158° F limit outlined in the project specifications. Exceeding 158° F specifically risks the occurrence

of delayed ettringite formation (DEF). DEF in the presence of water (water-bearing structures and/or groundwater exposure) generates internal expansion forces and cracking. No remedy or adequate repair option for DEF-affected concrete structures is known to exist. The JWC hired MJ2 consultants to perform a technical analysis of DEF risk factors associated with filter #15 and #16 concrete. MJ2's analysis of the risk factors were conducted in full view and cooperation of JWC, Slayden, and CH2M/Jacobs and ultimately concluded DEF risk factors existed for pours measured or modeled in excess of 174° F – albeit with significant margin for error.

Following the commission meeting on 10/12/2018, and executive committee meeting on 11/9/2018, the JWC concluded it was necessary to remove all concrete known to have exceeded 158° F, or to have been thermally modeled to exceed 158° F. The JWC cited a refusal to accept anything short of total remediation of DEF-risks (removal/replacement) and preservation of treatment plant capacity that would otherwise be compromised by a potential, catastrophic failure of filter #15 and #16. The decision to remove and replace concrete in the thickened slabs of filter #15 and #16 resulted in a claim from Slayden totaling \$905,494 dollars and requested use of project contingency funds. The JWC rejected Slayden's request to use project contingency for the expenses associated with removal, replacement, and extended duration general conditions.

Separate from the Slayden claim, CH2M/Jacobs was engaged in technical and engineering analysis of DEF risk factors related to slab pours at filter #15 and #16 – as well as necessary design and construction services related to slab removal and reconstruction. CH2M/Jacobs invoices for services provided between June 30th, 2018 and March 28, 2019 included \$80,131 in engineering services and construction monitoring fees identified as being DEF-related. The JWC withheld payment of \$80,131 to CH2M/Jacobs pending the outcome of the DEF claims process as communicated in a May 15, 2019 letter to Jacobs

In addition to \$80,131 in engineering and construction monitoring services provided by CH2M/Jacobs for DEF tasks, Jacobs has identified \$55,000 in extended project duration expenses as a result of the delays incurred by the filter slab removal and replacement. The estimate of \$55,000 was provided in the context of a meeting in May 2019, between Brad Phelps and Kevin Meeuwsen (JWC) where CH2M/Jacobs projected all remaining engineering and construction monitoring fees relative to their contract total. The extended construction duration costs of \$55,000 were estimated to be two additional months of construction oversight by CH2M/Jacobs' construction inspector beyond the originally planned date of final completion. A comparison of final completion dates from Slayden construction schedules from June 2018 and September 2019 has resulted in a delay of project final completion from 7/30/2019 to mid-November, approximately 3.5 months. Therefore, the initial costs identified by CH2M/Jacobs for extended construction duration (\$55,000) would appear to lag the total expected project delay by approximately 1.5 months. The Slayden proposal to delay substantial completion to October 30, 2019 was ultimately accepted by all parties without a corresponding adjustment to the "not to exceed" value assumed by the JWC. The basis of the settlement with Jacobs not to exceed \$55,000 in extended duration construction monitoring engages Jacobs in an effective cost share of the delay costs related to construction monitoring, a cost that would have been avoided if the DEF issue had not occurred or at the very least, reduced by approximately one-half.

Attachment: Executed Settlement Agreement

SETTLEMENT AGREEMENT AND MUTUAL RELEASE OF CLAIMS

SEPT. 17,
This SETTLEMENT AGREEMENT AND MUTUAL RELEASE OF CLAIMS (the “Agreement”) is entered into as of August ¹⁷, 2019 (the “Effective Date”) by and between the Joint Water Commission (“JWC”), Slayden Constructors, Inc (“SCI”), and CH2M HILL Engineers, Inc. (“CH2M”) (referred to collectively herein as the “Settling Parties”).

