

**City of Cascade Locks  
Finance Committee  
Tuesday, January 20, 2015  
7:00 pm, City Council Chambers  
Agenda**

1. Call to Order/Pledge of Allegiance
2. Approval of December 15, 2014 minutes
3. Answer to Committee Questions:
  - a. What is the percentage of pipe remaining after the water project that will still need to be replaced?
4. Election of Chair and Vice Chair
5. Review Electric Substation Options
6. Distribution of "Old Fire Hall" Proceeds
7. Other Matters and Concerns
8. Next scheduled Meeting is Tuesday, February 17, 2015.
9. Adjourn

## Gordon Zimmerman

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**From:** Darrin Eckman <DEckman@tennesoneng.com>  
**Sent:** Monday, December 22, 2014 4:36 PM  
**To:** Gordon Zimmerman (gzimmerman@cascade-locks.or.us); 'Sheldon Price'  
**Subject:** RE: Waterlines  
**Attachments:** New & Old Infrastructure.pdf

Gordon and Sheldon,  
Please take one more look and see if the waterline map provided reflects the changes we discussed. If this is correct then:

Age of Pipe	Existing System	Proposed System	Reduction
Pre-1990	~52,100 lf (70%)	~32,100 lf (48%)	~20,000 lf (38%)
1990-Current	~22,600 lf (30%)	~22,600 lf (34%)	
Proposed	~0 lf (0%)	~12,200 lf (18%)	
TOTAL	~74,700 lf	~66,900 lf (7% reduction)	

Thus the proposed project removes about 20,000 lf, or 38% of the older pipe in the system and results in an overall reduction of about 7900 lf of pipe in the overall system. This is 7% less pipe that must be maintained and replaced.

Please let me know if you need anything else on this issue...

*Thanks,  
Darrin*

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**From:** Darrin Eckman  
**Sent:** Wednesday, December 17, 2014 3:51 PM  
**To:** Gordon Zimmerman (gzimmerman@cascade-locks.or.us); 'Sheldon Price'  
**Subject:** Waterlines

Gordon and Sheldon,  
Could you please take a look at the attached map and see if there are any other new (say 1990 or newer) waterlines that we missed? With your input we can then calculate the % of older waterline that would still require replacement. The RED lines are the proposed waterlines. The BLUE is what we think are newer.

One question I had was the pipe on the south side of I-84 from Oxbow to the Forest Service office. Was that all replaced in the 1990's? Even the 4" line? Is the pipe under I-84 and Bear Mountain old or new?

Thanks,

*Darrin Eckman, P.E.  
Tennessee Engineering Corporation  
The Dalles, OR  
(541) 296-9177*

