

AGENDA
VENETA CITY COUNCIL
MONDAY, NOVEMBER 14, 2016 – 6:30 P.M.
Veneta Administrative Center, 88184 8th Street, Veneta, Oregon

- 6:30 **1. CALL TO ORDER**

- 6:30 **2. PUBLIC COMMENT** - Maximum time 20 minutes. Speakers will be limited to 3 minutes each. The Council will not engage in any discussion or make any decisions based on public comment at this time; however, they may take comments under advisement for discussion and action at a future Council meeting.

- 6:40 **3. CONSENT AGENDA**
 - a. Minutes for October 24, 2016 Work Session
 - b. Minutes for October 24, 2016
 - c. Accounts Payable
 - i. To be Paid – Payable through November 8, 2016
 - d. Civic Calendar for December 2016
 - e. Public Works Activity Reports for September & October 2016

- 6:45 **4. NEIGHBORHOOD WATCH PROGRAM PRESENTATION**

- 7:05 **5. COUNCIL BUSINESS AND REPORTS**
 - a. Business
 - (1) Lane County Sheriff’s Office Activity Report
 - (2) Acceptance of City Councilor Tim Brooker’s Resignation
 - (3) Economic Development Committee Update (verbal)
 - b. Council/Committee Liaison Reports

- 7:25 **6. STAFF REPORTS**
 - a. Economic Development Specialist.....Steve Dobrinich
 - (1) Emergency Operations Plan Adoption
 - i. Agenda Item Summary
 - ii. **Resolution No. 1209** – A RESOLUTION ADOPTING THE CITY OF VENETA/LANE FIRE AUTHORITY EMERGENCY OPERATIONS PLAN (EOP)

 - b. Community Development Director.....Kay Bork
 - (1) Fern Ridge Southern Route Multi Use Path Intergovernmental Agreements, Lane County & ODOT
 - i. Agenda Item Summary
 - ii. Intergovernmental Agreement (IGA) with Lane County
 - iii. Intergovernmental Agreement (IGA) with ODOT

 - c. Finance Director.....Shauna Hartz
 - (1) Financial Activity and Fund Balance Report through September 30, 2016

 - d. Public Works Director.....Kyle Schauer
 - (1) Adoption of the 2016 Wastewater Master Plan and Recommended Capital Improvement Plan
 - i. Agenda Item Summary
 - ii. **Resolution No. 1210** – A RESOLUTION ADOPTING THE 2016 WASTEWATER MASTER PLAN AND RECOMMENDED CAPITAL IMPROVEMENT PLAN AND REPEALING RESOLUTION NO. 1001
 - (2) Cost Overrun for 2016 Pavement Preservation Project
 - (3) Update on Wastewater Treatment Plant (verbal)

8:40 e. City Administrator.....Ric Ingham
(1) 2016 Election Results (handout)
(2) Questions from Councilors

9:00 7. **OTHER**

9:10 8. **ADJOURN**

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Minutes of the Veneta City Council Work Session

October 24, 2016

Present: Sandra Larson, Tim Brooker, Thomas Cotter, Thomas Laing, Laura Ruff

Others: Ric Ingham, City Administrator; Julie Reid, Emergency Management Specialist; Darci Henneman, City Recorder; Chief Terry Ney, Lane Fire Authority; and Joan Mariner, Fern Ridge Review

1. CALL TO ORDER THE VENETA CITY COUNCIL WORK SESSION

Mayor Larson called the meeting to order at 5:34 p.m.

2. REVIEW EMERGENCY OPERATION PLAN & ANNEXES

Ingham said this has been a long process beginning in 2012 identifying the need for the community to ramp up for community preparedness. He said we worked with Chief Ney and decided to start with creating an Emergency Operations Plan (EOP). He said we tried to work on it in-house and realized early on that we needed some outside staff time. He said we applied for a RARE position in 2015 and finally got Julie Reid on board to create the EOP and assist with finalizing the Natural Hazard Mitigation Plan and assisted Chief Ney with a great table top exercise. With the assistance of staff, Reid created the Plan and the annexes which she will review. He said hopefully the Plan will be ready for final adoption next month. Ingham said Chief Ney is attending tonight's meeting and he will weigh in at any time he feels appropriate.

Chief Ney said his plan will have two sections - one portion will be for within City limits and the other is for surrounding communities. He said the concepts will be the same but those in charge will be different.

In response to a question from Mayor Larson, Ingham said we know Veneta is the service area for the surrounding communities and that residents from those areas will come into Veneta or will rely on Lane Fire Authority (LFA) for emergency services.

Chief Ney said we need to be flexible - whether people come into the City or leave the City, if we have an earthquake event and a tsunami, we'll have a flood of people from the coast so both Plans will be designed to be integrated.

Reid reviewed the Plan and highlighted the areas and annexes that may involve the City Council. She said the basic Plan sets the frame work. Also, because grant funds were used to create the Plan, we were required to follow NIMS (National Incident Management System) guidelines.

Ingham said the Council will adopt the Plan by resolution.

Chief Ney said he is holding off adopting the Plan until after the November election and hopefully the merger with Lane Rural Fire District. He said regardless of the nature of the emergency, the process, and the roles that people have will be pretty much the same. If he's incident commander of a fire, flood, or winter storm, his role will be pretty much the same for each event. He said specific tasks may be different but the overall Plan is the same. He said disasters we might experience like a dam failure or tsunami, will indirectly affect us. For instance if Fern Ridge Reservoir dam were to collapse, traffic will need to be redirected through Veneta or north to the Lawrence Rd. area.

Ingham said depending on the type of event, we may not be able to restore water service to all households. He said one of the hazard mitigation projects was to identify a process to use well 4 or 12 to fill water tanks placed on flat bed trailers to distribute throughout the City rather than everyone gathering at the public works yard to get water.

In response to a question from Laura Ruff, Ingham said the asterisk indicates that Eugene's Emergency System is opposite from everyone else in the country.

Chief Ney said there's a federal, state, and county system, and then there's Eugene. He said we align with federal, state, and county systems but not with Eugene's system. He said their system is exactly opposite from everyone else. He said when talking with Eugene, we need to clarify that our level 1 is actually their level 4 and vice versa.

Reid said our Plan is aligned with Lane County. A level one would be something we can take care of around town and a level 3 would be the big one.

Chief Ney said we're building a book on how to set up the Emergency Operation Command Center (EOCC). He said equipment for each station will be stored in individual totes and will include a station floor plan diagram to use to set up each station.

In response to questions from Thomas Cotter, Chief Ney said the fire station has a generator but it's doesn't run the entire station (including the heat pumps) but it does provide enough electricity to keep it functional. He said their generator runs off propane, which he prefers because it can be stored for long periods of time.

Ingham said the City's generator will get the lights and computers up and running but also cannot run the heat pumps.

In response to a question from Laura Ruff, Chief Ney said the largest portable generator LFA has is 25 KW generator, which can run a fairly good sized building.

Ingham said part of the remodeling upgrades to Veneta Elementary included installing a generator switch to accommodate a large generator. He said it would run the commons and gymnasium areas as an emergency shelter. He said the Hazard Mitigation Plan also includes purchasing a generator to be put on a trailer and hauled to Veneta Elementary at a moment's notice or to be used to run wells.

Chief Ney said LFA has a verbal commitment with the Jerry Brown Co. to hook up a generator to power one of the gas/diesel pumps for filling City and emergency vehicles. However, it would not be available to the general public.

Ingham said Reid accepted a great job opportunity with OSHA so she is leaving her RARE contract early but there are still Oregon Emergency Funds available through Lane County to finish up our EOP. He said Dobrinich will stay on at the City to work on Economic Development through December and will wrap up the EOP using Oregon Emergency Funds. He said once the Council adopts the Plan it will be used as a template for small cities in Oregon including the City of Creswell.

Ingham said we're still waiting for Lane County's response and review of our Hazard Mitigation Plan (HMP) but we've got a good work plan that we provided to the University of Oregon through the Community Service Center (CSC). He said the RARE program is within that organization so it was easy to shift the contract from RARE to CSC (from Reid to Dobrinich).

Thomas Cotter said once communities start the discussion about emergency preparedness they realize how big the problem can be and then it gets overwhelming. He said that's why its important that a few people carry these out to start the structure and avoid the chaos.

Ingham said we started with the EOP and HMP but many cities break it down even further to create a continuity of operations plan and then take it a step further and create community resiliency - how do we make sure our businesses are up and running and if not, how quickly can we get our businesses back up so they are available to provide goods and services to the community. He said there are so many phases to community disaster preparedness.

In response to a question from Tim Brooker, Chief Ney said the Plan includes forms for each function so by completing the forms, a record is created.

3. ADJOURN

Mayor Larson adjourned the Veneta City Council Work Session at 6:19 p.m.

XXXXXXXXXXXXXXXXXXXX
Sandra H. Larson, Mayor

ATTEST:

XXXXXXXXXXXXXXXXXXXX
Darci Henneman, City Recorder
(Minutes prepared by DHenneman)

Minutes of the Veneta City Council

October 24, 2016

Present: Sandra Larson, Thomas Cotter, Tim Brooker, Thomas Laing, Laura Ruff

Others: Ric Ingham, City Administrator; Shauna Hartz, Finance Director; Kay Bork Community Development Director; Kyle Schauer, Public Works Director; Steve Dobrinich; Community Development Specialist; Darci Henneman, City Recorder; Joan Mariner, Fern Ridge Review

1. CALL TO ORDER THE VENETA CITY COUNCIL

Mayor Larson called the Veneta City Council to order at 6:38 p.m.

2. PUBLIC COMMENT

None

3. CONSENT AGENDA

MOTION: Thomas Cotter made a motion to approve the consent agenda as presented. Tim Brooker seconded motion.

VOTE: Thomas Laing, aye; Thomas Cotter, aye; Sandra Larson, aye; Laura Ruff, aye; Tim Brooker, aye.

The consent agenda as approved included Minutes for September 26, 2016 Joint Work Session, Minutes for September 26, 2016, Minutes for October 10, 2016, Accounts Payable To be Paid – Payable through October 18, 2016, Civic Calendar for November 2016, Annual Light Parade and Banner Permits.

4. COUNCIL BUSINESS AND REPORTS

a. Business

- (1) Lane County Sheriff's Office Activity Report
Sgt. Denham asked the Council if they had any questions.

Ingham said a few years back Sgt. Denham was one of Veneta's contract deputies for four or five years. He said Sgt. Denham has built a good relationship with the community and was the first deputy to make an appearance at the skate park.

In response to a question from Laura Ruff, Sgt. Denham said activity in Veneta has shifted. He said the amount of calls and case numbers were the same, meaning deputies are making self-generated contacts. He said as cases and calls for property crimes go down, vehicle offenses and crimes against the state increase. He said we may see the same amount of calls but many are self-generated.

In response to a question from Mayor Larson, Sgt. Denham said he's received a lot of calls about kids in the Library parking lot using a bong to smoke marijuana but deputies have been patrolling the area and no bongs or kids smoking marijuana were located. He said there's a natural flow from the Skate Park along Territorial Rd. to the Library.

In response to a question from Thomas Laing, Sgt. Denham said the Veneta contract deputies have been asked to track active patrols at the skate park, meaning they don't track the drive-bys but they do track when they get out and walk through the park and talk to people. He said those stops are actually logged as calls.

Sgt. Denham said Deputy Rich Glessner was selected to replace Deputy Blake Dornbusch, who left the Veneta patrol and went to dune patrol in Florence. He said Deputy Glessner wanted to work on community policing. Sgt. Denham said he's doing a lot of good stuff and he brings a little

more experience to Veneta. He said Deputy Jesse is training a night deputy for about three weeks and then he will move to the main office. He said he's trying to provide coverage when deputies are in training or off the clock. He said they are also working with the community neighborhood watch program to hopefully expand that program. He said the Council will get a report soon from the Veneta Neighborhood Watch group.

b. Council/Committee Liaison Reports

Thomas Laing said Mid Lane met on September 20th and they received a \$5000 grant from FEMA for emergency assistance planning. He said Mid Lane usually receives \$10,000 from United Way but to date they've received nothing. He said Mid Lane has raised about \$8500 for the kiddie pool and he provided a flyer to purchase a tile. He said a new fundraising event, March-Toberfest, will be on March 11, 2017 from 2:00 p.m. to 6:00 p.m. at the Service Center. He said Project Community Connect will be November 12th with the dental van from 11:00 p.m. to 2:00 p.m. at the Olivet Baptist Church and November 6th will be the thank you dinner at Deep Woods Event Center. He said they also plan to build a wooden fence around the community garden beds and will plant eight ft. tall arborvitae to cover a new type of fencing.

Ingham asked Thomas Laing to encourage the Mid Lane Board to please talk to City staff before they purchase any fencing materials for the community garden. He said we've asked them to submit a plan for fencing the garden.

Thomas Cotter said the new Chamber of Commerce sign is up, their computer is fixed, and the Light Parade applications have been submitted. He said as a member of the Economic Development Committee (EDC) the Work Force Development subcommittee had a good discussion but there's still a lot more work to be done. He said many local employers are somewhat frustrated with our current work force and they talked about how to make jobs more attractive. He said many local business owners felt high school aged kids don't seem to be prepared to work after high school to take over the job market due to a perceived lack of work experience. He said the subcommittee will meet again in November and are looking at getting more feedback from the other groups.

Mayor Larson said if there is an issue with career readiness, the school district should be involved.

Thomas Cotter suggested before we talk to the School District, we should wait until we have something concrete to act on and quantify what it is local employers want to see.

Thomas Cotter said he and Ingham met with Kristina Payne, Executive Director at Work Force Lane County (WFLC) and Krystina Keeney from Worksource Lane. He said they were very knowledgeable about programs that are available for Veneta residents and how WFLC applies their programs to help educate would-be workers through the Work Force program.

Ingham said the discussions around Work Force Development identified that local employers are saying that 19 to 20 year olds don't have any experience or work ethic. He said there was a lot of discussion about today's teens don't really get that true work experience before graduating from high school. He said teens today are busy with sports, clubs, and getting into college. He said it's not so much that they're not ready to work but they just haven't been exposed to work at a younger age like older generations were.

Tim Brooker said the Council has been informed that he will be submitting his letter of resignation from the City Council. He is planning to stay on through the first meeting in November. He said he and his wife are sorry to have to leave Veneta after contributing so many years of community service but it's necessary for them to move to Eugene. He said hopefully the Council can find a qualified replacement.

Mayor Larson said she is very sorry to see them leave but she's very glad that the Brookers are able to do what they're doing.

