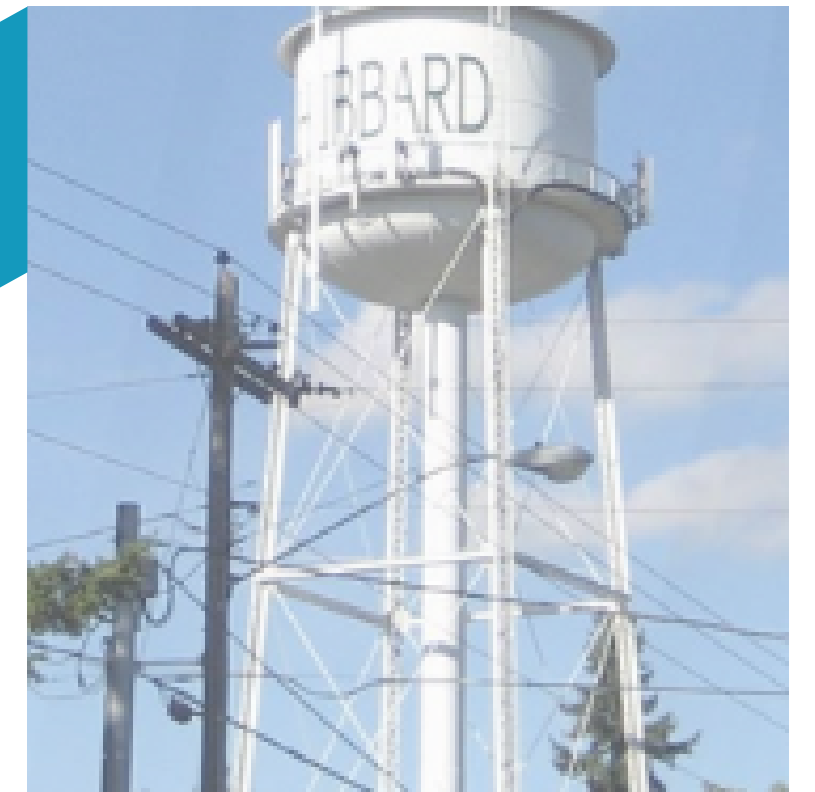




City of Hubbard



Wastewater Treatment Plant Projects



Contact No.



503-981-9633

3720 2nd Street, Hubbard, OR 97032

swaite@cityofhubbard.org

Executive Summary

The City of Hubbard provides wastewater collection and treatment services to approximately 3,454 residents. Wastewater is collected via the City's sanitary sewage system and conveyed by a mix of gravity and pump systems to the wastewater treatment plant in the northwest portion of the City. The wastewater undergoes screening, biological treatment, clarification, and UV disinfection. The treated water is discharged into Mill Creek at river mile 5.3, while solids are treated and beneficially reused through agricultural land application.

The City anticipates the development of the Bear Creek Planned Unit Development (PUD) Subdivision within the next five years. This development includes 324 dwelling units across 204 lots, featuring single-family homes, duplexes, townhomes, and apartments. This project is critical, as housing inventory, particularly for apartments and townhomes, is extremely low or nonexistent. The City's population is expected to grow by approximately one-third in the next 20 years, increasing the daily volume of wastewater to be treated.

The wastewater treatment plant, originally constructed in the 1960s, has undergone significant improvements, including a biological treatment system reconstruction in 2005–2006. The City's sanitary sewage collection system comprises over 62,000 linear feet of pipe. Approximately half of this pipe, primarily asbestos concrete, was installed in the 1960s, while the remainder, mainly PVC, has been added during subsequent City developments.

Facility planning ensures the City can effectively manage wastewater treatment infrastructure. The City contracted Civil West Engineering Services to prepare a Wastewater Facilities Plan, approved by the Oregon Department of Environmental Quality in 2024.