RECITALS

WHEREAS, this dispute arises out of defective concrete laid during the JWC Water Treatment Plant Expansion to 85MGD (the “Project”);

WHEREAS, the Project was a CM/GC with Slayden Constructors, Inc. as the General Contractor and CH2M HILL Engineers, Inc. as the Engineer;

WHEREAS, in order to accommodate the increased capacity contemplated by the Project, two new concrete, dual media filtration basins were designed and constructed;

WHEREAS, the concrete poured for those filtration basins —specifically slabs 3, 4, 6, and 7—exceeded the contract specification of 158°F during curing and triggered meaningful risk that the four slabs in question would have a severe chemical reaction called delayed ettringite formation (“DEF”);

WHEREAS, the concrete slabs at issue, together with certain walls poured on top of those slabs, were removed and replaced;

WHEREAS, SCI requested a change order and submitted a subsequent claim (“Claim”) for the DEF-related replacement work of removal and replacement of concrete for slabs numbered 3, 4, 6, and 7 and walls that were poured above those slabs (“DEF-Related Repairs”); the Claim totaled \$905,494;

WHEREAS, CH2M issued invoices items totaling \$80,131 associated with the DEF-Related Repairs;

WHEREAS, JWC authorized the DEF-Related Repairs but denied payment authorization associated with the work, objecting that the costs were the responsibility of both SCI and CH2M ; and

WHEREAS, after engaging in mediation on August 2, 2019, the Settling Parties reached an agreement in principle to settle the dispute between them, as confirmed by CH2M via email on August 9, 2019. A *Binding Settlement Term Sheet* was approved and executed by the Settling Parties, subject to the Joint Water Commission Board final approval, in which the Settling Parties agreed to more formally memorialize the terms of the settlement in principle in this Agreement.

AGREEMENT

NOW, THEREFORE, in consideration of the terms, covenants, promises, conditions, and releases set forth in this Agreement, and being fully advised, the Settling Parties mutually agree:

1. Recitals Incorporated. The above Recitals are incorporated by reference into this Agreement.

2. Settlement Payments. In consideration of the releases and other covenants and promises contained herein: (1) the total sum of Two Hundred Thousand Dollars (\$200,000.00) (the "JWC Settlement Payment") shall be paid to SCI by JWC in total satisfaction of the Claim; (2) the total sum of One Hundred and Fifty Thousand Dollars (\$150,000.00) (the "CH2M Settlement Payment") shall be paid to SCI by CH2Ms in total satisfaction of the Claim; and (3) the total of Twenty Five Thousand (\$25,000.00) ("Invoice Settlement Payment") shall be paid to CH2M by JWC in total satisfaction of the \$80,131.00 DEF-related invoice items from CH2M (together, the JWC Settlement Payment, the CH2M Settlement Payment, and the Invoice Settlement Payment are jointly referred to as the "Settlement Payments"). The Settlement Payments shall be delivered via wire transfer or check drawn on funds immediately available. The Settlement Payments shall be delivered to and received by the receiving parties no later than 30 days following the complete execution of this Agreement. The payments detailed herein are the sole and individual responsibility of the party named. No party will be responsible for payment of any sum owed by another party.

3. CH2M Construction Oversight Fees. JWC also agrees to pay an amount not to exceed \$55,000 total for CH2M's construction oversight fees ("CH2M Construction Oversight Fees") for the duration of the Project exceeding the original timeline for project final completion (July 30, 2019), which shall be paid in the ordinary course after receipt of invoice(s). This cap does not apply to additional services previously presented by CH2M to JWC in May of 2019 for project management, disinfection contact time analysis, engineering office services, startup assistance, raw water VFD design, project closeout, warranty period services, as-builts, integration services per contract amendment #1, and additional integration services.

4. Extension of Substantial Completion. JWC agrees to extend the substantial completion date to October 30, 2019 due to issues related to DEF. With the exception of the "additional services" referenced in paragraph 3 above, SCI and CH2M agree that this extension will not result in any additional claims including but not limited to extended overhead, construction costs, or delays for the extension of the substantial completion date to October 30, 2019. This provision does not preclude CH2M from seeking additional fees due to newly-arising changes in condition resulting in future further project delays that arise separate and apart from the DEF issues and Settled Claims released in this Agreement.