Laura Ruff said the October 15th Fall Arbor Day event was cancelled due to bad weather but it has been rescheduled for this Saturday, October 29th at the same location. She hopes to see everyone there.

Mayor Larson said she is a SMART (Start Making A Reader Today) volunteer at Veneta Elementary. She said she was reading to students during the Great Shake Up drill that took place last week. She said the kids were very prepared and it was a good exercise. Mayor Larson said the School District Bond is on track and Gary Carpenter seems to be doing an excellent job as interim superintendent and principal at the high school. She said the District has started a wellness program for staff and the average class size at Elmira Elementary is 25 students and Veneta Elementary averages 24 students per class. She said enrollment is up 19 students from the projected budget figures but down 8 students from this time last year.

5. STAFF REPORTS

a. Community Development Director.....Kay Bork

- (1) **Ordinance No. 540** – AN ORDINANCE AMENDING THE VENETA COMPREHENSIVE PLAN DIAGRAM AND VENETA ZONING MAP FROM RURAL R-RURAL RESIDENTIAL AND L-LOW DENSITY RESIDENTIAL TO M-MEDIUM DENSITY RESIDENTIAL PLAN DESIGNATION AND FROM RURAL RESIDENTIAL(RR) AND SINGLE FAMILY RESIDENTIAL (SFR) TO GENERAL RESIDENTIAL (GR) ZONE DESIGNATION for Second Reading by Title Only and Final Enactment.

Bork said tonight Ordinance No. 540 is before the Council for second reading and final enactment. She said unfortunately, the copy of Ordinance No. 540 that was included in tonight’s packet was the old version that did not include legal counsel’s recommended changes. Staff provided the Council with the correct version. Bork read the following two sections aloud that legal counsel added to the Ordinance on October 10th, prior to the first reading.

“Section 2 The Veneta Comprehensive Plan Diagram is hereby amended as follows: Assessor’s Map 17-05-31-00, Tax Lots 00400, 00501 are re-designated from Rural Residential to Medium Residential and Tax Lot 00602 is re-designated from Rural Residential and Low Density Residential to Medium Residential.

Section 3 The Veneta Zoning Map is hereby amended as follows: Assessor’s Map 17-05-31-00, Tax Lots 00400, 00501 are re-zoned from Rural Residential to General Residential and Tax Lot 00602 is re-zoned from Rural Residential and Single Family Residential to General Residential.”

MOTION: Thomas Cotter made a motion to adopt Ordinance No. 540, an Ordinance amending the Veneta Comprehensive Plan Diagram and Veneta Zoning Map from Rural Residential and L-Low Density Residential to M-Medium Density Residential Plan Designation and from Rural Residential (RR) and Single Family Residential (SFR) to General Residential (GR) Zone Designation for second Reading by Title Only and final enactment. Tim Brooker seconded the motion which passed with a vote of 5-0.

Ordinance No. 540 was read into the record for second reading by title only and final enactment.

- (2) Transportation System Plan Update
Bork said the Oregon Dept. of Transportation (ODOT) has agreed to fund an update to the City’s Transportation System Plan (TSP). She said ODOT contracted with DKS Consultants to provide assistance with the update. She said DKS has worked on the Fern Ridge Highway Corridor Plan and Lane County’s TSP project. She said staff is also advertising for volunteers to serve on a Citizen Advisory Committee (CAC). Staff asked the Council to consider appointing one or two Councilors to serve on the Committee and will also request the Planning Commission appoint two members. She said staff is hoping to recruit at least three to five citizens for a seven to nine member CAC. She said CAC members will not be appointed until December.

Thomas Cotter suggested waiting until after the election to see what happens and hopefully by then Tim Brooker's Council position will be filled.

In response to a question from Thomas Cotter, Bork said staff thought a seven to nine member committee would be a good fit. She said with one to two Councilors and Planning Commissioners that would leave five or so citizen positions.

Ingham said transportation means a lot of things; freight, passenger, commercial, pedestrian and bicycle and hopefully we can get community members with some of those transportation views to serve on the committee.

In response to a question from Mayor Larson, Bork said she's working on possibly recruiting one or more Park Board members and she plans to outreach to the school district.

Mayor Larson said it would be nice to see a student representative on the committee.

Ingham said we'll get the information to Veneta Elementary and maybe a teacher or staff person would be interested in serving on the committee.

Bork said it would also be nice to have a senior perspective; someone from the Service Center and/or with an Americans with Disabilities Act (ADA) perspective. She said she will be outreaching to those groups as well.

b. Public Works Director.....Kyle Schauer

(1) Award of Contract for the City of Veneta 3rd St. Water Line Project

Schauer said originally this was the water part of the 2nd and 3rd St. project that went out for bid last summer but only one very high bid was received. Based on direction from the Council, he split that project into the water part and the street part. Schauer said on October 6th the bidding closed for the water portion of the project to install a water line from Broadway Ave. to Hunter Rd. He said this water project was also included in the Water Master Plan to provide for better circulation. Schauer said we received seven bids on this project, ranging from \$167,403 to a low bid of \$117,528 from Durbin Excavating. He said Branch Engineering reviewed the bids and determined that Durbin's bid was the most responsive and they recommended we award the contract to Durbin. He said we contracted with Durbin to excavate the Service Center site and they also worked on the recent remodel at Veneta Elementary. Schauer would also like to include a 10% contingency in the contract for a total amount not to exceed \$130,000.

MOTION: Thomas Cotter made a motion to authorize City staff to enter into contract with Durbin Excavating, Inc. to construct the 3rd St. Water Line Project for an amount not to exceed \$130,000. Thomas Laing seconded motion which passed with a vote of 5-0.

In response to a question from Mayor Larson, Schauer said this project is considered a capital improvement because it is bringing current service to today's standards by improving flow. He said the service lines in this area are very long and round-about and the last Master Plan included increasing the flow capacity in the center of town. He said this area is considered underflow as far as fire flow standards go. He said this project will also increase the reliability of the water flow and make the water lines shorter.

(2) Update on Wastewater Treatment Plant

Schauer said he has nothing new to report since the last Council meeting. He said a lot of flow came in from the storms as well as a small concentration of contaminant. He said he's not sure how much contaminant came in nor how it's affecting us but the ponds are currently stable. He said there's still room for improvement and he will continue to work on keeping the system stable.

He said for the last couple of weeks, he hasn't seen anything like previous contaminant levels.

In response to a question from Mayor Larson, Schauer said while he was protecting the good pond and public works cleaned the bad pond, the water was ran back through the plant and, so far, both ponds are handling it fine. He said he is seeing traces of something but it could be from bypassing the water. He said it may be there for a while until we decrease the level of the surge pond but for now, nothing is really hindering us.

Schauer said we had enough dilution with almost 8 inches of rain, we had to run water from the surge pond because it was at a high level.

Ingham said we were invited to submit an application to Infrastructure Authority (IFA) for a \$20,000 reimbursement grant for additional testing. He said Mayor Larson signed the application and it's being routed through the process. He said its difficult to do any testing with the water levels so high.

In response to a question from Laura Ruff, Ingham said the dilution would eliminate the ability to test for specific contaminates.

In response to a question from Mayor Larson, Ingham said the \$20,000 grant from IFA is a reimbursement grant – meaning, if we need to incur any testing costs we would use City money and then be reimbursed with grant funds.

In response to a question from Tim Brooker, Schauer said as the flows diminish, if we start seeing the contaminant again, we will use those grants to the fullest extent to track it down and trace the contaminant to hopefully find out what it is. He said as far as long term, the technology isn't out there to identify the contaminant if it stops coming in. He said the last time he thought he saw it coming back, they turned up the air to the pond and that seemed to work.

In response to a question from Mayor Larson, Schauer said he's not sure what long term effect, if any, turning up the air has on the ponds. He said he saw a few issues, which may be due to the air but he can't be certain of that.

In response to questions from Ingham, Schauer said we can adjust the blowers a little bit to change the air flow from one pond to the next. He said the good pond is low on air and it seems to be doing fine, so he doesn't want to fiddle with it. Schauer said the new piping system was installed last year and if we were operating under the old system, this likely would have been a bigger issue; any extra air would not have been possible.

Mayor Larson said many people may not realize how important it is to know how the system can be effected.

Ingham said staff spoke with Sanipac and they are willing to do a hazardous material collection day in Veneta. He said we have a couple of months to figure that out.

- c. City Administrator.....Ric Ingham
 - (1) Questions from Councilors
 - None

6. OTHER

Ingham said the Council has been informed that staff has been working on a broadband demand survey to gauge the level of interest residents have in additional internet providers and what residents would be willing to pay for that service. He said recently staff met with a broadband company that is looking at a unique wireless project and they felt this information would be helpful to develop their business model. He said we'll make this available to anyone that is considering expanding their broadband services. He said we've talked in the past about LCOG's offers to all members a free survey tool – the MindMixer tool. He

said staff felt this was the right project and survey. He said Steve Dobrinich worked through the format and LCOG was pleased with how the survey was formatted, the nature of the questions, etc.

Dobrinich reviewed how to take the survey, what the survey is for, and why the City is conducting the survey.

In response to a question from Laura Ruff, Ingham said hard copies of the survey will also be provided.

In response to a question from Thomas Cotter, Dobrinich said currently there are nine questions on the survey.

In response to a question from Thomas Cotter, Ingham said information about the on-line survey and where hard copies can be found, will be in the upcoming City newsletter, included at the bottom of the water bill, and we'll provide a display at the library to show how to take the survey on-line or fill out a hard copy.

Tim Brooker said he felt most people that are interested in better broadband, would take the time to take the survey on-line.

Ingham said the on-line survey would collect the demographic information and is intended to identify who is taking it; the demand from inside City limits as well as outside City limits.

In response to a question from Mayor Larson, Ingham said LS Network's broadband relies on existing infrastructure, cable, etc. They heard today about some amazing things that are out there using wireless connections.

In response to a question from Thomas Cotter, Dobrinich said generally on-line surveys are a very useful tool and are very good at culminating the information and creating some good graphics. He said it would be a good test to learn more about the demand of the community.

After a brief discussion, it was the consensus of the Council to use the MindMixer on-line survey and also provide hard copies of the survey to be completed.

Ingham said staff would like to get the Wastewater Master Plan to the Council for adoption at the November 14th meeting. He said because the second Council meeting falls on the Monday after Thanksgiving, the Council will likely only have one meeting in November and that schedule would likely repeat in December, with one meeting on December 12th.

7. ADJOURN

Mayor Larson adjourned the Veneta City Council at 7:35 p.m.

XXXXXXXXXXXXXXXXXXXX
Sandra H. Larson, Mayor

ATTEST:

XXXXXXXXXXXXXXXXXXXX
Darci Henneman, City Recorder
(Minutes prepared by DHenneman)

Invoice #	Inv Date	Amount	Quantity	Pmt Date	Description	Reference	Task	Type	PO #	Close POLine #
	LanCoEnv Total:	305.00								
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LanEle Lane Electric Coop Inc										
42002 10/16	10/28/2016	89.58	0.00	11/15/2016	Community Center		-		No	0000
130-530-51035	Electricity-Community Center									
	42002 10/16 Total:	89.58								
42007 10/16	10/28/2016	136.17	0.00	11/15/2016	Hwy 126 Welcome Sign		-		No	0000
100-100-51100	Welcome Sign Maintenance									
	42007 10/16 Total:	136.17								
42008 10/16	10/28/2016	4,167.28	0.00	11/15/2016	Wastewater Treatment Plant		-		No	0000
220-220-51035	Electricity									
	42008 10/16 Total:	4,167.28								
42009 10/16	10/28/2016	148.41	0.00	11/15/2016	Bolton Hill Reservoir		-		No	0000
210-210-51035	Electricity									
	42009 10/16 Total:	148.41								
42013 10/16	10/28/2016	323.50	0.00	11/15/2016	Huston/Tidball pump		-		No	0000
210-210-51035	Electricity									
	42013 10/16 Total:	323.50								
St Lts 10/16	10/28/2016	824.38	0.00	11/15/2016	Various Street Lights		-		No	0000
230-230-51035	Electricity-Street Lights									
	St Lts 10/16 Total:	824.38								
	LanEle Total:	5,689.32								
<hr/>										
LanFor Lane Forest Products										
1846960(PO4996) 10/31/2016		140.00	0.00	11/15/2016	City Hall roundabout landscaping		-		No	0000
100-100-51085	Miscellaneous/Discretionary									
	1846960(PO4996) Total:	140.00								
	LanFor Total:	140.00								
<hr/>										
LillMari Lill Marian										
2016 11/02/2016		125.00	0.00	11/15/2016	Arbor Day Event - Apple pressing		-		No	0000
100-180-51115	Urban Forestry Activities									
	2016 Total:	125.00								
	LillMari Total:	125.00								
<hr/>										
MidSta Mid-State Industrial Svc										
166863 10/20/2016		1,930.00	0.00	11/15/2016	Monthly Contract		-		No	0000
230-230-53150	Street Sweeping Contract									
	166863 Total:	1,930.00								
	MidSta Total:	1,930.00								
<hr/>										

Invoice #	Inv Date	Amount	Quantity	Pmt Date	Description	Reference	Task	Type	PO #	Close POLine #
	SchKyl Total:	50.00								
<hr/>										
SchlJeff Schlageter Jeffrey										
FP-1-16	10/31/2016	269.21	0.00	11/15/2016	Return balance of Planning Deposit		-		No	0000
140-140-51105	Refunds-Land Use Appl									
	FP-1-16 Total:	269.21								
	SchlJeff Total:	269.21								
<hr/>										
SpeHoy Speer Hoyt LLC										
37848	10/31/2016	351.50	0.00	11/15/2016	General Legal Services		-		No	0000
100-100-52010	Attorney & Legal Services									
	37848 Total:	351.50								
37849	10/31/2016	296.00	0.00	11/15/2016	General Legal Services		-		No	0000
100-100-52010	Attorney & Legal Services									
	37849 Total:	296.00								
37850	10/31/2016	111.00	0.00	11/15/2016	General Legal Services		-		No	0000
100-100-52010	Attorney & Legal Services									
	37850 Total:	111.00								
37851	10/31/2016	92.50	0.00	11/15/2016	General Legal Services		-		No	0000
100-100-52010	Attorney & Legal Services									
	37851 Total:	92.50								
37851planning	10/31/2016	111.00	0.00	11/15/2016	General Legal Services		-		No	0000
140-140-52010	Attorney & Legal Services									
	37851planning Total:	111.00								
	SpeHoy Total:	962.00								
<hr/>										
Sprint Nextel Communications										
886952530-131	10/27/2016	39.56	0.00	11/15/2016	Cell phones - Oct 2016		-		No	0000
100-100-51030	Telephone Services									
886952530-131	10/27/2016	39.54	0.00	11/15/2016	Cell phones - Oct 2016		-		No	0000
130-130-51030	Telephone Services									
886952530-131	10/27/2016	59.31	0.00	11/15/2016	Cell phones - Oct 2016		-		No	0000
210-210-51030	Telephone Services									
886952530-131	10/27/2016	59.31	0.00	11/15/2016	Cell phones - Oct 2016		-		No	0000
220-220-51030	Telephone Services									
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230-230-51030	Telephone Services									
	886952530-131 Total:	237.26								
	Sprint Total:	237.26								
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CITY OF VENETA - CIVIC CALENDAR - DECEMBER 2016