Findings and Recommendations

The Facilities Plan assessed the existing facility's capacity to handle current and future wastewater flows and pollutant loads, regulatory requirements, and the condition of system components. The plan included a thorough mapping of the City's collection system and an inflow and infiltration (I/I) study, resulting in several improvement recommendations:

1. **Thermal Load Compliance:**
 - The treatment plant's effluent frequently exceeds the thermal load limit specified in the discharge permit during the dry season. Corrective action is required to meet compliance.
2. **Inflow and Infiltration:**
 - Multiple areas in the collection system have direct stormwater inflow or groundwater infiltration, diluting the system and disrupting treatment during wet-weather events.
3. **Lift Station Capacity:**
 - The Lift Station's current pumps are underperforming and unable to handle future flows. Peak flow events result in bypassing significant parts of the treatment system, causing poor performance.
4. **Solids Dewatering:**
 - The solids dewatering process is underperforming and lacks capacity for projected future rates. Continuous operation of the existing centrifuge system requires significant oversight, exceeding staff capacity.

5. UV Disinfection System:

- The system lacks redundancy and reliability, is past its design life, and faces increasing difficulty with replacement parts. Failure would hinder compliance with bacteria reduction requirements.

6. Secondary Clarifier:

- A redundant secondary clarifier is needed to enable maintenance without major disruptions to treatment processes.

7. Inflow and Infiltration Study:

- Critical areas of the collection system need CCTV surveys to locate potential line breaks.

8. Headworks Screen and Grit Removal:

- The existing fine screen struggles with fats, oils, and grease, causing clogs. Additionally, a grit removal system is recommended, necessitating reconstruction of the headworks channel.

9. Aeration Equipment:

- Aeration equipment will surpass its useful life by the end of the planning period. Noise complaints from the blowers suggest potential violations of the City's noise ordinance.

10. Sludge Outlet Pipe:

- The sludge outlet pipe from Digester #1 frequently clogs, creating unsafe working conditions.

Funding and Implementation

Based on the Wastewater Facilities Plan's needs assessment, the City has adopted a phased project approach. A "One-Stop" funding meeting involved representatives from the Department of Environmental Quality (DEQ), USDA, Business Oregon, Mid-Willamette Council of Governments, and staff from Senator Merkley and Representative Salinas' offices. While various financing options were discussed, most federal and state programs primarily offered loans.

The City is conducting a water and wastewater rate study. If approved by the City Council, rate increases may be insufficient to cover operational costs and an annual debt service payment of approximately \$500,000. The General Fund reserve is approximately \$1.9 million, and the Sewer and Sewer Construction funds have a combined balance of \$1.2 million. An estimated \$2,393,000 is needed to fund Phase 1 projects, reducing debt service payments to sustainable levels.

BEAR CREEK PLANNED UNIT DEVELOPMENT HUBBARD, ORE.



CITY OF HUBBARD LAND USE APPLICATION
BEAR CREEK PLANNED UNIT DEVELOPMENT
T.L. 100 OF T.M. 041W33
MARION COUNTY, OREGON
11984 BROADACRES ROAD NE
HUBBARD, OR 97032

COVER SHEET/
OVERALL
CONCEPT PLAN

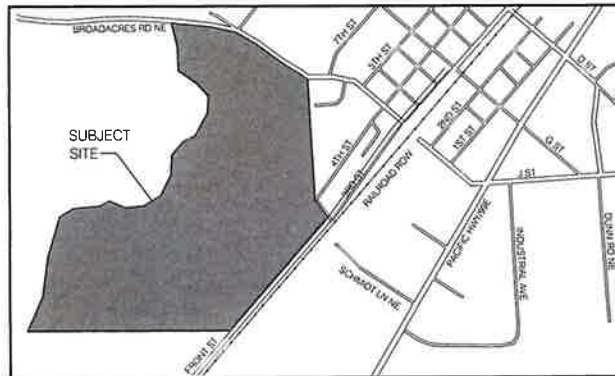
APRIL 4, 2023

REVISIONS



P-1

SHEET 1 OF 9



VICINITY MAP

INDEX OF DRAWINGS

LAND USE PLANNING PLAN SET

- P-1 COVER SHEET/OVERALL CONCEPT PLAN
- P-2 AERIAL PHOTO/LAND USE PLAN
- P-3 MASTER PLAN
- P-4 DETAILED APARTMENT COMPLEX PLAN
- P-5 SOUTHEAST PRELIMINARY PLAT
- P-6 SOUTHWEST PRELIMINARY PLAT
- P-7 CENTRAL PRELIMINARY PLAT
- P-8 NORTH PRELIMINARY PLAT
- P-9 PHASING PLAN