5. Settled Claims. As used in this Agreement, the term "Settled Claims" shall mean and include any and all claims, causes of action, suits, damages, liabilities, costs, expenses, losses, demands, or allegations, of whatever kind and nature, that SCI, CH2M, and JWC could have asserted against one another, regardless of whether the Settled Claims are presently known, unknown, discovered, undiscovered, or could have been known or discovered, by the Settling Parties at any time up to and including the Effective Date of this Agreement, arising out of or in

any way related to the DEF-Related Repairs, including but not limited to removal and replacement of concrete for filter slabs numbered 3, 4, 6, and 7 as identified in SCI's claim, including any claims of delay or for extended overhead arising from those events (except as otherwise agreed in paragraph 3 above).

6. SCI's Release of JWC and CH2M. For valuable consideration, including, but not limited to the JWC Settlement Payment and CH2M Settlement Payment and the terms and conditions of this Agreement, the sufficiency of which is hereby acknowledged, and effective upon SCI's receipt of the JWC Settlement Payment and CH2M Settlement Payment, SCI and its past, present, and future equity owners, shareholders, parents, subsidiaries, trustees, directors, officers, members, employees, agents, attorneys, contractors, subcontractors, insurers, reinsurers, sureties, representatives, affiliates, predecessors, successors, assigns, partners, and any other person or entity acting on its behalf hereby FOREVER AND COMPLETELY RELEASE AND DISCHARGE JWC and CH2M from and against any and all Settled Claims, which are fully and finally released in their entirety. This release shall include and inure to the benefit of JWC and CH2M and their respective past, present, and future heirs, administrators, equity owners, shareholders, parents, subsidiaries, trustees, directors, officers, members, employees, agents, attorneys, contractors, subcontractors, insurers, reinsurers, sureties, representatives, affiliates, predecessors, successors, assigns, partners, and any other person or entity acting on their behalf. In the case that an SCI subcontractor nevertheless makes a claim related to the Settled Claims against JWC or CH2M, SCI shall indemnify JWC and/or CH2M and defend against those claims.

7. CH2M's Release of JWC and SCI. For valuable consideration, including, but not limited to the Invoice Settlement Payment and CH2M Construction Oversight Fees and the terms and conditions of this Agreement, the sufficiency of which is hereby acknowledged, and effective upon CH2M's receipt of the Invoice Settlement Payment and CH2M Construction Oversight Fees, CH2M and its past, present, and future equity owners, shareholders, parents, subsidiaries, trustees, directors, officers, members, employees, agents, attorneys, contractors, subcontractors, insurers, reinsurers, sureties, representatives, affiliates, predecessors, successors, assigns, partners, and any other person or entity acting on its behalf hereby FOREVER AND COMPLETELY RELEASE AND DISCHARGE JWC and SCI from and against any and all Settled Claims, which are fully and finally released in their entirety. This release shall include and inure to the benefit of JWC and SCI and their respective past, present, and future heirs, administrators, equity owners, shareholders, parents, subsidiaries, trustees, directors, officers, members, employees, agents, attorneys, contractors, subcontractors, insurers, reinsurers, sureties, representatives, affiliates, predecessors, successors, assigns, partners, and any other person or entity acting on their behalf. In the case that a CH2M subcontractor nevertheless makes a claim related to the Settled Claims against JWC or SCI, CH2M shall indemnify JWC and/or SCI and defend against those claims.

8. JWC's Release of SCI and CH2M. For valuable consideration, including, but not limited to the CH2M Settlement Payment and the terms and conditions of this Agreement, the sufficiency of which is hereby acknowledged, and effective upon receipt of the Settlement Payments, JWC and its past, present, and future equity owners, shareholders, parents, subsidiaries, trustees, directors, officers, members, employees, agents, attorneys, contractors, subcontractors, insurers, reinsurers, representatives, affiliates, predecessors, successors, assigns