Veneta Administrative Center - 88184 8th Street, Veneta, Oregon

1	Tree Lighting - Veneta Elementary - 88131 Territorial Rd.		Santa at 6:00 p.m. Tree Lighting at 6:30 p.m.
6	Veneta Planning Commission Meeting - City Hall		6:30 p.m.
7	Veneta Park Board Meeting - City Hall		4:30 p.m.
8	Light Parade (See reverse for parade route)		7:00 p.m.
12	Veneta City Council Meeting - City Hall Veneta Urban Renewal Agency Meeting - Immediately following City Council Meeting		6:30 p.m.
14	Veneta Economic Development Committee Meeting - City Hall		2:00 p.m.
15	Municipal Court - City Hall		8:30 a.m.
26	City Hall closed in Observance of Christmas Holiday		Closed
26	Veneta City Council Meeting - City Hall		Cancelled
	Calendar updates will be posted on the City's website at www.venetaoregon.gov This Civic Calendar was sent to: Fern Ridge Review, Fern Ridge School District 28J, Fern Ridge Public Library, and Lane Fire Authority		

All City of Veneta Ordinances are available for review at City Hall (88184 8th St.) prior to and after City Council adoption

PARADE ROUTE AND PARKING DETAILS



City of Veneta
M E M O R A N D U M

Date: October 20, 2016
To: City Council
From: Kyle Schauer, Public Works Director
Subject: Monthly Significant Activities Report for September 2016

Water

Monthly water production: Wells-12.264 MG, EWEB-6.682 MG.

Total of 18.946 MG.

Installed two new meters.

Rebuilt one meter.

Repaired two service line leaks.

Took five bacteriological samples. All were negative.

Performed 62 service calls.

Performed 16 shut offs for non-payment.

Installed new operating valve on Bulk Water Station.

Wastewater

Took five influent and five effluent samples of treatment plant.

Unknown substance continued to enter WWTP and kill off all biological function but have been able to counter and keep plant functional.

West basin still online and working well.

Spoke with many professionals about sewer issue. Met with Oregon Association of Water Utilities circuit rider to inspect WWTP. He could not suggest anything that we are not already doing.

Monitored Jeans and Pine Street lift pump stations.

Made repair to small reel irrigator's motor.

Cut back blackberries on WWTP driveway and fence.

Drained and removed grit from west cell at WWTP.

Made repairs to aeration swings and replaced all aeration sleeves in west aeration pond.

Brought west cell back online.

Street/Storm Drainage

Issued zero Right of Way Construction Permits.

Replaced/repared six street signs.

Removed signs from Right of Ways.

Trimmed trees to accommodate construction equipment along entire Pavement Preservation Project site.

Contractor began work on 2016 Pavement Preservation Project.

Parks & Recreation

Cleaned parks weekly.

Mowed all parks weekly.

Closed down Veneta Community Pool for the year.

Turned down chemical systems and pumps at pool for winter.

Installed winter pool cover.

Re-built pedestrian bridge at Oak Island Park.

Removed several dead trees from City Park.

Rebuilt picnic table at Oak Island Park.

Other

Completed 14 miscellaneous service orders.

Performed 22 utility locates.

Community center use: paying-eight, non-profit-seven.

Building Permits: Zero

Certificates of Occupancy issued: Four

Public Works received FEMA Incident Command System 700 training.

Assisted with set up of Harvest Festival.

Re-painted all City owned handicap parking spaces.

City of Veneta
M E M O R A N D U M

Date: November 8, 2016
To: City Council
From: Kyle Schauer, Public Works Director
Subject: Monthly Significant Activities Report for October 2016

Water

Monthly water production: Wells-5.059 MG, EWEB-6.887 MG.

Total of 11.946 MG.

Installed two new meters.

Rebuilt one meter.

Repaired two service line leaks.

Took five bacteriological samples. All were negative.

Performed 80 service calls.

Performed 23 shut offs for non-payment.

Installed new operating system for Bulk Water Station.

Awarded bid for 3rd Street water line project.

Repaired roof of Well #4 building.

Wastewater

Took five influent and five effluent samples of treatment plant.

Unknown substance continued to enter WWTP and kill off all biological function but have been able to counter and keep plant functional.

Monitored Jeans and Pine Street lift pump stations.

Re-installed the floating weir in the east clarifier.

Began discharging to river.

Removed spool irrigators and prepared for winter.

Street/Storm Drainage

Issued zero Right of Way Construction Permits.

Replaced/repared eight street signs.

Removed signs from Right of Ways.

Contractor completed work on 2016 Pavement Preservation Project.

Cleaned out catch basins around town.

Trimmed back street trees in ROW of Fern Meadows.

Removed blackberries from ROW of Jack Kelley Drive, E. Hunter, and Sertic Road.

Inspected and cleared City owned waterways and detention ponds.

Began leaf pick-up program.

Parks & Recreation

Cleaned parks weekly.

Mowed all parks weekly.

Prepared pool buildings for winter.

Removed leaves from all parks.

Other

Completed 8 miscellaneous service orders.

Performed 31 utility locates.

Community center use: paying-seven, non-profit-six.

Building Permits: Zero

Planted new landscaping at City Hall parking lot.

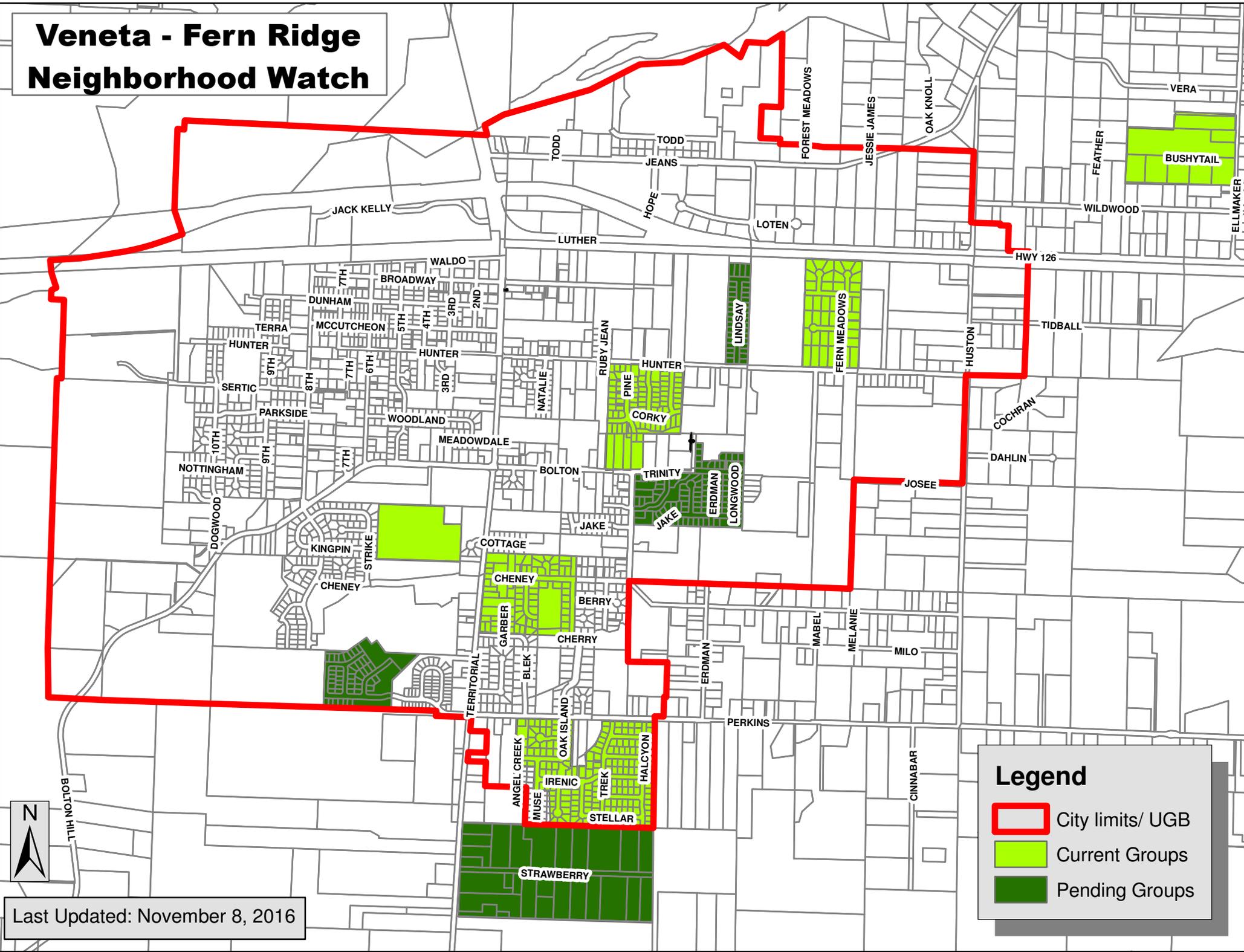
Certificates of Occupancy issued: Zero

Public Works received FEMA Incident Command System 100 training.

Began remodeling break room at City Hall.

Kyle Schauer and Ric Ingham received FEMA Incident Command System 300 and 400 training in Salem.

Veneta - Fern Ridge Neighborhood Watch



Last Updated: November 8, 2016

Legend

-  City limits/ UGB
-  Current Groups
-  Pending Groups

Current Fern Ridge/Veneta Neighborhood Watch Groups:

1. HUNTER HEIGHTS: 14 members - Captain Cathy Cole
Street Location: Pine, Llama, Crystal, Corky.
2. PERKINS COUNTRY ESTATES: 16 members - Captains Liz Killam and Robbie McCoy
Street Location: Oak Island, Legacy Court, Allure, Irenic, Trek, Halcyon, Stellar, Tyro, Stellar Court.
3. SHALIMAR COUNTRY ESTATE MOBILE HOME PARK: 16 homes participating -
Captains Milton Campbell, Terry & Sheri Thiesfeld
Location: 16 homes inside the mobile home park.
4. FERN VIEW: 10 members - Captain Karen Reister
Street Location: Fern Meadows, Eastwood, Westwood, Laro.
5. BUSHY TAIL LANE (outside City limits): 4 members (unconfirmed) - Captain Dave Quirk
Location: Bushy Tail Lane off Elmaker
6. PATROL GROUP: - 8 members - Captain Dave Quirk
 - Cover mostly City of Veneta. Sometimes, depending on crime activity, will patrol areas surrounding the city and even into Elmira on occasion.
 - Primarily patrol an area depending on requests from local citizens. Patrol Group has been focusing efforts alongside school busses and school zones a couple times a week.
 - Group coordinates with the sheriff's office (S.O.) for when there will be no deputy coverage. When this happens, patrol members make an effort to fill in the gap.

NEIGHBORHOOD WATCH GROUPS THAT ARE CURRENTLY FORMING:

1. APPLGATE LANDING: residents have reached out wanting to form a group.
2. STRAWBERRY LANE (outside City limits): a former NW Captain will be starting a group that consists of most of the houses on Strawberry Lane.
3. TRINITY TERRACE: a resident of the area has agreed to start a group, including streets: Crossword, Jake, Erdman and Longwood.
4. LINDSAY LANE: - another resident has volunteered to start a group, including streets: Lindsay, East Broadway and Christopher Road.

FINANCIAL NEED:

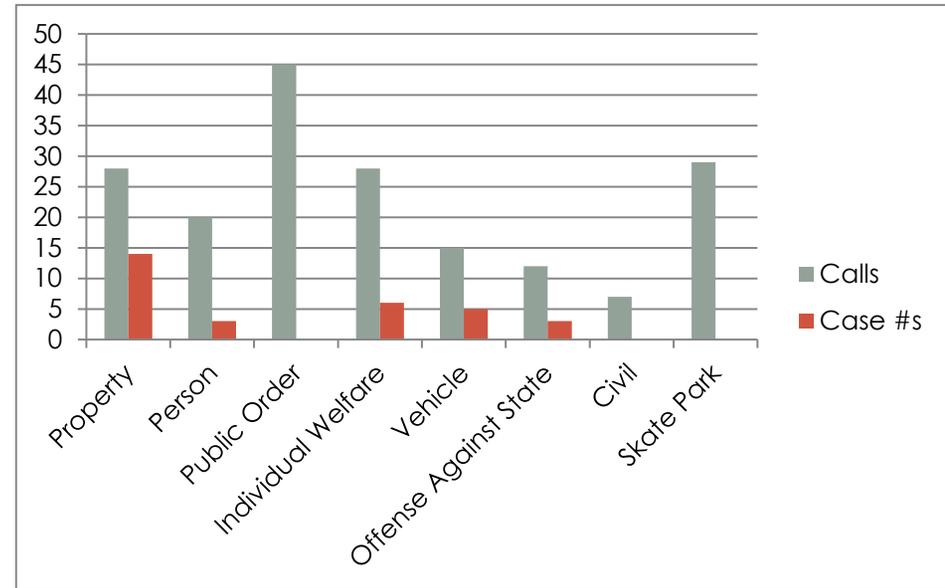
1. The four new Neighborhood Watch Groups will need signage. Some of these neighborhoods have multiple streets/entrances, one group could need 2-3 signs. A few of the streets and potential groups only have one entrance. **Likely need of 10 new street signs.**
2. The Patrol Group continues to expand. The Group has two additional members without car decals. The expectation is that 5-6 new members will be added this next year. **Likely need of 5 -7 sets of car decals.**

City of Veneta Monthly Police Activity- October 2016

Prepared by Sgt. Scott Denham, LCSO

Calls for Service by Incident Types:

<u>Incident Type</u>	<u>Calls</u>	<u>Case #s</u>
<u>Property</u>	28	14
<u>Person</u>	20	3
<u>Public Order</u>	45	0
<u>Individual Welfare</u>	28	6
<u>Vehicle</u>	15	5
<u>Offense Against State</u>	12	3
<u>Civil</u>	7	0
<u>Skate Park</u>	29	0
<u>Total</u>	184	31



Property (Thefts, Criminal Mischief, Trespass)

Person (Assaults, Menacing, Harassment, Viol. Restraining Order)

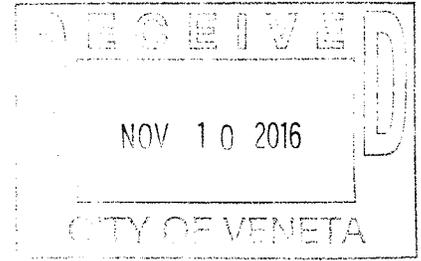
Public Order (Disorderly Subjects, Suspicious Vehicles/Persons)

Individual Welfare (Welfare Checks, Missing Persons, Overdose, Suicidal Subjects)

Vehicle (DUII, DWS, Illegal Parking/Vehicles, Traffic Hazard)

Offense Against State (Drug, Warrants)

Civil (Civil Service, Eviction Process)



November 9, 2016

Timothy J. Brooker
24796 Sertic Rd
Veneta, OR 97487

RE: Resignation from City Council

Dear Mayor Larson & Council Members,

It is with my deepest regret that do to medical issue that I need to resign from the Veneta City Council effective November 15, 2016. It is my hope that a qualified replacement can be found in time for them to be sworn-in in January along with the other newly elected officials.