CIVIL ENGINEERING PLAN SET

- C-001 TO C-049 EXISTING CONDITIONS, STREET SECTIONS,
SITE PLANS, GRADING PLANS, UTILITY
PLANS, AND TRANSPORTATION AND
UTILITY PROFILES

LANDSCAPE DESIGN PLAN SET

- L0.0 TO L1.4

ARCHITECTURAL DESIGN PLAN SET



OVERALL CONCEPT PLAN

APPLICANT

FRANK J BRONEC OTIP TRUST AND
COLUMBIA TRUST COMPANY TRE
805 SW BROADWAY, SUITE 780
PORTLAND, OR 97205
503-279-3164
CONTACT: HELEN ROBINSON

APPLICANT'S REPRESENTATIVE

CASCADIA PLANNING + DEVELOPMENT SERVICES
PO BOX 1920
SILVERTON, OR 97038
503-804-9294
CONTACT: STEVE KAY, AICP

LAND SURVEYOR

CENTERLINE CONCEPTS LAND SURVEYING, INC.
19376 MOLALLA AVENUE, SUITE 120
OREGON CITY, OR 97045
503-650-0188
CONTACT: JAMES BROWN, PLS

CIVIL ENGINEER

EMERIO DESIGN
6446 SW FALLBROOK PLACE, SUITE 100
BEAVERTON, OR 97008
503-746-8812
CONTACT: PAT TORTORA, PE

LANDSCAPE ARCHITECT

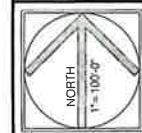
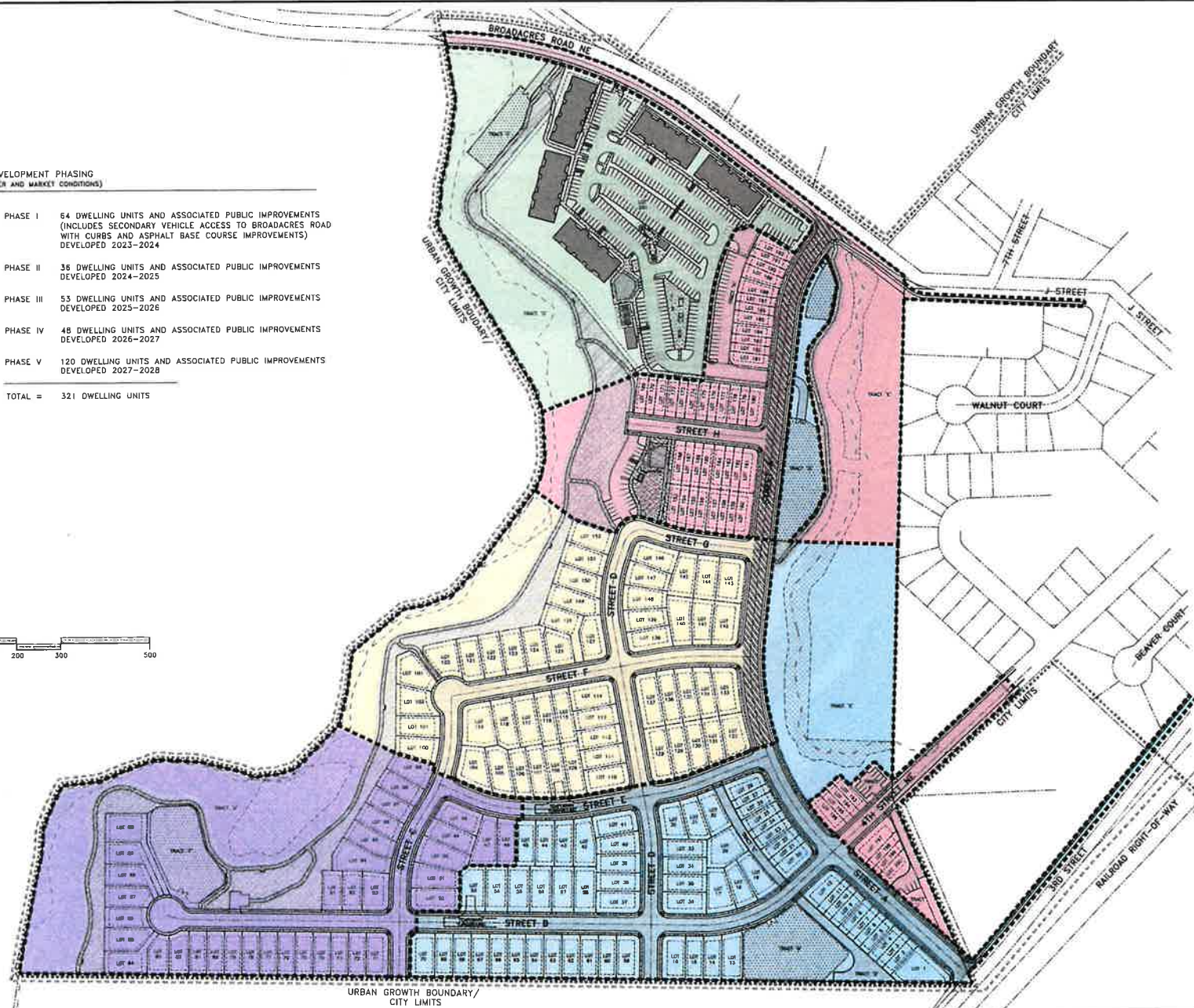
LAURUS DESIGNS, LLC
1012 PINE STREET
SILVERTON, OR 97381
503-784-6494
CONTACT: LAURA ANTONSON, ASLA