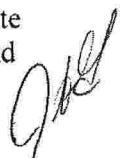
partners, and any other person or entity acting on its behalf hereby FOREVER AND COMPLETELY RELEASE AND DISCHARGE SCI and CH2M from and against any and all Settled Claims, which are fully and finally released in their entirety. This release shall include and inure to the benefit of SCI and CH2M and their respective past, present, and future heirs, administrators, equity owners, shareholders, parents, subsidiaries, trustees, directors, officers, members, employees, agents, attorneys, contractors, subcontractors, insurers, reinsurers, sureties, representatives, affiliates, predecessors, successors, assigns, partners, and any other person or entity acting on their behalf. In the case that a JWC subcontractor nevertheless makes a claim related to the Settled Claims against CH2M or SCI, JWC shall indemnify CH2M and/or SCI and defend against those claims.

9. Claims Not Released. Notwithstanding any other provision to the contrary, the Settling Parties expressly acknowledge and agree that this Agreement, and the releases contained herein, do not in any way affect, inhibit, or limit: (i) any Settling Party's right or ability to enforce this Agreement or assert claims for breach of this Agreement; (ii) any Settling Party's right or ability to assert any claim or defense in any other proceeding unrelated to the Settled Claims; or (iii) any Settling Party's right or ability to assert any claim or defense based on acts, events, or omissions occurring after the Effective Date of this Agreement.

10. Effect of this Agreement. This Agreement shall bind and inure solely to the benefit of the respective Settling Parties and any persons or entities released herein. The Settling Parties intend that there be no third-party beneficiaries to this Agreement.

11. Dispute Resolution and Attorney Fees. In the event that the Settling Parties have any dispute about the meaning of this Agreement, the language of any additional documents needed to effectuate this Agreement, the performance of any party under this Agreement or related documents, or about any other issue relating to or arising out of this Agreement or any ensuing documents (including disputes in the nature of declaratory judgment), the dispute shall be settled by arbitration of those issues before Chris Kent as arbitrator. Unless otherwise agreed, the arbitration shall be conducted in Portland, Oregon, under ORS § 36.600 *et seq.* and in accordance with the then-current arbitration rules of the Arbitration Services of Portland, Inc. (the "Rules"). Discovery shall be the type provided by the Oregon Rules of Civil Procedure both in advance of, and during recesses of, any arbitration hearing. The arbitrator shall have no jurisdiction to consider evidence with respect to or render an award or judgment for punitive damages or any other amount awarded for the purpose of imposing a penalty. All facts and other information relating to any arbitration arising under this Agreement shall be kept confidential to the fullest extent permitted by law. The arbitration shall be final and binding upon the Settling Parties, and judgment may be entered upon the final decision in accordance with applicable law in any court having jurisdiction in Washington County, Oregon. If any issue hereunder is submitted to arbitration, the arbitrator shall be directed to award reasonable attorney fees and costs to the party who, in the arbitrator's view, substantially prevailed in the arbitration.

12. Additional Documentation; Time of the Essence. Each of the Settling Parties agrees that it will execute any other documents that become reasonably necessary to effectuate this Agreement, and further agrees that time is of the essence in executing this Agreement and any other documents that become reasonably necessary to effectuate the same.



13. No Admission. The Settling Parties agree that executing this Agreement shall in no way constitute a concession or admission of any fact, fault, liability, defense, alleged damages, or responsibility under any theory whatsoever on the part of any of the persons or entities being released by this Agreement, except in any action to enforce this Agreement. The Settling Parties expressly deny any alleged defenses, liability, or culpability in connection with the Settled Claims. The payment of the Settlement Payment referenced above is made solely to compromise the Settled Claims.

14. Integration. The terms and conditions contained in this Agreement comprise the Settling Parties' entire understanding concerning the subject matter of this Agreement. Such terms and conditions supersede all prior and/or contemporaneous oral and/or written representations, discussions, negotiations, statements, promises, understandings, and agreements concerning the subject matter of this Agreement, including the *Binding Settlement Term Sheet*.

15. Governing Law. This Agreement is written under and shall be controlled by the laws of the State of Oregon, without regard to choice of law principles.