I've enjoyed my 23 plus years on the Council. I feel we accomplished a lot in that time, and I hope my contribution has helped shape Veneta into the City that it is today.

While Inez and I will no longer reside in Veneta we plan to stay involved with volunteer activities and stay connected to the community. Please let me know if there is any assistance I can provide during the transition in selecting the replacement for the last two years of my term.

Sincerely,

A handwritten signature in black ink, appearing to read "T.J. Brooker". The signature is fluid and somewhat stylized, with a large loop at the end.

T.J. Brooker

VENETA CITY COUNCIL

AGENDA ITEM SUMMARY

Title/Topic: Emergency Operations Plan Adoption

Meeting Date: November 14, 2016
Department: City Administration

Staff Contact: Steve Dobrinich
Email: sdobrinich@ci.veneta.or.us
Telephone Number: 541-935-2191 Ext. 316

ISSUE STATEMENT

Staff is presenting an update on the City of Veneta/Lane Fire Authority Emergency Operations Plan (EOP) and asking City Council to discuss formal adoption of the Plan. The Plan was last reviewed by Council during the October 24th work session.

BACKGROUND

The City of Veneta has recognized the necessity of having an Emergency Operations Plan (EOP). The result is an all-hazards Plan that describes how the City of Veneta and Lane Fire Authority will organize and respond to emergencies in the City and surrounding area.

The EOP is designed to be flexible, adaptable, and scalable. It consists of a Basic Plan, Essential Support Function Annexes, and an Appendix. The EOP provides the framework and guidance for coordinated response and recovery tasks for incidents of all sizes beyond the scope of a single agency. For larger scale incidents, the Plan describes integration with County, State, and Federal organizations.

The City has formally adopted and is in compliance with the National Incident Management System, and the National Planning Framework. The Plan will be revised and updated as needed.

RELATED CITY POLICIES

- A. N/A

COUNCIL OPTIONS

- A. Adopt Emergency Operations Plan as presented or with minor revisions.
- B. Provide comments and suggestions for staff to make in the coming weeks and request to review Plan further before adoption.
- C. Reject changes and continue without an Emergency Operations Plan in place.

CITY ADMINISTRATOR'S RECOMMENDATION

- A. Adopt the City of Veneta/Lane Fire Authority Emergency Operations Plan as presented.

SUGGESTED MOTION

“I make a motion to adopt the City of Veneta/ Lane Fire Authority Emergency Operations Plan as presented.”

ATTACHMENTS

- A. City of Veneta/Lane Fire Authority Emergency Operations Plan



City/LFA Emergency Operations Plan



Adopted:	
Updated:	

Prepared for:
The City of Veneta &
Lane Fire Authority



This document was prepared under Grant No: 15–264 from the State Homeland Security Program, Federal Emergency Management Agency, and through the Oregon Military Department, Office of Emergency Management. Points of view or opinions expressed in this document are those of the authors and do not necessarily represent the official position or policies of the Office of Emergency Management or FEMA.

Funding for this plan is from the State Homeland Security Grant Program, Federal Emergency Management Agency, and through the Oregon Military Department, Office of Emergency Management. Additional funding was assigned from the City of Creswell to Veneta to produce a template of the plan. Preparation was done by Julie Reid, MPH - 2016 UO RARE Participant.

Letter of Proclamation

CITY OF VENETA

To All Recipients:

The City Council promulgates this Emergency Operations Plan (EOP) for the City of Veneta. This EOP provides the structure for the City of Veneta to conduct response and short-term recovery emergency operations. This is an all-hazards plan that describes best practices for managing incidents that range from serious but local to a large-scale disaster. It identifies the key functions and tasks of management and operations, and multi-agency coordination. The City has formally adopted and is in compliance with the National Incident Management System, and the National Planning Framework.

This Plan has been approved by the City Council. It will be revised and updated as needed. The City Administrator is to be advised of any changes that might result in its improvement or increase its effectiveness, and will subsequently be forwarded to those on the distribution list.

Mayor and Council Members:

Sandra H. Larson, Mayor _____ Thomas Laing, City Councilor _____

Thomas Cotter, Council President _____ Laura Ruff, City Councilor _____

Tim Brooker, City Councilor _____ _____

Letter of Proclamation

LANE FIRE AUTHORITY

To All Recipients:

The Board of Directors promulgates this Emergency Operations Plan (EOP) for the Lane Fire Authority. This EOP provides the structure for the Lane Fire Authority to conduct response and short-term recovery emergency operations. This is an all-hazards plan that describes best practices for managing incidents that range from serious but local to a large-scale disaster. It identifies the key functions and tasks of management and operations, and multi-agency coordination. The Lane Fire Authority has formally adopted and is in compliance with the National Incident Management System, and the National Planning Framework.

This Plan has been approved by the Board of Directors. It will be revised and updated as needed. The Fire Chief is to be advised of any changes that might result in its improvement or increase its effectiveness, and will subsequently be forwarded to those on the distribution list.

Board Members:

_____	_____
_____	_____
_____	_____

Preface

November, 2016

The City Council of Veneta and the Board of Directors for the Lane Fire Authority have recognized the necessity of having an Emergency Operations Plan (EOP). The result is an all-hazards plan that describes how the City of Veneta and Lane Fire Authority will organize and respond to emergencies in the city and surrounding area.

Funding for this plan is the result of a grant from the State Homeland Security Grant Program, Federal Emergency Management Agency, and through the Oregon Military Department, Office of Emergency Management. Additional funding was assigned from the City of Creswell to Veneta to produce a template of the plan. In addition, Veneta and Creswell will collaborate on a Tabletop exercise to test the plan. It is the wish of the City/LFA that this plan, tailored toward the characteristics of this area and population, be of benefit to other small cities in their emergency preparedness efforts.

This EOP is designed to be flexible, adaptable, and scalable. It consists of a Basic Plan, Essential Support Function Annexes, and an Appendix. This EOP provides the framework and guidance for coordinated response and recovery tasks for incidents of all sizes beyond the scope of a single agency. For larger scale incidents, the plan describes integration with County, State, and Federal organizations.

Ric Ingham, City of Veneta Administrator

Chief Terry Ney, Lane Fire Authority

Emergency Operations Plan

Table of Contents

LETTER OF PROCLAMATION.....	I
LETTER OF PROCLAMATION.....	II
PREFACE.....	III
CONTENT SUMMARY	1
Part I – Basic Plan.....	1
Part II - Essential Support Function Annexes.....	1
Part III - Appendix.....	1
1. MISSION, PURPOSE AND SCOPE OF PLAN	2
1.1 Mission.....	2
1.2 Purpose and Scope.....	2
2. ADMINISTRATION OF PLAN (NON-EMERGENCY).....	3
2.1 Record of Plan Changes.....	3
2.2 Distribution List.....	4
2.3 Review Assignments.....	5
2.4 Training Requirements.....	6
3. SITUATION AND PLANNING ASSUMPTIONS	7
3.1.1 The Government of Veneta.....	7
3.1.2 Lane Fire Authority.....	7
3.2 Employees, Essential Employees, and Family Safety	7
3.3 Community Profile of Veneta.....	8
3.3.1 – Lane Fire Authority Profile.....	12
3.4 Planning Assumptions	12
3.5 Other Agency Plans	13
3.6 Nongovernmental and Other Organizations	13
3.7 Access and Functional Needs Populations.....	14
3.8 Children	14
3.9 Animals.....	14
4. HAZARDS.....	15
4.1 Types of Hazards	15
4.2 Hazard Mitigation Plan Risk Results	15
5. CONCEPT OF OPERATIONS	16
5.1 All - Hazard Planning	16
5.1.1 Activation.....	16
5.2 Priorities in Response and Short-Term Recovery.....	16
5.3 Phases of an Emergency	17
5.4 Incident Levels.....	18
	2

5.5 Federal Emergency Management Levels.....	20
5.6 The Incident Command System Model	20
5.7 Interoperability.....	21
5.8 Communications – Plain Language	21
5.9 Resource Management in the EOC.....	21
5.9.1 Resource Typing	21
5.10 Volunteer and Donation Management	22
6. THE EMERGENCY OPERATIONS CENTER.....	23
6.1 Purpose and Function of the EOC	23
6.2 Location	23
6.3 Set-up.....	23
6.4 Activation.....	24
6.5 Actions.....	24
6.6 Alert and Warning Systems	25
6.7 Lead Agencies by Incident.....	25
6.8 Common Operating Picture	26
6.9 Evacuations	26
6.10 Access	26
6.11 Shift Changes	27
6.12 Demobilization.....	27
7. THE CITY/LFA EMERGENCY MANAGEMENT ORGANIZATION	28
7.1 The City/LFA EMO.....	28
7.2 Executive Group Roles and Responsibilities	28
7.2.1 Declaration of Emergency	29
7.3 City Administrator and Fire Chief Roles and Responsibilities.....	30
7.4 Incident Response Group.....	30
7.5 Management by Objective	30
7.6 Unified Command.....	31
7.7 Multi–Agency Coordination System (MACS)	31
7.8 Joint Information Center	31
7.9 County Response and Assistance.....	32
7.10 State Response and Assistance	32
7.11 Federal Response and Assistance	32
7.12 Lines of Succession.....	33
7.13 Other Departments and Functions.....	33
7.14 Evaluation and After Action Review	34
8. AUTHORITIES AND MUTUAL AID	35
8.1 Mutual Aid Agreements.....	35
8.2 Legal Authorities	35

Tables

Table 1– Record of Plan Changes.....	3
Table 2–Distribution List.....	4
Table 3–Review Assignments	5
Table 5–Training Requirements.....	6
Table 6–Community Profile for Veneta.....	8
Table 7–CIKR, Veneta.....	8
Table 8–Medical	10
Table 9–Access and Functional Needs Populations.....	10
Table 10–Human Resources	12
Table 11–Hazard Threat Analysis.....	15
Table 12–EOP Escalation Activations	19
Table 13–Activation Characteristics.....	19
Table 14–ICS Model.....	20
Table 15–EOC Locations.....	23
Table 16–Lead Agencies by Incident.....	25
Table 17–Lines of Succession.....	33
Table 18–Essential Records Packet Access	34
Table 19–MAA’s	35
Table 20–Legal Authorities	35

Part I – Basic Plan

Content Summary

Part I – Basic Plan

1. Mission, Purpose and Scope
2. **Non-Emergency Administration of Plan** – Records of changes, distribution of plan, review, and training requirements.
3. **Situation and Assumptions** – The state of the City and surrounding area, and likelihoods during an incident regarding city services. Identification of critical infrastructure and key resources, access and functional needs persons, and support personnel.
4. **Hazards**- A summary of the Hazard Mitigation Plan (HMP) to recognize relevant hazards in the area.
5. **Concept of Operations** – Covers components of NIMS, such as incident levels, response priorities, interoperability, and the Incident Command System (ICS).
6. **The Emergency Operations Center** – Explains the processes and functions of incident management such as activation, the alert system, and demobilization.
7. **City/LFA Center Management Organization** – Explains the roles and responsibilities of the City/LFA Emergency Management Organization at each levels of activation of the EOP and the Emergency Operations Center (EOC), how the local government and LFA will transition and integrate with outside agencies, and the tasks and responsibilities of the Emergency Response Group.
8. **Authorities and Mutual Aid** – Recognizes the legal basis for emergency operations and activities, and lists mutual aid agreements.

Part II - Essential Support Function Annexes

Essential Support Function (ESF) Annexes – The Annexes are detailed, function specific interagency operational plans. Annexes identify primary and support agencies, critical tasks and responsibilities, and checklist of duties. The Annexes give specific provisions for the rapid integration of personnel and resources when the EOC is activated. ESF's double as the Core Capabilities in the National Response Framework.

Part III - Appendix

Appendix – This section includes: Acronyms, Glossary, Maps, Charts and Forms.

FREQUENT ACRONYMS:

EOC - Emergency Operations Center

ICS – Incident Command System

ESF – Essential Support Function

MAA – Mutual Aid Agreement

1. Mission, Purpose and Scope of Plan

1.1 Mission

It is the mission of the City of Veneta and Lane Fire Authority to ensure that it is prepared for an emergency through efficient and effective response and short-term recovery activities that will minimize loss of life and reduce impacts on property and the environment. Our mission is based on and is in alignment with the five mission areas as defined by PPD-8¹: Protection, prevention, mitigation, response and recovery.

1.2 Purpose and Scope

Routine emergencies are effectively handled in Veneta and within the Lane Fire Authority District every day by emergency responders as part of their daily responsibilities. The purpose of this EOP is to provide a plan for the incidents that exceed the capacity of these resources. The result is an all-hazard approach that includes natural or human-caused emergencies and incidents. These occurrences could impact unincorporated areas surrounding the City, incorporated areas, or both. Although no plan can anticipate all situations and conditions of an emergency, this plan provides the framework and guidance to effectively manage and support a city or area-wide incident. No guarantee of a perfect response system is expressed or implied by this plan. This plan is also appropriate for larger or more complex non-emergency events.