TRANSPORTATION ENGINEER

LANCASTER MOBLEY
321 SW 4TH AVENUE, SUITE 400
PORTLAND, OR 97204
503-248-0313
CONTACT: JENNIFER DANZIGER, PE

PLANNED UNIT DEVELOPMENT PHASING
(DEPENDENT ON WEATHER AND MARKET CONDITIONS)

	PHASE I 64 DWELLING UNITS AND ASSOCIATED PUBLIC IMPROVEMENTS (INCLUDES SECONDARY VEHICLE ACCESS TO BROADACRES ROAD WITH CURBS AND ASPHALT BASE COURSE IMPROVEMENTS) DEVELOPED 2023-2024
	PHASE II 36 DWELLING UNITS AND ASSOCIATED PUBLIC IMPROVEMENTS DEVELOPED 2024-2025
	PHASE III 53 DWELLING UNITS AND ASSOCIATED PUBLIC IMPROVEMENTS DEVELOPED 2025-2026
	PHASE IV 48 DWELLING UNITS AND ASSOCIATED PUBLIC IMPROVEMENTS DEVELOPED 2026-2027
	PHASE V 120 DWELLING UNITS AND ASSOCIATED PUBLIC IMPROVEMENTS DEVELOPED 2027-2028
TOTAL = 321 DWELLING UNITS	



CITY OF HUBBARD LAND USE APPLICATION
BEAR CREEK PLANNED UNIT DEVELOPMENT

T.L. 100 OF T.M. 04/1W/33
MARION COUNTY, OREGON

11984 BROADACRES ROAD NE
HUBBARD, OR 97032

PHASING
PLAN

APRIL 4, 2023
REVISIONS



P-9

SHEET 9 OF 9

City of Hubbard WWTP Priority Project Phases

Phase	Project	High Level Cost Estimate	Total
Phase 1 - (high priority)			
	Water Quality - Cooling	\$1,500,000	\$1,500,000
Phase 1			\$893,000
	WWTP Lift Station & Wet Well Improvements	\$785,000	
	Major I & I Source Repair	\$108,000	
Phase 2			\$1,050,000
	Replacement Blowers & Building Construction	\$1,050,000	
Phase 3			\$1,010,000
	Headworks Channel, Screen & Grit Reconstruction	\$1,010,000	
Phase 4			\$1,400,000
	Secondary Clarifier Construction	\$950,000	
	Digester 1 Solids Flow Stream Retrenching	\$450,000	
	Total Hard Costs:		\$5,853,000
Soft Costs			
	Engineer Estimate (25%)	\$1,463,250	
	Legal (2%)	\$117,060	
	Project Contingency	\$1,170,600	
	Total Soft Costs:		\$2,750,910
Total Project Costs:			\$8,603,910

ONE-STOP PROJECT SUMMARY

Date	November 22, 2024
Client Name	City of Hubbard
Name of Project	Wastewater System Improvements

Project Description

Peak flow events have a negative impact on WWTP effluent quality. DEQ's has redundancy requirements for the secondary clarifier, and operators cannot currently take the clarifier offline. Improvements are needed to maintain thermal compliance. Ground or rainwater can currently enter the sanitary sewer system, and the current system needs improvements to effectively handling of fats, oils and grease. Blower equipment is currently exposed to the elements and is noisy.