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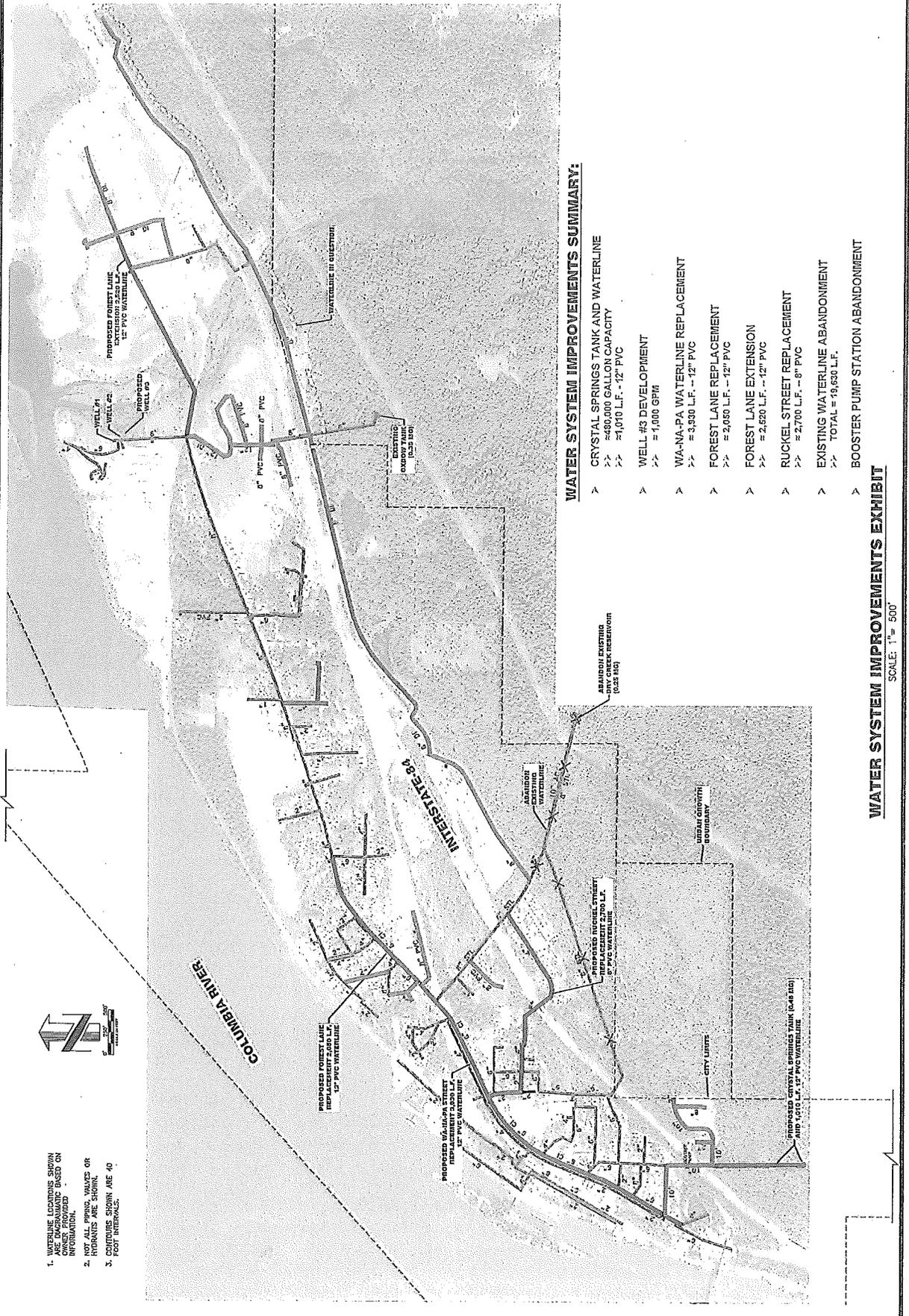
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*Darrin Eckman, P.E.  
Tenneson Engineering Corporation  
The Dalles, OR  
(541) 296-9177*

**TENNISON ENGINEERING CORP.**  
 CONSULTING ENGINEERS  
 3775 CRATES WAY  
 THE DALLES, OREGON 97058  
 PH. 541-298-9177 FAX 541-298-6657

**WSER**  
 WATER SUPPLY ENGINEERING REGISTERED PROFESSIONAL ENGINEER  
 LICENSE NO. 12707/23  
 REGISTERED PROFESSIONAL ENGINEER  
 LICENSE NO. 12707/23  
**PREFERRED**  
**EXHIBIT 6.0**  
 Work Order No. 14020



1. WATERLINE LOCATIONS SHOWN ARE BASED ON OWNER PROVIDED INFORMATION.
2. NOT ALL PIPING, VALVES OR HYDANTS ARE SHOWN.
3. CONTOURS SHOWN ARE 40 FOOT INTERVALS.

**WATER SYSTEM IMPROVEMENTS SUMMARY:**

- A CRYSTAL SPRINGS TANK AND WATERLINE  
 >> ≈480,000 GALLON CAPACITY  
 >> ≈1,010 L.F. - 12" PVC
- A WELL #3 DEVELOPMENT  
 >> ≈1,000 GPM
- A WA-NA-PA WATERLINE REPLACEMENT  
 >> ≈3,530 L.F. - 12" PVC
- A FOREST LANE REPLACEMENT  
 >> ≈2,050 L.F. - 12" PVC
- A FOREST LANE EXTENSION  
 >> ≈2,520 L.F. - 12" PVC
- A RUCKEL STREET REPLACEMENT  
 >> ≈2,700 L.F. - 8" PVC
- A EXISTING WATERLINE ABANDONMENT  
 >> TOTAL ≈ 19,630 L.F.
- A BOOSTER PUMP STATION ABANDONMENT

**WATER SYSTEM IMPROVEMENTS EXHIBIT**

SCALE: 1" = 500'

City of Cascade Locks  
 Electrical Master Plan Cost and Revenue Projections  
 Revision Date: December 16, 2014