Oregon Revised Statutes Chapter 401.032(2) states that it is the policy and intent of the Legislative Assembly that preparations for emergencies and governmental responsibility for responding to emergencies be placed at the local level. Nonetheless, every person who lives or works in the City or local area shares responsibility for creating a resilient community. This includes awareness of local hazards, and taking proactive measures to prepare. To the extent it is possible, the City/LFA will assist its citizens by providing preparedness information, emergency public information, and critical public services during an emergency. However, a major emergency is likely to damage critical infrastructure, reduce the workforce, and strain resources. Prepared citizens who are able to care for themselves, their families, and their neighborhood, will make a significant contribution towards preparedness and community resiliency.

The Emergency Operations Plan is a public document that contains the basic plan, functional annexes, and appendices. The Essential Records Packet is a separate document that contains personnel contact information, inventory lists, access codes and other confidential information that will be accessed only by key officials.

¹ Presidential Policy Directive/PPD-8: National Preparedness

2. Administration of Plan (Non-Emergency)

The City Administrator and Fire Chief are the NIMS point of contact for the City of Veneta and Lane Fire Authority, respectively. The Administrator/Fire Chief are also responsible for the distribution of the Plan to the appropriate agencies, documentation of changes and to oversee plan review assignments. This Plan has been promulgated by the City Council and Board of Directors and will be reviewed and updated every three years or when significant changes occur. Confidential information or that requiring frequent updating will be available in the Master EOP maintained by the City Administrator and Fire Chief, and available at the Emergency Operations Center. Changes to the Annexes and Appendices, and non-substantive changes to the Basic Plan, may be made by the City Administrator and Fire Chief without formal Council/Board approval.

The following three forms pertain to the maintenance of the plan.

2.1 Record of Plan Changes

All updates and revisions to the Plan will be tracked and recorded in the following table to ensure that the most recent version of the plan is used. Copy date on to Basic Plan Cover for quick reference.

Table 1– Record of Plan Changes

Date	Change No.	Department	Summary of Change
11/2016	Original EOP	City Administrator’s Office	No Prior EOP
11/2016	Original EOP	Fire Chief, LFA	No Prior EOP

2.2 Distribution List

Copies of this EOP will be provided to the following list by the City Administrator/Fire Chief. Recipients will be responsible for updating their EOP when they receive changes. Distribution and updates will be done electronically unless otherwise specified.

Table 2–Distribution List

Agency/Organization	Title
Lane Fire Authority	Board of Directors, Fire Chief
City of Veneta	City Council, Administrator
Public Works	Public Works Director
Lane County Sheriff’s Office	Supervising Sergeant
Agencies with the EOP on File:	
Lane County Emergency Management	Emergency Manager
OMD, Office of Emergency Management	Operations & Preparedness Section Manager
ODOT	Region 2 Manager.
Lane Co Animal Services/Animals in Disaster (Volunteer Group)	Health and Human Services
OR Department of Forestry	Board of Forestry
School Districts: Fern Ridge Crow–Applegate Bethel Junction City Eugene 4J	Superintendents

2.3 Review Assignments

Core Capabilities as defined in the National Response Framework are in the left column. Each is an interagency operational plan and is further detailed in EOP Part 2: Annexes. The right column lists the same Annexes by lead department collectively for simplification. Annexes that will be led by other agencies are listed bottom right. City/LFA lead departments are responsible for regular review and updates of their EOP sections. Changes are forwarded to the City Administrator and Fire Chief for integration and redistribution of the revised version.

Table 3-Review Assignments

Essential Support Functions	City/LFA ESF's by Lead Department
ESF 1 Transportation	Lane Fire Authority
ESF 2 Communication	ESF 2 – Communication
ESF 3 Public Works/Water	ESF 4 – Firefighting
ESF 4 Firefighting	ESF 10 – Hazardous Material Response
ESF 5 Planning	ESF 14 – Volunteers & Donations
ESF 6 Mass Care/Shelter	Public Works
ESF 7 Logistics & Resource Management	ESF 3 – Public Works/Water
ESF 8 Public Health	ESF 7 – Logistics & Resource Management
ESF 9 Search & Rescue	City/LFA EMO
ESF 10 Hazardous Material Response	ESF 5 – Planning
ESF 11 Food & Water	ESF 7 – Logistics & Resource Management
ESF 12 Energy & Utilities	ESF 11 – Food & Water
ESF 13 Public Safety/Evacuation	ESF 15 – Public Info. & External Affairs
ESF 14 Volunteers & Donations	
ESF 15 Public Information	ESF's by Other Lead Agencies
ESF 16 Mass Fatality Management	Sheriff, OSP – ESF 1, ESF 9, ESF 13
ESF 17 Animal Care & Rescue	ODOT – ESF 1
	EPUD, LEC, Cable – ESF 12
	Lane Co. Medical Examiner – ESF 16
	Lane Co. HHS – ESF 17, ESF 6, ESF 8
	Red Cross – ESF 6, ESF 8, ESF 14

2.4 Training Requirements

The City/LFA is responsible for ensuring that essential staff are identified and trained at a level that enables personnel to respond effectively. Current training and operational requirements set forth under NIMS have been adopted and implemented by the City/LFA. The City Administrator/Fire Chief or his designee maintains training records received by personnel.

Table 4–Training Requirements

Emergency Personnel	Training Required
Direct role in emergency management or emergency response	ICS-100b IS-700a
First-line supervisors, mid-level management, and Command and General Staff	ICS-100b, 200a IS-700a
Supervisory role in expanding incidents or a management role in an EOC	ICS-100b, 200a, 300 IS-700a
Management capacity in an Area Command situation or EOC	ICS-100b, 200a, 300, 400 IS-700a, 701a
Public Information Officers	IS-702a
Resource management	IS-703a
Communication or incident information systems	IS-701a
Development of mutual aid agreements and/or mutual aid operational plans	IS 706
Planning	IS-800b

3. Situation and Planning Assumptions

3.1.1 The Government of Veneta

Veneta operates under a council-administer form of government, with Council members enacting policy and the City Administrator responsible for daily operations of the city. The City Administrator manages the maintenance and daily aspects of the EOP. The Executives in the Emergency Management Organization (EMO) consists of the City Council and City Administrator, who are responsible for the acquisition and allocation of City resources. All agencies and departments who perform specialized emergency functions are a part of the EMO and shall participate in emergency management activities, including training and exercises, and maintenance of their respective plans (ORS.401).

3.1.2 Lane Fire Authority

LFA operates under a Board of Directors–Fire Chief form of government, with Board members enacting policy and the Fire Chief responsible for daily operations. The Fire Chief manages the maintenance and daily aspects of the EOP. The Executives in the Emergency Management Organization (EMO) consist of the Board of Directors and Fire Chief, who are responsible for the direction and control of local resources. The Fire Chief shall also be the primary Incident Commander. All agencies who perform specialized emergency functions are a part of the EMO and shall participate in emergency management activities, including training and exercises, and maintenance of their respective plans (ORS.401).

3.2 Employees, Essential Employees, and Family Safety

The City/LFA acknowledges that an employee's first obligation is to the safety of his/her own family, and encourages each employee to undertake a program of family preparedness to assure their safety.

This plan is based upon the premise that the functions of City/LFA departments involved in emergency response will generally parallel normal day-to-day functions, utilizing the same personnel and resources. Departments should identify functions critical to business continuity and emergency response. Day-to-day functions of personnel that do not contribute directly to emergency response or recovery may be temporarily suspended and redirected to emergency tasks. Upon the declaration of a state of emergency, all leaves and vacations may be nullified as necessary.

Designation of Departmental Essential Employees - Each department shall develop departmental policies outlining the significance of each employee's normal work under emergency conditions. Employees shall be aware of the department's needs and expectations during emergency conditions, emergency reporting instructions and alternate work locations.

Emergency outside of work hours - Automatic mobilization of Essential Employees is critical to emergency response. Employees should be equipped to monitor local media for reporting instructions. If unable to do so, all employees should attempt to contact their supervisor. If phones are out, all employees should take actions to ensure their family's safety and report to their normal job sites as soon as safe and practical to do so. Essential Employees should pay special attention to conditions encountered while traveling to their work site to provide situation status information when they arrive.

Emergency during work hours - As employee's first concern if an emergency occurs will be the welfare of one's family, departments shall develop a system to allow for nonessential employees to check on the families of those employees who are critical to emergency operations. Employees should be encouraged to provide accurate home addresses and phone numbers and to discuss emergency operations and expectations with their families. This information will be kept confidential and updated as needed.

3.3 Community Profile of Veneta

Table 5–Community Profile for Veneta

General Information for the City of Veneta, OR		
Population	4690	
Land area of City	2.66 square miles	
Size of Government	16	City Council, City Administrator, Staff
Elevation	415	Latitude: 44.05 N, Longitude: 123.35 W
Population Density	1750 people per sq. mi.	Low
Landmarks	1. Fern Ridge Reservoir 2. Long Tom River 3. Main Intersection	1. Dam located on north shore 2. Crosses Hwy 126 w. end of city limits 3. Hwy 126 and Territorial Hwy.
Housing Units	Approximately 1800	Within city limits
Nearest City >50,000	Eugene	12 miles east on Hwy 126
Nearest Hospital	Riverbend (Eugene)	20 miles east
Public Transportation	Lane Transit (bus)	Leaves from Eugene daily, round trips
Principle Industries	Retail and Services	Mostly on Hwy 126, Territorial, and Broadway

Table 6–CIKR, Veneta

Critical Infrastructure and Key Resources (CIKR)			
City Hall	1	88184 8 th St. (8 th and Broadway)	541-935-2161
Highway, Major Roads	2	East/West - Hwy 126- Major Arterial - 2 lane- Eugene to Coast	
		North/South – Territorial Hwy- Arterial - runs from Crow-Veneta-Elmira-Cheshire-Monroe	
Bridges	1	8 th St. Bridge near City Hall	
Post Office	1	25042 Dunham Ave.	541-935-9533
Railways	1	Coos Bay Rail Link (541) 266-7245 (Lumber, sawdust)	

Water Treatment Plant	1	25192 E. Broadway Ave.
Wastewater Treatment Facility	1	24679 Sertic Road
Other water sources		3 Water Towers – .5 mil, 1 mil, 2 mil 3 Wells, 300 Fire Hydrants Bulk Water Station- Cornerstone Dr.
Public Works Shop	1	25226 E. Broadway, Office at City Hall
LC Public Works Shop	1	25398 Jeans Rd. Near Bi-Mart
Fire Stations		See LFA Profile
Fern Ridge Dam		See LFA Profile
Substations	2	Maintained by EPUD and Lane Electric
Electricity Providers	2	Emerald People’s Utility District (EPUD) (BLEC NW of town)
		Lane Electric COOP
Lane Co. Waste Mgmt.	1	24444 Bolton Hill Rd. 541-935-1297
Fuel Suppliers	4	Jerry Brown Co. 25067 Jeans Rd 541 688-8211 (gas and diesel)
		Tyree Oil, Inc. 88241 Huston Rd 541-687-0076 (gas and diesel)
		Towne Pump 24927 Hwy 126 541-935-0942 (gas and diesel)
		Shell Station 25547 Hwy 126 541-935-4518 (gas and diesel)
Aircraft & Towers		
See LFA	1	Crow-Mag Airport 24007 Suttle Rd. (small, private) 503-935-7167

Table 7–Medical

Medical				
Medical Centers	2	Applegate Medical	25045 Dunham Ave.	541 935-2035
		Veneta Medical Clinic	87983 Territorial Rd.	541 935-2200
Pharmacies	2	Coastal Pharmacies, LLC	24991 Hwy 126	541 935-2201
		Bi–Mart	25126 Jeans Rd.	541 935–0903
Ambulance Service	1	See LFA		
Veterinary Centers	1+	Veneta Veterinary Hospital	88233 Territorial Rd. (Moving to Jeans Rd. 2017)	541-935-4151
		Veterinary Housecall Service	24733 Dogwood Ln	541 935-7169

Table 8–Access and Functional Needs Populations

Access and Functional Needs and Populations				
	SCHOOL	ADDRESS	PHONE	STUDENTS
SCHOOLS Total Enrollment: 1,323 (2016/17)	Elmira High School	24936 Fir Grove Lane Elmira, 97437	541-935-8200	483 Grades 9-12
	Fern Ridge Middle School	88831 Territorial Rd. Elmira, 97437	541-935-8230	328 Grades 6-8
	Elmira Elementary	88960 Territorial Rd. Elmira, 97434	541-935-8214	250 Grades K-5
	Veneta Elementary	88131 Territorial Rd. Veneta, 97487	541-935-8225	331 Grades K-5
	West Lane Learning Center	24967 Hwy 126 Veneta, 97487	541-935-2102	111 Grades 9-12

School District Office	88834 Territorial Rd. Elmira, OR 97437	541-935-2253
Assisted Living Residences	Sherwood Pines Memory Care 87986 Sherwood St.	541-935-0653
Community Center	25190 E. Broadway Veneta 97487	541-935-2191 (City Hall)
Library	88026 Territorial Rd. Veneta 97487	541-935-7512
Social Services	MidLane Cares 25035 W. Broadway	541-935-4555
# Residences in Hazard Prone Areas	Flood map	See Appendix for Map
Locations of Past Flooding	Flood map	See Appendix for Map
Major Employers	FCR Call Center, Rays Food Place, School Dist., Holt Mfg.	
Homeless Population	Fern Ridge Homeless Coalition	Dennis Maricle 541-525-1174 Dennismaricle1@gmail.com

Table 9–Human Resources

Resources			
Amateur Radio/ ARES, LCSARO		Contact: LFA Assistant Chief Dale Borland 541-935-2226	
Veterinarians	2	Veneta Veterinary Hospital 88233 Territorial Rd. (Jeans Rd. 2017)	541-935-4151
		Vet Housecall Service 24733 Dogwood Ln	541-935-7139
Animal Supplies, Farm	1	The Farm Store - Feed & Farm Supplies 87774 Territorial Rd.	541 935-2604
Tow Truck Service	1	Roger’s Towing (Hwy 126)	541-935-1031
Heavy Equipment	2	Holte Mfg- Well Drilling 25330 Jeans Rd	541-935-5054
		Kelley Bros., Inc.- Logging and Farming Equipment 88017 Territorial Rd	541 935-4514
Emergency Trained Citizens		Veneta CERT (See LFA)	

3.3.1 – Lane Fire Authority Profile

The Lane Fire Authority jurisdiction profile is located at the end of this section

3.4 Planning Assumptions

1. The City of Veneta and surrounding area may experience a disaster at any time or place.
2. Some incidents occur with enough warning that the public can be notified. Other incidents occur with no advance warning.
3. City and Fire Department officials recognize their responsibility for the safety and welfare of the public and will assume their roles as needed.
4. A major emergency will likely affect many City or LFA employees and may limit or prevent them from responding.
5. Essential City services will be maintained as long as possible.
6. A disaster may be of such magnitude and severity that state and federal assistance is required. Such support will be available only after all local resources have been depleted.