Project Solution

To address current system issues, this project will implement: influent lift station & wet well improvements; secondary clarifier improvements; water cooling improvements; major I & I source repair; headworks upgrades; replacement blowers & building construction; digester 1 pipe upgrades and improvements to the solids handling operation, removing a significant maintenance burden and also improving safety as it will no longer be a confined space area.

Project Background	
Type of Project	Sewer
Compliance Issue	Yes
Business Commitment	No
# Jobs Created/Retained	N/a

Project Financing	
Estimated Project Cost	\$8,603,910
Local Contribution	\$0
Assistance Requested	\$8,603,910
Source of Loan Repayment	User Fees

Water and Sewer Only	
Projected OM&R	\$510,900
Current OM&R	\$477,440
Existing DS (matures in FY2025)	\$54,502
Current Avg Monthly OM&R + DS per EDU	\$32.59
Current Avg Monthly User Rate per EDU	\$45.43
Property Tax applied to Utility	\$0.00

Demographics	
EDU's	1,360
Connections	1,360
Population	3,491
Unemployment Rate	3.60%
Community MHI	\$89,016
Statewide MHI	\$76,632
Percentage of Statewide MHI	116%
LMI %	N/a
Distressed Index	Distressed
County	Umatilla County
Affordability Rate	\$92.73

Term Key	
EDU	Equivalent Dwelling Unit
MHI	Median Household Income
LMI	Low/Moderate Income
OM&R	Operations, Maintenance, Repair
DS	Debt Service

ONE-STOP SCENARIO #1

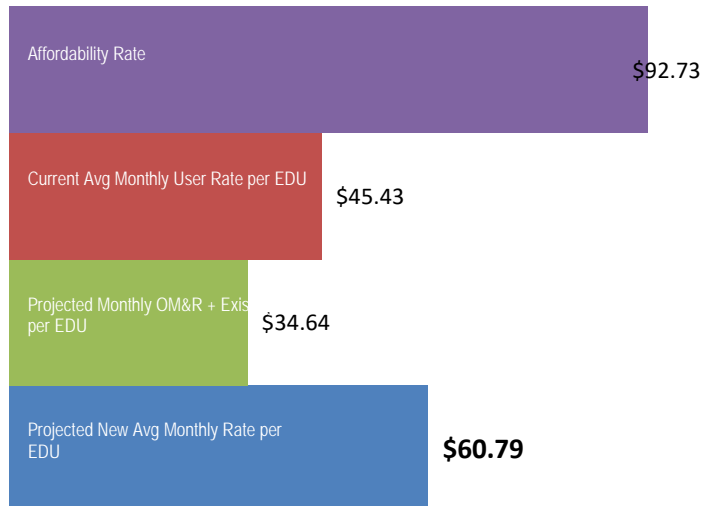
Estimated Project Cost	\$8,603,910
Local Contribution	\$0
Assistance Requested	\$8,603,910

Projected Monthly OM&R + Existing DS per EDU	\$34.64
Monthly New DS per EDU	\$26.14
Projected New Avg Monthly Rate per EDU	\$60.79

					Financing Terms		
Partner	Program	Total Financing	Grant Amount	Loan Amount	Loan Repayment Term (yrs)	Estimated Interest Rate	Annual Debt Payment
USDA	RUS	\$8,603,910		\$8,603,910	40	3.875%	\$426,647

Total Financed	\$8,603,910	Financing Gap	\$0	Annual Debt Service	\$426,647
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Impact per EDU