Options	Option #1 New Substation On BPA Property	Option #2 New Substation On Pyramid	Option #3 New Substation On Port Property	Option #4 BPA Build On BPA Property (Future Purchase)	Option #5 Rebuild Pyramid	Option #6 Rebuild BPA Maintain Pyramid
Cost of Land:	\$ 301,000	\$ -	\$ -	\$ -	\$ -	\$ 301,000
Industrial Feeder #1:	250,000	250,000	250,000	250,000	200,000	200,000
12/16/20 MVA Substation:	1,969,000	1,969,000	1,969,000	3,500,000	590,000	690,000
Transmission Line From BPA to Sub:	-	-	277,000	-	-	-
<b>Total:</b>	<b>\$ 2,520,000</b>	<b>\$ 2,219,000</b>	<b>\$ 2,496,000</b>	<b>\$ 3,750,000</b>	<b>\$ 790,000</b>	<b>\$ 1,191,000</b>

USDA RUS Financing						
Interest Rate:	3.25%	3.25%	3.25%	0.00%	3%	3%
Term (Years):	40	40	40	-	4	4
Annual Payment:	\$ 113,470	\$ 99,917	\$ 112,390	\$ -	\$ 212,531	\$ 320,411

Property Liability Insurance						
Current Coverage: \$2,050,000 for Pyramid	\$ 1,416					
Increased Coverage: \$2,500,000*2 (2016)	\$ 3,481	\$ 3,065	\$ 3,448	\$ 1,500	\$ 1,500	\$ 3,000
Increased Coverage: \$2,500,000*2 (2017)	\$ 3,655	\$ 3,219	\$ 3,621	\$ 1,575	\$ 1,575	\$ 3,150
Increased Coverage: \$2,500,000*2 (2018)	\$ 3,838	\$ 3,380	\$ 3,802	\$ 1,654	\$ 1,654	\$ 3,308
Increased Coverage: \$2,500,000*2 (2019)	\$ 4,030	\$ 3,549	\$ 3,992	\$ 1,736	\$ 1,736	\$ 3,473

Low Voltage Delivery Charge Assumptions	Savings Option #1	Expense Option #2	Expense Option #3	Expense Option #4	Expense Option #5	Expense Option #6
2014: current cost	\$ 36,000					
2015: estimated cost for next year	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ -
2016: adding 3 mw and 25% cost increase	\$ -	\$ -	\$ -	\$ 100,000	\$ -	\$ -
2017: adding 1 mw and 25% cost increase	\$ -	\$ -	\$ -	\$ 145,833	\$ -	\$ -
2018: adding 1 mw and 10% cost increase	\$ -	\$ -	\$ -	\$ 183,333	\$ -	\$ -
2019: adding 10% cost increase	\$ -	\$ -	\$ -	\$ 201,667	\$ -	\$ -

Annual Maintenance Costs	Option #1	Option #2	Option #3	Option #4	Option #5	Option #6
2015: Pyramid	\$ 10,000	\$ 10,000	\$ 10,000	\$ -	\$ 10,000	\$ 10,000
2016: Pyramid, BPA Substation	\$ 20,400	\$ 20,400	\$ 20,400	\$ -	\$ 10,200	\$ 20,400
2017: Pyramid, BPA, and New	\$ 31,212	\$ 31,212	\$ 31,212	\$ -	\$ 10,404	\$ 20,808
2018: Pyramid, BPA, and New	\$ 31,836	\$ 31,836	\$ 31,836	\$ -	\$ 10,820	\$ 21,640
2019: Pyramid, BPA, and New	\$ 32,473	\$ 32,473	\$ 32,473	\$ -	\$ 11,037	\$ 22,073

Total Four Year Costs						
Annual Financing Payment:	\$ 453,882	\$ 399,668	\$ 449,559	\$ -	\$ 850,125	\$ 1,281,645
Increased Liability Insurance:	\$ 15,005	\$ 13,213	\$ 14,862	\$ -	\$ 6,465	\$ 12,930
Low Voltage Delivery Charge:	\$ -	\$ -	\$ -	\$ 630,833	\$ 40,000	\$ -
Annual Maintenance Costs:	\$ 115,921	\$ 115,921	\$ 115,921	\$ 6,465	\$ 42,461	\$ 84,921
<b>Estimated Incremental Total Cost:</b>	<b>\$ 584,808</b>	<b>\$ 528,802</b>	<b>\$ 580,342</b>	<b>\$ 637,299</b>	<b>\$ 939,051</b>	<b>\$ 1,379,497</b>