16. Severability. If any provision of this Agreement is determined to be void, invalid, illegal, or otherwise unenforceable under the laws of the State of Oregon, such provision shall be stricken and all remaining provisions shall be unaffected and shall remain valid and fully enforceable.

17. Construction of Agreement. This Agreement shall be construed as a whole according to its fair meaning, and not strictly for or against any of the Settling Parties. The term "or" shall be deemed to include the term "and." In interpreting defined terms, the singular or plural form shall be deemed to include the other. Paragraph headings in this Agreement are intended solely for convenience of reference, are not part of this Agreement, and shall not be used in the interpretation of any provision contained herein. Because the Settling Parties have mutually participated in the preparation of this Agreement, the rule of construction that contracts shall be construed against the drafter shall not apply to the interpretation of this Agreement.

18. Warranty of Non-Assignment. The Settling Parties acknowledge that they have not assigned any of the Settled Claims to any third parties and that the Settling Parties are authorized as set forth in Paragraph 18 to agree to the releases set forth in Paragraphs 6, 7, and 8.

19. Signature Authority. SCI, the JWC, and CH2M hereby represent and warrant that they have full authority to execute this Agreement on their own behalf and on behalf of the entity or entities that they represent below, and that they sign as their free and voluntary act and deed.

20. Counterparts. This Agreement may be executed in multiple counterparts. Upon execution, this Agreement shall become enforceable and binding upon each of the Settling Parties even if it is signed in counterparts. The Settling Parties acknowledge that this Agreement may be executed via facsimile and e-mail (scanned signature), and that an Agreement bearing a facsimile or scanned signature shall be enforceable as if it was bearing an original signature.

21. Representation. The Settling Parties agree that they have read and understood and voluntarily accept the terms of this Agreement. The Settling Parties hereby warrant and



represent that at all times they have been represented by counsel or have had the opportunity to discuss this Agreement with an attorney prior to affixing their respective signatures hereto. By executing this Agreement, the Settling Parties warrant and represent that they have had an adequate amount of time to properly analyze and consider all of the issues related to the terms and conditions contained in this Agreement, and that they are entering into this Agreement of their own free will and choice and not because of any statements, representations, or warranties made by the opposing party or that party's counsel.

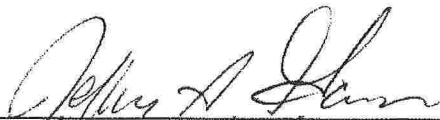
22. Modification or Amendment. This Agreement may not be modified or amended except in writing signed by all of the Settling Parties.

WHEREFORE, the Settling Parties agree to all the terms and conditions of this Agreement by signing in their respective locations below.

THE JOINT WATER COMMISSION,
jointly owned by the Cities of Hillsboro,
Forest Grove, Beaverton, and the Tualatin
Valley Water District

By: _____
Name: _____
Its: _____

SLAYDEN CONSTRUCTORS, INC., a
Oregon Corporation

By: 
Name: JEFFREY S. GARVER
Its: PRESIDENT

CH2M HILL Engineers, Inc., a Delaware
Corporation


By: _____
Name: _____
Its: _____

represent that at all times they have been represented by counsel or have had the opportunity to discuss this Agreement with an attorney prior to affixing their respective signatures hereto. By executing this Agreement, the Settling Parties warrant and represent that they have had an adequate amount of time to properly analyze and consider all of the issues related to the terms and conditions contained in this Agreement, and that they are entering into this Agreement of their own free will and choice and not because of any statements, representations, or warranties made by the opposing party or that party's counsel.