7. Certain operations or services may be unavailable due to blocked access or damage to facilities.
8. Overwhelmed systems could impair communication.
9. Non-essential operations may be stopped or reduced to free up resources.
10. The City/LFA is dependent on public and privately owned and operated infrastructure. Recovery efforts will be delayed if they are damaged, inoperable or depleted.
11. The responsibility for the protection of private property rests primarily with the owner.
12. Residents may need to rely on their own resources following an emergency incident for one week or more.
13. Community members who experience physical, mental, or medical care needs may require a higher level of assistance and additional resources.

3.5 Other Agency Plans

The following agencies in the area provide public services focused on a single area within their boundaries. These agencies use their own plans for emergency response that may be coordinated with county and city emergency plans through the use of Mutual Aid Agreements (MAA) or Memorandums of Understanding (MOU). They rely on support from external agencies during response to a major incident.

Lane County Sheriff’s Dept.
Lane County Public Works
Hazardous Material Responders
OR Dept. of Transportation
Emerald People’s Utility District
Lane Electric Co–op (No plan)
Eugene Water and Electric Board
Fern Ridge School District
Riverbend Hospital
McKenzie Willamette Hospital

3.6 Nongovernmental and Other Organizations

Preparedness organizations provide coordination for emergency management and incident response activities before an incident or planned event. These organizations range from groups of individuals to small committees to large standing organizations that represent a wide variety of committees, planning groups, or other organizations (e.g., Citizen Corps, Community Emergency Response Teams, and Local Emergency Planning Committees). Preparedness organizations meet regularly and coordinate with one another to ensure an appropriate focus on helping jurisdictions and groups of jurisdictions to meet their preparedness needs.

Volunteer disaster relief organizations, private institutions, business and industry may be called upon to support the City and District during an emergency. Organizations such as the Red Cross provide sheltering, emergency food supplies, counseling services, and other vital services for

response support of disaster victims. The roles of nongovernmental and faith-based organizations in an emergency may include:

- Managing volunteer resources
- Identifying shelter locations and needed supplies
- Providing critical emergency services, such as cleaning supplies, clothing, food, shelter, and assistance with post emergency cleanup
- Identifying those whose needs have not been met and helping to coordinate assistance

3.7 Access and Functional Needs Populations

Access and Functional Needs Populations (also referred to as Vulnerable Populations and Special Needs Populations) are members of the community who experience physical, mental, or medical care needs and who may require a higher level of assistance during and after an emergency.

Examples of individuals who have access and functional needs include, but are not limited to:

- Individuals with sensory impairment
- Individuals with limited English proficiency
- Children and the elderly
- Individuals without transportation
- Individuals who have medical conditions requiring assistance
- Individuals with special dietary needs
- Individuals who experience physical and cognitive disabilities

Persons with access and functional needs have the primary responsibility for minimizing the impact of emergencies through personal preparedness activities. To the greatest extent possible, the City/LFA will assist them in carrying out this responsibility by providing preparedness information, emergency public information, and critical public services in an accessible manner.

3.8 Children

Planning and preparing for the unique needs of children is of utmost concern to the City/LFA, and, whenever possible, the City/LFA will consider preparedness, evacuation, shelter operations, and public outreach and education activities that identify issues particular to children. Individuals with children have the primary responsibility for minimizing the impact of emergencies on themselves and their children through personal preparedness activities. To the greatest extent possible, the City/LFA will assist in carrying out this responsibility by providing preparedness information, emergency public information, and critical public services.

3.9 Animals

The need to care for domestic livestock and/or companion animals plays a significant role in decisions made by animal owners during an emergency. Preparing for the care or evacuation of animals during an emergency is the responsibility of owners. However, the City/LFA may coordinate with animal advocates such as local animal owners, veterinarians, and charities to address animal-related issues that arise during an emergency

4. Hazards

4.1 Types of Hazards

Types of hazards fall into the following categories:

- **Severe weather:** Floods, windstorms, drought, snow, or ice
- **Geologic:** Earthquake, landslide, volcanic eruption or subsidence
- **Epidemiological:** Infection of humans, animals or agricultural products
- **Fire & Explosions:** Industrial, structural, forest and range, or transportation incidents
- **Transportation:** Aircraft, rail systems, watercraft, motor vehicles, or pipelines
- **Hazardous Materials:** Explosives, gases, corrosives, inflammable liquids and solids, oxidizers, poisons, or radioactive materials involved in incidents at fixed sites or during transportation
- **Civil disturbance:** Terrorism, sabotage, unlawful demonstrations, or riots
- **Public Utility:** Failure or disruption of electrical, telephone, water, gas, fuel oil, sewer or sanitation systems

4.2 Hazard Mitigation Plan Risk Results

The City of Veneta Hazard Mitigation Plan has identified the following hazards and are listed from high to low according to the level of risk to Veneta and surrounding area.

Table 10–Hazard Threat Analysis

Hazard / Weight Factor (WF)	History WF x 2	Probability WF x 7	Vulnerability WF x 5	Maximum Threat WF x 10	TOTAL
Wildfire	8	10	5	8	191
Winter Storm	10	8	8	6	176
Flood	10	7	4	5	139
Windstorm	8	4	5	7	139
Haz Mat Incident	4	4	4	5	106
Earthquake	2	2	5	6	103
Drought	1	1	2	7	89
Pandemic	3	3	3	3	72
Volcano	1	2	2	4	66
Landslide	0	1	2	3	47
Dam Failure (Veneta)	0	1	1	1	22
Tsunami	0	0	0	0	0

5. Concept of Operations

5.1 All - Hazard Planning

This EOP uses the emergency management principle of an all-hazards approach to planning for an emergency, as most emergencies have similar characteristics in their response. An all-hazards plan cannot provide for every scenario, but through a risk-based assessment of area hazards, an EOP can provide the fundamental structure while still accommodating hazard-specific components.

The five mission areas of the National Planning Framework include prevention, protection, mitigation, response and recovery. Though the focus of this EOP is response and short-term recovery, the plan is integrated to all five mission areas through the Core Capabilities of Planning, Public Information and Warning, and Operational Coordination.

5.1.1 Activation

Once signed by the City Council and Board of Directors, this EOP is in effect and can be implemented in whole or in part to respond to emergencies affecting the City and Fire District. Activation is done through notification to the City/LFA Emergency Management Organization (EMO²) by a pre-arranged method. The City/LFA EMO personnel are required to respond to a notification.

The activation of this plan does not require activation of the Emergency Operations Center (EOC). A Declaration of Emergency is not necessary unless it overwhelms the resources of the City or LFA, nor is a declaration necessary to active the Emergency Operations Center (EOC).

A declaration template is included in the Appendix.

5.2 Priorities in Response and Short-Term Recovery

Prioritization of resources will be based on the ability to do the greatest good for the largest population at risk. The City/LFA's **response** priorities are as follows:

1. **Lifesaving:** 1) responders, 2) at-risk population, 3) general public.
2. **Stabilization of the Incident:** 1) protection of response resources, 2) isolation of impacted area, 3) containment (if possible) of incident.
3. **Protection of Property:** 1) protection of public facilities and infrastructure essential to life or emergency response, 2) protection of the environment where degradation will adversely impact public safety, 3) protection of publicly owned resources and property.
4. **Restoration of Critical Public Services:** 1) water treatment systems, 2) wastewater treatment systems, 3) roadways and bridges.

² The EMO is discussed in detail in Section 7.

Once the immediate response phase is over, the priority of the City/LFA's short-term recovery is to restore vital services to the community and to provide for basic human needs to the public in the following ways as much as is possible:

1. Providing necessary food, clothing and shelter.
2. Restoration of power, communication, water and sewage, and disposal of debris.
3. Providing access to trauma counseling (American Red Cross).
4. Reunification of stranded or abandoned animals.

5.3 Phases of an Emergency

An emergency often unfolds over time and may consist of four periods, requiring varying types and levels of emergency response. Emergency operations may be initiated during any one of the following time periods:

- I. Warning Period** - A serious emergency is highly likely or imminent. This period may be formally initiated over a period of time in slower developing emergencies (i.e. flood). Some emergencies occur suddenly and without advance indication (i.e. earthquake) and therefore there is no warning period. The EOC should be activated during this phase if valid warning is issued. Tasks to be accomplished during this period include:
 1. Assess most probable consequences and resource requirements.
 2. Coordinate with Emergency Management Organization and/or EOC for dissemination of emergency instructions or information to the public.
 3. Recall Essential Employees, if it can be done safely.
 4. Stage resources near hazard area if it can be done without further threat to resources.
 5. Staff the EOC and activate department personnel
 6. Initiate life saving measures (i.e. evacuation, shelter in place) as resources allow
- II. Impact Period** - The period during which a serious emergency is occurring. Impact may occur suddenly and be of limited duration or may follow a period of predictable buildup (warning) and last for an extended period. Tasks common to all emergency agencies to be accomplished in this period include:
 1. Take immediate protective measures for emergency personnel and resources.
 2. Provide damage information to the City/LFA EMO, or EOC if activated.
 3. Initiate response activities as conditions allow.
- III. Response Period** - The period immediately following the impact of a serious emergency during which all resources are committed to the protection of life and property. If not previously accomplished, the EOC will be activated. Tasks common to all emergency agencies to be accomplished in this period include:
 1. Communicate with field personnel, individual departments, and EOC to determine scope of emergency.
 2. Conduct field operations to save lives and protect property. Request mutual aid assistance if required.

3. Dispatch personnel to hazard areas to conduct cursory damage assessment.
4. If the emergency is of great magnitude with mass casualties or threatened populations, contact EOC to determine response priorities.
5. Send a representative to the EOC to assist in situation assessment analysis and coordination of public information if appropriate.
6. Analyze resource needs, request additional support from EOC.
7. Initiate short-term recovery activities (i.e., shelter, debris removal, building safety inspections).
8. Maintain accurate records of all costs associated with emergency response, including expenditures for personnel, supplies, and equipment.

IV. Recovery Period - The time phase following the response period during which activities are undertaken to start long-term repair or recovery. Tasks common to all emergency agencies to be accomplished in this phase include:

1. Analyze long-term restoration/recovery options.
2. Conduct detailed damage analysis.
3. Document and report emergency related expenditures to support request for financial assistance.
4. Assist in the dissemination of information relative to federal assistance programs.
5. Effect long-term repairs including demolition, reconstruction, etc.
6. Assess and re-evaluate the EOP.

5.4 Incident Levels

The incident levels below are a rating system used by the City/LFA, Lane County, and Oregon Emergency Management (State) to communicate the potential impact of an emergency to others within the EOC management and other jurisdictions. The levels are meant as a guideline only, since any situation can escalate or be fluid with the weather or additional information.

NOTE: Eugene/Springfield uses an Incident Level rating of 1–4 with Level 4 being routine and Level 1 being catastrophic.

Table 11–EOP Escalation Activations

Typical order of escalation activations:		Emergency Declaration?
Level 1	No Activations	No
Level 2	Partial EOP Activation	No
Level 2 or 3	Full EOP Activation	Possible
Level 2 or 3	EOC Activation/Full EOP	Possible
Level 3	Full EOC/Full EOP	Probable

LEVEL 1 – Characteristics:

- No EOP or EOC activation required
- Minor, resolved with existing City/LFA resources or limited outside help
- Little or no impact on personnel or normal operations outside the affected area
- Response personnel coordinate directly within their departments and each other
- May require notification to the public
- Has potential for escalation

Examples: Small chemical spill, multiple patient incidents, large structural fire, limited duration power failure, severe weather

LEVEL 2 – Characteristics:

- Unusual circumstances or conditions requiring response by more than one agency or jurisdiction
- Requires the acquisition and use of specialized resources
- Requires support to other jurisdictions
- Beyond the scope of available resources
- May require partial or full activation of the EOP and the EOC
- Most likely will not lead to a declaration.
- Often a grey area and requires sound judgment.

Table 12–Activation Characteristics

Partial Activation of EOP	Full Activation of the EOP	Activation of EOP & EOC
An incident that requires additional resources from a single agency. Example: Fire requiring help from another Fire District	An incident requiring multiple agencies but perhaps not life-threatening. Example: Severe flooding, extended power outage	An incident requiring coordination among multiple agencies across jurisdictional boundaries. Example: HazMat spill, mass shooting, small explosion, evacuations over 4 hours

LEVEL 3 – Characteristics

- The EOP will be implemented and the EOC will be activated
- A life threatening major disaster or imminent threat affecting a large portion of the population, requiring the coordinated response of local, county, state, and federal agencies
- The effects of the emergency are wide-ranging and complex and may require sheltering or relocation of the affected population.
- Will likely require a Declaration of Emergency

Examples: Major earthquake, major wild/urban fire, or major flooding

5.5 Federal Emergency Management Levels

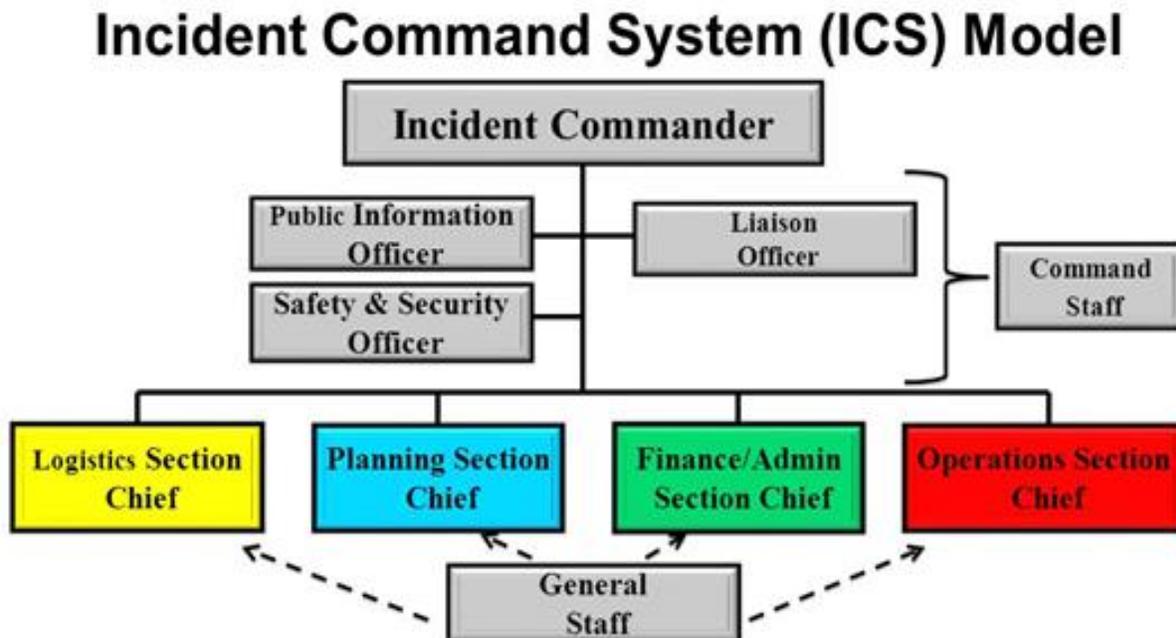
The City/LFA’s Incident Levels are the same as those of the County and the State, but not the Federal Incident levels. The FEMA Incident Levels range from 1 to 5, with 5 meaning relatively minor incidents, and 1 meaning major disaster. Incident levels identified in this EOP will switch to the FEMA incident levels when:

- Federal agencies are involved in response and recovery operations (Level 3), or
- National resources are impacted (such as waters of the U.S.), requiring response from federal agencies.