Total Estimated Incremental Financing Cost over the Life of the Loan:						
Annual Financing Payment:	\$ 4,538,816	\$ 3,996,680	\$ 4,495,590	\$ -	\$ 850,125	\$ 1,281,645
Low Voltage Delivery Charge:	\$ -	\$ -	\$ -	\$ 8,066,667	\$ 40,000	\$ -
<b>Estimated Incremental Total Cost:</b>	<b>\$ 4,538,816</b>	<b>\$ 3,996,680</b>	<b>\$ 4,495,590</b>	<b>\$ 8,066,667</b>	<b>\$ 890,125</b>	<b>\$ 1,281,645</b>

Incremental Revenue	1 MW	2 MW	3 MW	4 MW
<b>8 hour shift/5 days per week</b>				
Revenue: \$	180,630	\$ 361,260	\$ 541,890	\$ 722,520
Costs:	<u>102,573</u>	<u>205,146</u>	<u>307,719</u>	<u>410,292</u>
Gross Margin: \$	78,057	\$ 156,114	\$ 234,171	\$ 312,228
<b>Four Year Totals: \$</b>	<b>312,228</b>	<b>\$ 624,456</b>	<b>\$ 936,684</b>	<b>\$ 1,248,912</b>
<b>24 hour shifts/7 days per week</b>				
Revenue: \$	430,164	\$ 860,328	\$ 1,290,492	\$ 1,720,656
Costs:	<u>277,033</u>	<u>554,066</u>	<u>831,099</u>	<u>1,108,132</u>
Gross Margin: \$	153,131	\$ 306,262	\$ 459,393	\$ 612,524
<b>Four Year Totals: \$</b>	<b>612,524</b>	<b>\$ 1,225,048</b>	<b>\$ 1,837,572</b>	<b>\$ 2,450,096</b>

**City of Cascade Locks**  
**Disbursement of Funds from the Sale of the Old Fire Hall**  
**As of: December 31, 2014**

<b>Current Repayment Schedule</b>				
Remaining Balance as of Dec. 31, 2014:	\$ 295,833	Dec-14		
Final Payment:		<b>Apr-21</b>	76	6.4
Current Monthly Payment:	\$ 3,874.24			
Annual Payment:	\$ 46,490.88			

<b>Oregon Investment Board Loan</b>				
	Principle	Interest	Payment	
2014-15 (as of Dec. 31, 2014)	\$ 13,909	\$ 2,797	\$	16,705
2015-16	\$ 29,292	\$ 4,119	\$	33,411
2016-17	\$ 30,485	\$ 2,926	\$	33,411
2017-18	\$ 31,727	\$ 1,684	\$	33,411
2018-19 (last payment January 2019)	\$ 25,909	\$ 510	\$	26,419
	<u>\$ 131,322</u>	<u>\$ 12,036</u>	<u>\$</u>	<u>143,357</u>

<b>Sale of Old Fire Hall Proceeds</b>	
Estimated Proceeds without Closing Costs:	\$ 150,000

<b>Option #1: Apply proceeds to Current Repayment Schedule</b>				
Remaining Balance as of Dec. 31, 2014:	\$ 295,833	Dec-14		
Less sale proceeds:	\$ 145,833	<b>Feb-18</b>	38	3.1
Current Monthly Payment:	\$ 3,874.24			
<b>OIB Impact:</b>				
Remaining Payments as of Feb. 2018:	\$ 30,626.75			
Regular OIB monthly payment:	\$ 2,784.25			
Added Fire Hall Loan payment:	<u>\$ 3,874.24</u>			
	\$ 6,658.49			
Pay off OIB Loan (in months):	5	<b>Jul-18</b>	Savings: \$	510

<b>Option #2: Apply proceeds to OIB Loan</b>				
Sale Proceeds without closing costs:	\$ 150,000			
Remaining Balance of OIB Loan:	<u>\$ 131,322</u>	<b>Dec-14</b>		
Available to Fire Hall Loan	\$ 18,678			
<b>Fire Hall Loan Impact:</b>				
Remaining Balance after OIB Loan:	\$ 277,155			
Regular Fire Hall Loan Payment:	\$ 3,874.24			
Regular OIB Loan Payment:	<u>\$ 2,784.25</u>			
	\$ 6,658.49			
Pay off Fire Hall Loan:	42	<b>Jun-18</b>	Savings: \$	6,658.49