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THE JOINT WATER COMMISSION,
jointly owned by the Cities of Hillsboro,
Forest Grove, Beaverton, and the Tualatin
Valley Water District

By: 
Name: Nike Iverson
Its: General Manager

SLAYDEN CONSTRUCTORS, INC., a
Oregon Corporation

By: _____
Name: _____
Its: _____

CH2M HILL Engineers, Inc., a Delaware
Corporation

By: 
Name: David Simmons
Its: Vice President

JWC QUARTERLY REPORT

AS OF 6/30/2019

JWC RESOURCES	SUPPLEMENTAL BUDGET 18-19	AS OF 6.30.2019	AVAIL BUDGET 18/19	% USED
BEGINNING WORKING CAPITAL	-	-	-	
WATER SALES				
HILLSBORO - WATER PURCH	4,532,631	3,685,910	846,721	81%
FOREST GROVE - WATER PURCH	372,146	266,719	105,427	72%
BEAVERTON - WATER PURCH	1,867,067	1,532,314	334,753	82%
TVWD - WATER PURCH	1,673,029	1,216,156	456,873	73%
NORTH PLAINS - WATER PURCH	115,000	193,184	(78,184)	168%
NORTH PLAINS SDC	150,000	388,267	(238,267)	259%
TOTAL WATER SALES:	8,709,873	7,282,549	1,427,324	84%
CONTRIBUTIONS IN AID				
HILLSBORO - CAPITAL OUTLAY	11,159,325	7,979,508	3,179,817	72%
FOREST GROVE - CAPITAL OUTLAY	1,238,957	636,365	602,592	51%
BEAVERTON - CAPITAL OUTLAY	2,323,625	1,192,546	1,131,079	51%
TVWD - CAPITAL OUTLAY	3,293,593	2,245,864	1,047,729	68%
CWS - CAPITAL OUTLAY	-	803	(803)	0%
TOTAL CONTRIBUTIONS IN AID:	18,015,500	12,055,087	5,960,413	67%
OTHER				
GRANTS AND DONATIONS	-	13,000	(13,000)	0%
WESTERN LUTHERAN SCHOOL	-	1,366	(1,366)	0%
INTEREST EARNED	-	34,707	(34,707)	0%
MISCELLANEOUS INCOME	-	16,676	(16,676)	0%
LEASE REVENUE	206,560	206,560	-	100%
TOTAL OTHER:	206,560	272,309	(65,749)	132%
CONTINGENCY				
HILLSBORO-CONTINGENCY	225,000	-	225,000	0%
FOREST GROVE - CONTINGENCY	66,650	-	66,650	0%
BEAVERTON - CONTINGENCY	125,000	-	125,000	0%
TVWD - CONTINGENCY	83,350	-	83,350	0%
TOTAL CONTINGENCY:	500,000	-	500,000	0%
TOTAL RESOURCES:	27,431,933	19,609,945	7,821,988	71%

JWC EXPENDITURES	SUPPLEMENTAL BUDGET 18-19	AS OF 6.30.2019	AVAIL BUDGET 18/19	% USED
PERSONNEL SERVICES	2,961,800	2,767,139	194,661	93%
MATERIALS AND SERVICES	4,668,900	3,627,036	1,041,864	78%
CAPITAL OUTLAY	18,343,500	12,346,210	5,997,290	67%
SPECIAL PAYMENTS	957,733	869,559	88,174	91%
CONTINGENCY	500,000	-	500,000	0%
TOTAL EXPENDITURES:	27,431,933	19,609,945	7,821,988	71%

TOTAL RESOURCES AND REQUIREMENTS				
	SUPPLEMENTAL BUDGET 18-19	AS OF 6.30.2019	AVAIL BUDGET 18/19	% USED
TOTAL RESOURCES	27,431,933	19,609,945	7,821,988	71%
TOTAL REQUIREMENTS	27,431,933	19,609,945	7,821,988	71%
NET INCOME (LOSS)	-	-	-	

Note:

PLEASE NOTE THE AMOUNTS REPORTED ABOVE HAVE NOT YET BEEN AUDITED.