Notes	
RUS	<p>For public body applicants, USDA's Rural Utility Service program typically purchases a Revenue bond. Revenue bonds and Notes (for non-profits) come with a reserve requirement equal to one annual payment that can be established in advance or accumulated over ten years equating to a 110% debt service coverage. GO Bonds have no reserve or coverage requirements. Interim financing is usually necessary. The interest rate is set at the time the funds are reserved. Should the interest rates be lower at the time of project completion, the customer will get the benefit of the lower rate. There are no fees or pre-payment penalties or restrictions. Davis Bacon does not apply. American Iron and Steel requirements do apply. Projects are subject to NEPA.</p>

ONE-STOP SCENARIO #2

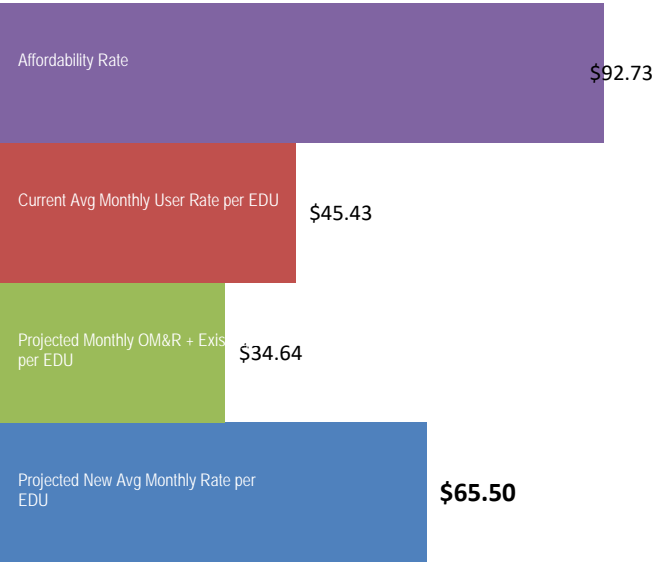
Estimated Project Cost	\$8,603,910
Local Contribution	\$0
Assistance Requested	\$8,603,910

Projected Monthly OM&R + Existing DS per EDU	\$34.64
Monthly New DS per EDU	\$30.86
Projected New Avg Monthly Rate per EDU	\$65.50

					Financing Terms		
Partner	Program	Total Financing	Grant Amount	Loan Amount	Loan Repayment Term (yrs)	Estimated Interest Rate	Annual Debt Payment
BizOR	SPWF	\$8,603,910		\$8,603,910	30	4.100%	\$503,624

Total Financed	\$8,603,910	Financing Gap	\$0	Annual Debt Service	\$503,624
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Impact per EDU



Notes	
SPWF	Must meet affordability criteria for subsidized interest rate and grant eligibility. Interest rates set quarterly; Oregon Bond Bank rates are set at time of the Bond Sale. IFA Board approval required for funding awards ≥\$3M or grant ≥\$500,000.

ONE-STOP SCENARIO #3

Estimated Project Cost	\$8,603,910
Local Contribution	\$0
Assistance Requested	\$8,603,910

Projected Monthly OM&R + Existing DS per EDU	\$34.64
Monthly New DS per EDU	\$30.86
Projected New Avg Monthly Rate per EDU	\$65.50

Partner	Program	Total Financing	Grant Amount	Loan Amount	Financing Terms		
					Loan Repayment Term (yrs)	Estimated Interest Rate	Annual Debt Payment
BizOR	WW	\$8,603,910		\$8,603,910	30	4.100%	\$503,624

Total Financed	\$8,603,910	Financing Gap	\$0	Annual Debt Service	\$503,624
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Impact per EDU



Notes	
WW	Must meet affordability criteria for subsidized interest rate and grant eligibility. Interest rates set quarterly; Oregon Bond Bank rates are set at time of the Bond Sale. IFA Board approval required for funding awards ≥\$3M or grant ≥\$500,000.