5.6 The Incident Command System Model

The ICS was developed to avoid duplication of efforts, improve communication, and organize resources. It has a strict hierarchal structure that is easily expanded or reduced to fit the situation.

Table 13–ICS Model



5.7 Interoperability

Interoperability is the ability of different agencies to effectively communicate with each other. Authorized parties must have the capacity and capability to operate and communicate effectively to each other through the use of communication systems, equipment, and personnel. Interoperable communications systems allow response personnel to communicate within and across agencies and jurisdictions in real time, when needed, and when authorized.

5.8 Communications – Plain Language

Plain language refers to emphasizing that agencies who regularly use coded language (e.g., law enforcement) are instead to use descriptive language, and eliminate the use of codes and acronyms during incident response involving more than a single agency. The use of plain language is to avoid confusion and misinformation.

5.9 Resource Management in the EOC

When the Emergency Operations Center (EOC) is activated (Level 2 or 3), the Logistics and Planning Sections have primary responsibility for coordinating the management of all resources. In a situation where resource allocations are in dispute, the Administrator has the final allocation authority³. Resources are to be distributed so that the most benefit is provided for the greatest amount of people or property. Resources will be distributed according to the following priorities:

1. Protection of life
2. Protection of resources used in the response effort
3. Protection of public facilities
4. Protection of private property

To obtain additional resources, the Planning Chief may:

1. Coordinate a citizen's appeal for assistance through the Public Information Officer (PIO), who may use local media to provide citizens with information about what is needed and where to drop off donations
2. Activate mutual aid agreements as necessary to supplement local resources
3. Issue a request for County, State, and Federal resources through an emergency declaration

5.9.1 Resource Typing

Resource Typing is an accounting method for equipment requests and managing resources during an incident. The City/LFA will initially rely on an inventory list and use resource typing consistent with the NIMS Incident Resource Inventory System (IRIS) in future revisions.

³ It is possible that the City Administrator will transition to Planning or Logistics Chief when the EOC is activated.

5.10 Volunteer and Donation Management

The City/LFA does not have a volunteer and donations management program. During a Level 2 or 3 incident, the Logistics Chief will coordinate and manage volunteer services and donated goods in collaboration with the local Red Cross, Salvation Army, and other volunteer organizations. Important aspects of volunteer and donation management include:

- Implementation of a system for tracking volunteers and donations (including cash contributions), as well as procedures to verify voluntary organizations and organizations operating relief funds
- Methods and sites for collection, sorting, managing, and distributing in-kind donations, including methods for disposing of or refusing goods that are not acceptable
- Methods of coordinating with county, state volunteer agencies
- Communications support such as coordination of a call center and public information.

6. The Emergency Operations Center

6.1 Purpose and Function of the EOC

The EOC serves several functions. In a major disaster, it may serve the following functions simultaneously:

1. Provide a facility from which the City/LFA or other agencies may coordinate the delivery of services during an emergency (Level 1 or 2).
2. Provide a facility from which discipline-specific emergency support activities (i.e., search and rescue or emergency evacuations) may be coordinated (Level 2).
3. During major emergencies or disasters, serve as the interface between the City/LFA and special districts and county, state and federal agencies.

6.2 Location

Table 14–EOC Locations

PRIMARY LOCATION	ALTERNATE #1	ALTERNATE #2
Lane Fire Authority 88050 Territorial Hwy. Veneta, OR 541-935-2226	Veneta City Hall 88184 8 th St. Veneta, OR 541-935-2191	If conditions do not allow functions to be conducted from either of the facilities, alternate locations will be identified, selected and announced.

6.3 Set-up

Upon notification of EOC activation, the Planning Chief or his designee will report to the facility and initiate setup of equipment. Supplies, forms, and layout diagrams are kept in the radio room of the EOC.

General setup responsibilities include:

- Ensure that the EOC is accessible
- Ensure that adequate furniture, fixtures, telephones, and space are available
- Establish a sign-in/sign-out log by the entrance to the EOC
- Set up and test telephones, fax machines, and other logistical supplies that may have been held in storage pending EOC activation
- Connect computers to network. EOC team members are to bring their own laptops into the EOC. The EOC location has wireless connectivity
- Set up pre-positioned management aids and tools including: General message board, white boards, and flip charts
- Post communications information (incoming telephone numbers, incoming fax machine numbers, Media Briefing Center number, etc.)
- Establish a "quiet space" where EOC staff can take a break and make private calls

- Continue to monitor EOC operations and logistical needs during the time the EOC is operational
- Schedule EOC operations so that 24-hour coverage is provided as required by the situation
- Establish a method to keep tabs on the families of responders during an extended emergency

6.4 Activation

The City/LFA Emergency Management Organization (EMO) are authorized to partially or fully activate and staff the EOC. EOC activation notifications will come from the Communications Center in the EOC. Upon full activation of the EOC, the City/LFA EMO, and all Essential Employees will report to the EOC. Additional personnel will be mobilized as needed. All City emergency services will implement their plans and procedures, and provide the Incident Commander with the following information throughout the incident:

- Operational status
- Readiness and availability of resources
- Changing conditions and status of resources
- Significant concerns and issues dealing with potential or actual loss of life or property

A sudden emergency or disaster site will likely first have an on-scene Incident Commander (IC). After the on-scene IC secures the scene and establishes command, the IC will notify the City/LFA EMO, and can also request activation of the EOC. The on-scene IC may also request activation of the Lane County EOC when warranted. The on-scene IC may also establish an on-scene Unified Command structure with county and state lead agencies. The City/LFA EMO may also request activation of the Lane County EOC. Coordination of outside agencies is then done through the County EOC, which will be managed by the County EOC Manager.

6.5 Actions

Upon implementation of this EOP due to a Level 3 disaster, the Incident Commander (or designee) will immediately take the following actions if needed:

1. Alert threatened populations and initiate evacuation as necessary.
2. Initiate emergency sheltering procedures with the American Red Cross and other community partners if evacuation procedures are activated. American Red Cross notification number for disaster services: 1-888-680-1455 (24/7, 365 days a year).
3. Instruct appropriate City/LFA emergency service providers to activate necessary resources.
4. Assign radio frequencies and communications equipment, implement a communications plan, and confirm interoperability among EOC staff and response agencies.
5. Request the Council/Board to prepare and submit a formal declaration of emergency through County Emergency Management.

6. Prepare to staff the City/LFA EOC as appropriate for the incident (maximum 12-hour shifts).

6.6 Alert and Warning Systems

Personnel – City/LFA non-response personnel receiving emergency information will call 9-1-1 and relay information to their City Administrator or Fire Chief.

Citizens of Veneta and Fire District– Depending upon the scope of the emergency, the City/LFA will utilize the following public notification methods:

- KOCF Radio Broadcast
- Community Emergency Notification System (CENS); AlertSense
- Integrated Public Alert Warning System (IPAWS)
 - EAS, WEA, NWS, Amber Alerts, NWEM/HazCollect
- Oregon Emergency Response System – for actual or potential incident of national significance
- Others as noted in ESF 2 - Communications

Response Agencies–Internal emergency notification procedures are established among the response community, and call-down lists are updated and maintained by each agency.

6.7 Lead Agencies by Incident

Table 15–Lead Agencies by Incident

Incident	Lead Agency
NATURAL DISASTERS	
Wind, Ice, Snow, Flood, Earthquake, Volcanic Ash, Drought, Landslide, Utility failure	Public Works
CONFLAGRATIONS	
Fire, Explosions	Lane Fire Authority
HUMAN	
Civil disturbance, terrorism	Sheriff, State Police
HEALTH EMERGENCIES	
Biological Incident, Pandemic	Lane County Health & Human Services
TRANSPORTATION	
Air, Water, Rail, Car, Bus – Spill, accident, explosion, casualties	ODOT, Sheriff, LFA, PW–1 st on Scene

The lead agency or department will establish an on-scene incident command post and implement the incident command system. The on-scene response activities shall ultimately be under the command of the IC at the EOC.

Initial response to an incident will be managed by the responding agency, who will assign an on-scene incident commander. The on-scene incident commander is responsible for performing or directing such duties as enforcing emergency measures and designating emergency areas. During the initial response, the on-scene incident commander may establish an incident command post and may assume the responsibilities of command staff until delegated.

6.8 Common Operating Picture

Situational awareness and intelligence gathering are practiced to maintain a common operating picture and message among response agencies.

Situational awareness: The ongoing process of collecting, analyzing, and sharing information across agencies, government, and the private sector.

Intelligence gathering: The collecting of security and operational information, such as collection of severe weather forecasts from the National Weather Service. Intelligence gathering may also be used to detect, prevent, apprehend, and prosecute criminals planning terrorist incidents.

On a day-to-day basis, and during Level 1 and 2 incidents when the EOC is not fully activated, the City/LFA, primary agencies, and supporting response agencies will:

- Be aware of their surroundings and identify and report potential threats and dangerous situations
- Share and evaluate information from multiple sources
- Integrate communications and reporting activities among responding agencies
- Monitor threats and hazards
- Share forecasting of incident severity and needs

If activated, the EOC Planning Section Chief will lead situational awareness and intelligence gathering activities and functions, unless otherwise designated. If a criminal or terrorist incident is suspected, the City's Sheriff will notify the Oregon Terrorism Information Threat Assessment Network Fusion Center (OTFC). During a terrorist incident, the OTFC will support situational awareness and intelligence gathering functions.

6.9 Evacuations

Executive direction and control of the incident and any ensuing evacuation will be conducted from the EOC if activated and on-scene command posts as established. Evacuation efforts shall be coordinated with the Red Cross, Salvation Army, and other service organizations for shelter and mass care operations. The Public Information Officer (PIO) will release ongoing information regarding evacuation status, evacuation routes, and available shelters. (Annexes-ESF 13, ESF 1.)

6.10 Access

Access to the EOC is for authorized personnel only. All others must obtain approval for admission from the Incident Commander. All personnel working in the EOC are to sign in and out on the EOC roster, which will be located on a table at the door.

6.11 Shift Changes

During incidents where response and recovery efforts span multiple days, the EOC Operations Section Chief will evaluate the situation and define necessary shift changes (e.g., 8 or 12 hours). Each EOC position is responsible for identifying and notifying the staff for the oncoming shift. At every shift change, outgoing EOC team members will brief the incoming staff. This briefing should include a review of the most recent operational period action plan, significant changes in the response strategy identified by the Executive Group and tactical response actions taken by specific operational departments.

6.12 Demobilization

As an emergency situation regresses and the need for response subsides, a transition period will occur during which emergency responders will transfer responsibility for emergency coordination to agencies involved with short and long-term recovery operations.

The following issues will be considered when demobilizing:

- Identification of surplus resources and probable resource release times
- Transition of Commander and/or EOC Managers
- Released or demobilized response resources as approved by the on-scene Incident Commander and/or EOC Manager
- Repair and maintenance of equipment, if necessary

The City/LFA EMO, with advice from the on-scene Incident Commander, will determine when a state of emergency no longer exists, emergency operations can be terminated, and normal functions can be restored.

7. The City/LFA Emergency Management Organization

7.1 The City/LFA EMO

Emergency planning requires that City and LFA establish an organizational structure for periodic administration of the EOP, to manage Level 1 or 2 incidents, and for seamless integration with the EOC and outside agencies during a major emergency. This leadership group is the Emergency Management Organization, called the City/LFA EMO. The City/LFA EMO includes the **Executive Group** and **Incident Response Agencies**. The Executive Group includes:

Veneta: Mayor, City Council, City Administrator;

Lane Fire Authority: Board of Directors, Fire Chief

7.2 Executive Group Roles and Responsibilities

Ongoing responsibilities for the Executive Group include:

- Establishing relationships with local jurisdictional leaders, volunteer agencies, community partners and core private-sector organizations to facilitate optimal Mutual Aid Agreements and Memorandums of Understanding.
- Supporting staff and citizen resiliency through education and/or training.
- Ensuring that planning considers the needs of all members of the community.
- Understanding of emergency management laws and regulations and how to implement the EOP.

Emergency Management responsibilities for the Executive Group include:

1. *Request, Allocation and Distribution of Resources* - The City/LFA EMO is responsible for the acquisition and control of resources during an emergency in the following ways:
 - Requesting additional emergency resources
 - Redirecting funds to respond to an emergency
 - Utilizing Memorandums of Understanding and Mutual Aid Agreements.
 - Provides support to the on-scene Incident Commander in requesting assistance
2. If demands deplete City/LFA resources, the City/LFA EMO may:
 - Have an emergency meeting to decide how to respond to shortfalls
 - Decide that a Declaration of Emergency is warranted
 - NOTE: The LFA Board of Directors is limited to serving in an advisory capacity.

3. Other Duties

- Select a Council/Board as a liaison for the community and other jurisdictions that have declared an emergency
- Attending Public Information Officer (PIO) briefings
- Encouraging citizen involvement and citizen assistance
- Issue clear policy statements as needed to support actions and activities of recovery and response efforts (example: curfews, water rationing)
- Providing the political contact needed for visiting state and federal officials

As time and policy dictate, the following considerations should be clearly communicated, documented, and provided to the Incident Commander:

- Safety considerations
- Environmental issues
- Legal and policy limitations
- Issues relating to critical infrastructure services or restoration
- Economic, political, and social concerns
- Cost considerations

7.2.1 Declaration of Emergency

The City/LFA EMO may declare an emergency and request assistance from Lane County if the City needs assistance beyond that provided by its own resources and mutual aid agreements. A quorum of Council members must be assembled to consider and vote on the declaration.