PROJECT	PROJECT DESCRIPTION	SUPPLEMENTAL BUDGET 18-19	AS OF 6.30.2019
11011	PRELIMINARY DESIGN FACILITY PLAN TOTAL COSTS	7,429,000	
	Personnel Services Expenditures		9,801
	Contractor Expenditures		5,054,412
10571	WATER TREATMENT PLANT EXPANSION 75 TO 85 TOTAL COSTS	8,721,000	
	Personnel Services Expenditures		54,013
	Contractor Expenditures		7,029,378
11184	NEW TUALATIN RIVER PERMIT APPLICATION	8,000	
	Personnel Services Expenditures		1,864
	Contractor Expenditures		24,619
11301	WATER MANAGEMENT SOLUTION SOFTWARE	7,500	
	Contractor Expenditures		8,823
11402	JWC SHPP FISH SCREEN WAIVER		
	Personnel Services Expenditures		377
	Contractor Expenditures		41,264
11297	WATER RIGHTS NEGOTIATIONS		
	Personnel Services Expenditures		842
	Contractor Expenditures		1,775
	FACILITIES AND IMPROVEMENTS	78,000	
11440	WTP ALKALINITY TITRATOR		6,404
11438	WTP CHLORINE ANALYZER REPLACEMENT		39,575
11415	POWDER ACTIVATED CARBON FEEDER		114,808
11135	FAIRWAY FUND		17,918
XXXXX	SURGE BASIN VFD UPGRADGES		7,234
	JWC EMERGENCY EQUIP REPLACEMENT TOTAL COSTS	2,000,000	-
TOTAL PROJECT COSTS		\$ 18,243,500	\$ 12,413,107



STAFF REPORT

To: Joint Water Commission

From: Chris Wilson, Water Treatment Manager
Niki Iverson, Joint Water Commission General Manager

Date: October 11, 2019

Subject: Agenda Item 4F - Carollo Storm Event After-Action Report

Staff Recommendation:

Informational item only; no action requested at this time.

Background:

The Joint Water Commission (JWC) Water Treatment Plant (WTP) has experienced three (3) separate storm events that have caused treatment process upsets (including two that happened closely together in December 2018 and February 2019), resulting in finished water production impacts up to and including complete WTP shutdowns.

Carollo Engineering was hired for the purpose of evaluating the existing plant sources of supply, treatment processes, and maintenance and operating procedures. They were chosen based on their expertise and also their previous work with the JWC. The purpose of the report is to identify best practices that are in place and also improvements that will increase plant and staff resilience when similar events occur in the future. The Scope of Work included performing an analysis of WTP facilities and operations, a review of documented storm responses (Incident Command System (ICS) forms and timelines), review of incident management procedures, and a review of raw water quality monitoring procedures and equipment utilized during storm events.

Staff received a final draft report that will be reviewed by the Operations Committee. The report resulted in 27 recommendations, several of which were already planned as part of the JWC Expansion project or minor items that can be handled internally. There are also larger recommendations that would require future funding. JWC staff and the Operations Committee will work together to evaluate the recommendations and decide on a plan for moving forward. Staff will present the report to the JWC Board in January, and will include a proposed schedule and estimated costs for implementation of the chosen recommendations.

Setting a Precedent: AMERICAN and Others Work to Ensure Oregon Water System Meets Rigorous Seismic Safety Standards

Question: How do you design a water-delivery pipeline for an area that has averaged nearly one earthquake per week during the past year?

Answer: *Very carefully.*

Most agree that Oregon, with its breathtaking mountains and rugged coastline, is a scenic wonder. Yet the geologic forces that make it so spectacular also make it one of the most earthquake-prone spots in the country.

Take, for example, the Hillsboro, Oregon, area. Just a half-hour's drive from Portland, it has been the scene of 49 recorded earthquakes in the past 365 days. Most measure less than 2.0 in magnitude, but the fact remains: any new construction requires innovative planning, design and implementation to mitigate the kind of seismic activity common to the area.

That was the challenge for Oregon's Joint Water Commission (JWC)—owned in partnership by the cities of Hillsboro, Beaverton, Forest Grove and the Tualatin Valley Water District. The JWC currently treats, transmits and stores drinking water for more than 365,000 customers and is the largest conventional water treatment plant in Oregon. However, due to population growth, the JWC needed to strengthen the water plant infrastructure and increase capacity from 75 MGD (million gallons per day) to 85 MGD while factoring in a potential future capacity of 105 MPD.