ONE-STOP SCENARIO #4

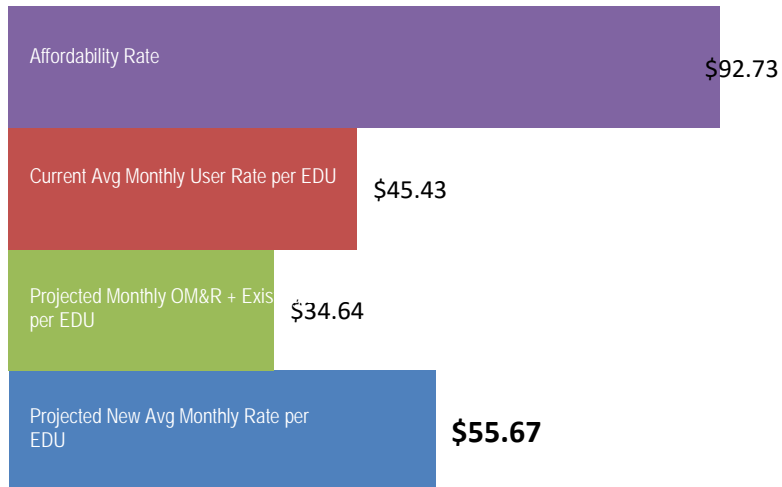
Estimated Project Cost	\$8,603,910
Local Contribution	\$0
Assistance Requested	\$8,603,910

Projected Monthly OM&R + Existing DS per EDU	\$34.64
Monthly New DS per EDU	\$21.02
Projected New Avg Monthly Rate per EDU	\$55.67

					Financing Terms		
Partner	Program	Total Financing	Grant Amount	Loan Amount	Loan Repayment Term (yrs)	Estimated Interest Rate	Annual Debt Payment
DEQ	CWSRF	\$8,603,910	\$2,000,000	\$6,603,910	30	3.140%	\$343,052

Total Financed	\$8,603,910	Financing Gap	\$0	Annual Debt Service	\$343,052
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Impact per EDU



Notes	
CWSRF	<p>DEQ Rate is "Effective rate" which includes .5% fee. DEQ will require a Debt Service Reserve be established. Fiscal Sustainability Plan and Cost and Effectiveness analysis (both may already be included in the facility plan).</p> <p>Environmental report (requires 30 day public comment period). Comply with federal cross cutting authorities. Davis-Bacon (or BOLI whichever is more), American Iron and Steel certification. Applications 3 times a year scored regionally. Depending on project timing, may need to document qualifications based procurement for Architectural & Engineering contracts (OR law already requires qualifications based procurements when A&E exceeds \$100K)</p>

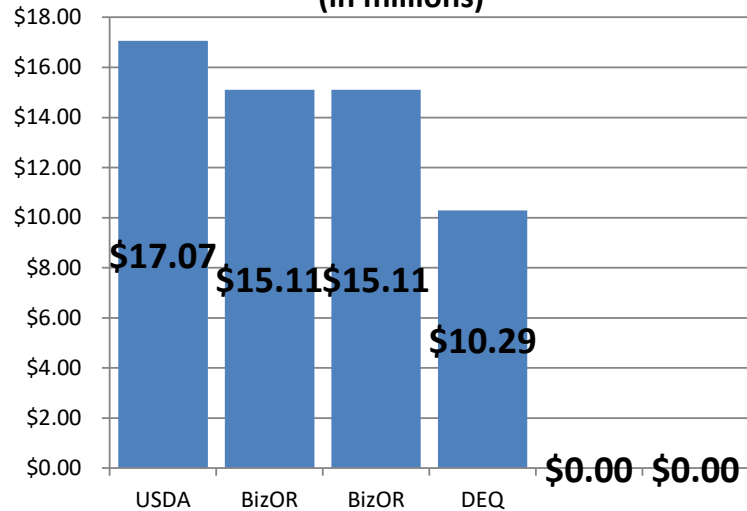
ONE-STOP SCENARIO COMPARISONS

Estimated Project Cost	\$8,603,910
Local Contribution	\$0
Assistance Requested	\$8,603,910