To meet the challenge, AMERICAN sales engineers worked closely with project engineering firm Jacobs (formerly CH2M), general contractor Slayden Constructors Inc. (a subsidiary of MWH Constructors) and the JWC to design a ductile iron pipeline to achieve the JWC's aggressive goals.

Because the state of Oregon requires new and retrofitted construction to meet rigorous seismic safety standards, this project sets a precedent for earthquake-resistant treatment plants in the Pacific Northwest.

"We provided a variety of 24-inch to 48-inch Flex-Ring pipes and fittings," said Jeff Blakely, AMERICAN senior sales engineer. "The design we helped develop is capable of withstanding 22 inches of permanent ground deformation due to liquefaction (a destabilization that occurs when saturated soil loses its firmness) during a seismic event."

Robert Montgomery, senior project manager for Slayden Constructors Inc., said, "AMERICAN worked with the engineering team (from Jacobs) even before it went out to bid. Then, AMERICAN came out and did a class for our installation people because the earthquake-resistant pipeline is such a new thing. That was very helpful. Jeff Blakely and his team have been very responsive."

The project will be completed via an alternative delivery model known as Construction Manager/General Contractor (CM/GC). This method allows the owner to engage a construction manager during the design process to provide constructability input.

Completion is scheduled for October 2019.

NOTE: Oregon earthquake data can be found at <https://earthquaketrack.com/us-or-hillsboro/recent> and is accurate as of April 23, 2019.

See a [video](#) of the installation.







To: Joint Water Commission
From: Chris Wilson, Water Treatment Manager
Date: September 20, 2019
Re: JWC Water Treatment Plant Quarterly Report - June 20, 2019 – September 19, 2019

PRODUCTION:

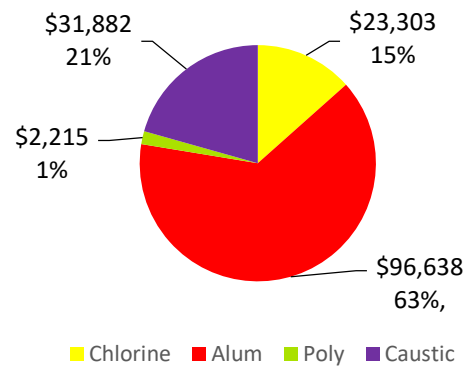
During the third quarter, the Water Treatment Plant (WTP) averaged a production rate of 44.1 million gallons per day (MGD). Highest production day was August 3rd, with 59.93 MGD produced. The lowest production date was September 12th, with 23.76 MGD.

WQ PARAMETERS:

Finished Water met all water quality parameters.

COSTS:

Average chemical cost was \$1,674.35 per day during the third quarter, an average of \$46.37 per MG. August 3rd (59.93 MGD) was the most expensive chemical day at \$2,175.94. July 14th (34.47 MGD) was the least expensive chemical cost day at \$1,312.68.



EXPANSION to 85 MGD Update:

- Installation of new 24" backwash piping and connection to existing backwash piping was completed. Filters are backwashed periodically to improve performance and remove sediment from the filter media.
- Filter structure washwater troughs were installed. Washwater troughs collect the water and sediment resulting from filter backwashes and convey it to our solids handling process.
- Filter structure masonry work for electrical building and stairway shelter was completed.
- Filter structure mechanical piping installation is ongoing. Mechanical piping is necessary to collect filtered water and to backwash the filters.
- Backfill around surge basin and new filter structure is ongoing.

OTHER:

- Loss of power for approximately 5 minutes on Monday July 1st
- Yearly Summer Filter Media Measurements completed
- Operations manual review and updates in progress
- Fernhill Reservoir #1 roof repair project is underway
- FWPS #1 pump replacement project (FW pumps 1,2,4,6) underway
- Chandra Hingston, the JWC Laboratory Coordinator was selected by the PNWS of the AWWA as the 2019 Subsection Activity Award winner! Congratulations!
- Media sampling of filters began on 8/5/19
- Thunder and lightning on 8/10/19 with over 1.5" of rain accumulated in one hour