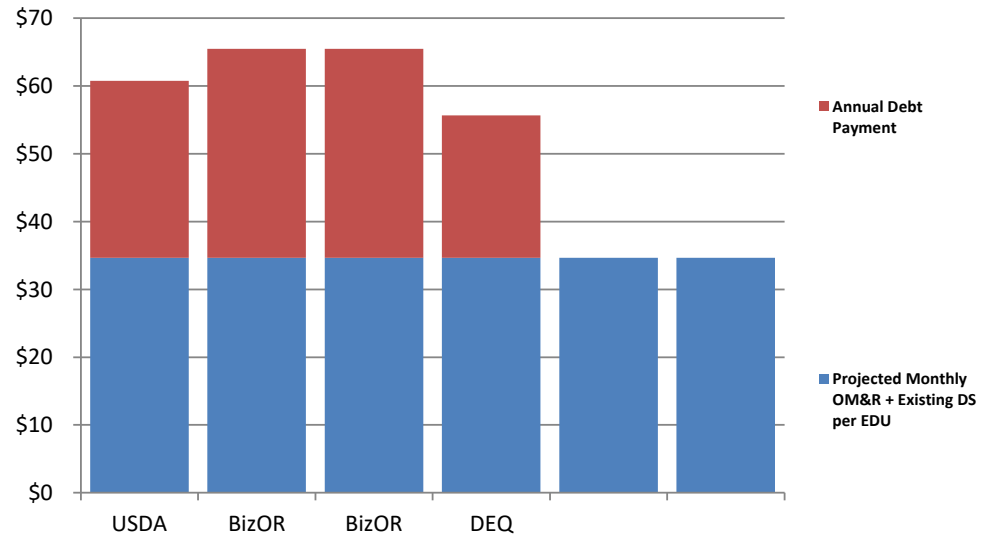
Current Avg Monthly User Rate per EDU	\$45.43
Projected Monthly OM&R + Existing DS per EDU	\$34.64

Scenario	Total Financing	Grant Amount	Loan Amount	Annual Debt Payment	Total Payments over Life of Loan	Projected Monthly New DS per EDU	Projected New Avg Monthly Rate per EDU	# of Funding Partners	Rate	Term Years
USDA	\$8,603,910	\$0	\$8,603,910	\$426,647	\$17,065,873	\$26.14	\$60.79	1	3.88%	40
BizOR	\$8,603,910	\$0	\$8,603,910	\$503,624	\$15,108,717	\$30.86	\$65.50	1	4.10%	30
BizOR	\$8,603,910	\$0	\$8,603,910	\$503,624	\$15,108,717	\$30.86	\$65.50	1	4.10%	30
DEQ	\$8,603,910	\$2,000,000	\$6,603,910	\$343,052	\$10,291,572	\$21.02	\$55.67	1	3.14%	30

**Total Payments over Life of Loan
(in millions)**



Projected New Avg Monthly Rate per EDU



ONE-STOP MEETING SUMMARY

Date	<input type="text" value="November 22, 2024"/>
Client Name	<input type="text" value="City of Hubbard"/>
Name of Project	<input type="text" value="Wastewater System Improvements"/>

Thank you for participating in the One-Stop financing meeting. This packet includes the following results for your use:

- 1 Meeting Summary
- 2 Project Summary
- 3 Financing Scenario(s)
- 4 Scenario Comparisons
- 5 Funding Partner Information
- 6 Contact List

This information is intended to assist you in identifying funding sources, evaluating alternatives, and moving forward with your project. The Financing Scenarios are ESTIMATES ONLY and should not be considered actual rates, costs, or funding commitments. Program details, requirements, and financing scenarios are subject to change. Please consult with the appropriate funding agency contact for more details as your project progresses.

Discussion Notes

The project has several options for financing available from federal and state funding partners. Most programs are able to offer loan only, with DEQ able to offer some principal forgiveness based on certain eligibility criteria. Business Oregon can offer a loan through either the Water Wastewater Financing Program or Special Public Works Fund that does not have federal requirements but does have state labor standards and procurement requirements. USDA can offer a loan that does have federal requirements and would require a DEQ or other interim lender. DEQ can offer a loan with some forgivable loan up to \$2 million per fiscal year. In addition to funding programs, there is potential to request a congressionally directed spending grant (\$500,000 to \$3 million typical request amounts) through house and senate offices. House requests are limited to 15 projects in the state and require a non-federal match, senate requests also require match and have no limit on number of projects in the state. Like other federal programs, environmental review process, Build America Buy America, and other federal requirements apply to congressional requests receiving funds. The potential to phase the needed work into separate projects and potential advantages for maximizing funding options was discussed and regrouping in the near future to look more closely at these options was offered.

Next Steps

This Week		Within 1 Month		Within 3 Months		Within 1 Year	
Review One-Stop scenarios		Share options with public		Refine project scope		Secure funding	
Discuss options and follow up		Gather public input		Begin application processes		Finalize design	
						Solicit bids	