The declaration of a local emergency includes:

- A preliminary damage assessment of death, injuries, property loss or damage
- A description of the situation and existing conditions that warrant the declaration
- The geographic boundaries of the emergency area
- The special powers being invoked or the emergency controls to be imposed by the City/LFA EMO
- The effective period for the declaration (i.e. for 72 hours) that can be extended if emergency conditions still exist after the effective period expires
- Description of the mission to be accomplished
- Types of assistance needed
- Certification that all resources have been expended

A quorum is not required to declare if there is immediate danger of loss of life or property. If the Council members are unable to assemble a quorum due to absence or incapacity, the following line of succession shall be used:

1. Council Chair
2. Chairs by Seniority
3. Administrator or Fire Chief

In the event that a situation appears to be an actual or potential Incident of National Significance, the lead agency shall report the situation to the state by calling the Oregon Emergency Response System at 1-800-452-0311.

7.3 City Administrator and Fire Chief Roles and Responsibilities

The City Administrator and Fire Chief are responsible for overall direction of the City/LFA's emergency planning efforts, including the following ongoing tasks:

- Implementing the policies and decisions of the Council and Board
- Supporting the budgetary and organizational requirements of the emergency response program
- Ensuring plan compliance with state and federal policy and law, including training
- Ensuring that departments develop, maintain, and exercise their respective service annexes to this plan
- Ensuring that plans are in place to protect and preserve City/LFA records
- Identifying Essential Employees

Emergency Management Responsibilities for the Administrator and Fire Chief are:

- Continuity of government (Administrator)
- Maintaining the authority to resolve conflicts when resources are limited.
- Serving as advisor to the Council/Board for emergency decision-making
- Dissemination of public information

7.4 Incident Response Group

The Incident Response Group will be led by the LFA Chief or his designee. All agencies and departments that have emergency response personnel or are involved with continuity of services have ongoing responsibility for:

- Ensuring EOC operational capability
- Alert and notification procedures for personnel
- Ensuring that vehicles and other equipment are equipped and ready
- Notifying the Fire Chief/City Administrator of resource shortfalls
- Developing procedures for maintaining and reestablishing public services
- Assigning personnel to the EOC when necessary
- Tracking incident-related costs incurred by the department during response or recovery

7.5 Management by Objective

The IC or Unified Commanders establish incident objectives that drive incident operations in the field. Likewise, the Center Director, often with direction from a policy group, establishes objectives

that drive incident activities in an operations/coordination center. Management by objectives includes the following:

1. Establishing response priorities and incident objectives—statements of guidance and direction used to select strategies and the tactical direction of resources;
2. Establishing specific, measurable, and realistic tactics, tasks, or activities in support of defined strategies;
3. Developing and issuing assignments, plans, procedures, and protocols for various incident management functional units to accomplish identified tasks; and
4. Documenting results against the objectives to measure performance, facilitate corrective actions, and inform development of incident objectives for the subsequent operational period.

7.6 Unified Command

UC is typically executed during incidents involving multiple jurisdictions, a single jurisdiction with multiagency involvement, or multiple jurisdictions with multiagency involvement. This may include the integration of neighboring geographical jurisdictions or the inclusion of overlapping local, state, tribal, territorial, and Federal jurisdictions. UC allows agencies with different legal, geographic, and functional authorities and responsibilities to work together effectively without affecting individual agency authority, responsibility, or accountability. An organizational structure is included in Appendix IV.a.

7.7 Multi–Agency Coordination System (MACS)

MACS focus on coordination and supports the Incident Commander. MACS are more likely to be established in a large disaster scenario that may require various different types of expertise. They do not have direct involvement in the EOP and may operate virtually. It is multi–agency and multi–jurisdictional, and exists to establish policy, strengthen a common operating picture, resolve resource issues, and synchronize messaging. An organizational structure is included as Appendix IV.b.

7.8 Joint Information Center

The JIC may be a separate location or structure from the EOC for developing and delivering incident-related coordinated messages. It develops, recommends, and executes public information plans and strategies; advises the Incident Commander, Unified Command, and supporting agencies or organizations concerning public affairs issues that could affect a response effort; and controls rumors and inaccurate information that could undermine public confidence in the emergency response effort. It is the central point of contact for all news media at the scene of an incident. Public Information Officers (PIO) from all participating agencies/organizations should co-locate at the JIC.

Internet/Web Procedures – The Internet and other Web-based tools can be resources for emergency management/response personnel and their affiliated organizations. For example, these tools can be used prior to and during incidents as a mechanism to offer situational awareness to organizations/agencies involved in the incident or to the public, when appropriate.

7.9 County Response and Assistance

Lane County's Emergency Management program operates under the direction of the Lane County Sheriff who is designated the Director of Emergency Management by the Board of County Commissioners. All departments, agencies or individuals of the county who may perform specialized emergency functions are a part of the County's Emergency Management Organization, led by the Emergency Manager.

All initial requests first go to the County. If County resources are insufficient to respond to the request, the County may request assistance from the State through the Oregon Office of Emergency Management. Alternately, if the County is unable to provide the assistance requested, the County may declare a local emergency and request that the Governor also declare an emergency. Lane County may add its support to the request, request that additional areas or services be included, or pass the request through to the state without any comment. Requests for state assistance will be forwarded to Oregon Emergency Management as soon as practical. These requests may be sent by FAX (with original signed documents forwarded later) by mail, or may be hand delivered.

7.10 State Response and Assistance

Under the provisions of ORS 401.305, the Governor has broad authority and responsibility for the direction and control of all emergency activities in a State declared emergency. The administrator of the Oregon Office of Emergency Management (OEM) has delegated authority to coordinate all activities and organizations for emergency management within the state and to coordinate in emergency matters with other states and the federal government. Some state agencies may call upon their federal counterparts to provide additional support and resources for Essential Support Functions (ESF) following established procedures and policies for each agency.

Requests for State assistance shall be made by the Chief Executives of the County in which the emergency exists. If the emergency is the result of a major fire, the Lane Fire Authority Board Chief may make a request to the State Fire Marshal for immediate mobile support under the State Fire Mobilization Plan. State assistance may be requested whether or not a local Emergency Declaration has been or will be made, provided that all appropriate local resources have been utilized.

Only the State of Oregon has the option of declaring a State of Emergency and can authorize activation of state resources in support of the incident. The State can declare a State of Emergency and begin negotiations with FEMA for a Federal Disaster Declaration.

7.11 Federal Response and Assistance

Federal response partners are typically requested by OEM in the event that State resources become limited or specialized services are needed. The Governor shall make these requests for Federal disaster or emergency assistance to the President. In most instances, federal resources become available following a formal declaration of emergency by the Governor. A Presidential Disaster Declaration makes available extensive response and recovery assistance including support to government, business, and individual citizens. Federal assistance may be requested

and some provisions of the National Response Plan implemented prior to the formal declaration of a disaster or emergency.

Procedures and policies for allocating and coordinating resources at the federal level follow the Oregon Emergency Management Plan and, if necessary, the National Response Framework.

7.12 Lines of Succession

To ensure the continued operation of city functions in an emergency situation, the lines of succession will be as follows:

Table 16–Lines of Succession

City of Veneta/Lane Fire Authority Lines of Succession	
Emergency Coordination	Emergency Policy
1. City Administrator, Fire Chief	1. LFA Board, City Council
2. Public Works Director	2. Senior Council, Senior Board
3. Assistant Fire Chief	3. Elected Official
4. Assistant Fire Chief	4. Elected Official
5. Public Works Superintendent	5. Elected Official

Each department is responsible for pre-identifying staff for succession for the temporary or permanent absence of the designated official or lead worker.

7.13 Other Departments and Functions

Finance - The finance department is responsible for tracking resources committed to the incident and to provide documentation for purchases. Personnel time, losses and expense reports are also maintained for later submission for filing FEMA Public Assistance reimbursement requests. The Finance Section may use their own forms. The finance department may act as the Finance Section if the EOC is activated (Level 2 or 3).

Reporting and documentation - Proper documentation is required for emergency expenditures and for historic records.

Incident and damage assessment reports include:

- Incident Command logs
- Cost recovery forms
- Incident After Action Reports (AAR’s)

Preservation of records – The City and the LFA will each retain their own Essential Records Packets. The Essential Records packet contains this EOP, current contact lists, a vital records inventory, keys or access codes, and other confidential information. The location of the Essential Records Packets are known to those on the following lists.

Persons having access to the vital records packet are:

Table 17–Essential Records Packet Access

Essential Records Packet Access	
Veneta	Lane Fire Authority
1. Administrator	1. Fire Chief
2. Mayor	2. Chairman
3. Public Works Director	3. Vice Chair

7.14 Evaluation and After Action Review

During the recovery period, the City/LFA EMO and supporting staff will review and implement mitigation measures, and share lessons learned with the emergency response community. They will also reassess this EOP, including annexes, to identify deficiencies and take corrective actions. This information will be reported on an After Action Report (AAR). Resources to restore or upgrade damaged areas may be available if the City/LFA EMO demonstrates that extra repairs will mitigate damages caused by another similar emergency in the future.

8. Authorities and Mutual Aid

8.1 Mutual Aid Agreements

State law (ORS 402.210) authorizes the creation of an intrastate mutual assistance compact among local governments within the State. This compact, referred to as the Omnibus Mutual Aid Agreement, streamlines the process by which a local government requests assistance and temporarily acquires resources. Sample forms are included in Appendix V.c. and V.d. The following Agreements are currently in place:

Table 18–MAA’s

AGENCY	FUNCTION	CONTACT INFO	CONTACT
OR Water/Wastewater Agency Response Network (ORWARN)	Water/Wastewater	http://www.orwarn.org/equipment-teams	Public Works Director
ODOT	Transportation		Public Works Director

8.2 Legal Authorities

Table 19–Legal Authorities

FEDERAL LAW & POLICY⁴
Public Law 93-288 - Robert T. Stafford Disaster Relief and Emergency Assistance Act Amended April 2013
The Stafford Act authorizes the following grant programs:
- The Hazard Mitigation Grant Program
- Pre-Disaster Mitigation Grant Program
- Public Assistance Grant Program
- Fire Management Assistance Grant Program
- Federal Emergency Management Agency (FEMA) Policy
Other Key Federal Laws and Policies:
- Disaster Mitigation Act of 2000
- Post Katrina Emergency Management Reform Act
- Homeland Security Act
- National Oil and Hazardous Substances Pollution Contingency Plan
Presidential Directives:
- Homeland Security PD 5 (December 2008)
- Homeland Security PD 8 (February 2003), Amended March 2011)
OREGON LAW & POLICY is included at the end of the Appendix

⁴ Lindsay, B. R. (2012). *Federal Emergency Management: A Brief Introduction*. DC: Congressional Research Service.

End of Basic Plan

VENETA CITY COUNCIL

AGENDA ITEM SUMMARY

Title/Topic: FERN RIDGE SOUTHERN ROUTE MULTI-USE PATH INTERGOVERNMENTAL AGREEMENTS, LANE COUNTY & ODOT

Meeting Date: November 14, 2016
Department: Community Development

Staff Contact: Kay Bork
Email: kbork@ci.veneta.or.us
Telephone Number: 541-935-2191 Ext.314

ISSUE STATEMENT

Staff is presenting two Intergovernmental Agreements for Council approval. The Agreements are between the City and Lane County and the City and ODOT for work to be completed for phase 1 of the Fern Ridge Southern Route Multiuse Path project. The scope of the project includes NEPA planning and preliminary design. NEPA is the National Environmental Planning Act.

BACKGROUND

In 2013 the City and Lane County jointly submitted a 2015-18 STIP (Statewide Transportation Improvement Program) application for the multiuse path. In 2014 multiuse path project was placed on the STIP project list for funding. The State funded the project for the requested amount of \$140,000 and the City and Lane County required match is \$17,500 each. The multiuse path will roughly parallel OR126W between Greenhill Rd to the east and Huston Rd in Veneta to the west, primarily within the Lane County right-of-way of KR Nielson Rd, Cantrell Rd and Central Rd and Perkins Rd.

The agreement with ODOT states that they will complete the NEPA Planning and preliminary design for the multiuse path and the agreement with Lane County states that they will provide a cash match, rather than an in-kind match of \$17,500 towards the project. Originally when the STIP application was submitted, Lane County agreed to provide preliminary engineering as in-kind match.

RELATED CITY POLICIES

The City may enter into agreements with counties, cities, and states, and local units of governments for the performance of work on projects.

COUNCIL OPTIONS

1. City Council may choose to approve the agreements as written and authorize the City Administrator to sign on the City's behalf.
2. The Council may modify the agreements and authorize the City Administrator to sign on the City's behalf.

CITY ADMINISTRATOR'S RECOMMENDATION

1. Approve the agreements as written and authorize the City Administrator to sign on the City's behalf.

SUGGESTED MOTION:

1. I make a motion to approve the attached IGA between Lane County and the City titled, *“Oregon Route 126: Fern Ridge Southern Route Multi-Use Path Planning & Design Match Contribution City of Veneta / Lane County.”*
2. I make a motion to approve the attached IGA between Oregon Dept. of Transportation and the City titled, *“Local Agency Agreement Multimodal Transportation Enhance Program (MTEP) Oregon Route 126: Fern Ridge Southern Route Multi-Use Path National Environmental Policy Act (NEPA) Planning and Design City of Veneta.”*

ATTACHMENTS

1. Lane County/Veneta IGA: Oregon Route 126: Fern Ridge Southern Route Multi-Use Path Planning & Design Match Contribution City of Veneta / Lane County.
2. ODOT/Veneta IGA: Local Agency Agreement Multimodal Transportation Enhance Program (MTEP) Oregon Route 126: Fern Ridge Southern Route Multi-Use Path National Environmental Policy Act (NEPA) Planning and Design City of Veneta.



LANE COUNTY

INTERGOVERNMENTAL AGREEMENT

FOR

Oregon Route 126: Fern Ridge Southern Route Multi-Use Path
Planning & Design Match Contribution
City of Veneta / Lane County

This Agreement is entered into by and between Lane County, a political subdivision of the State of Oregon ("County"), and City of Veneta, an Oregon unit of local government ("Agency"), referred to collectively in this Agreement as "the parties".

County and Agency agree as follows:

1. RECITALS

- 1.1 ORS 190.010 and the Lane County Home Rule Charter provide that units of local governments may enter into agreements for the performance of any or all functions and activities that a party to the agreements, its officers or agents, have authority to perform.
- 1.2 Agency is entering into Intergovernmental Agreement No. 31138 (IGA) with the State of Oregon Department of Transportation (ODOT) for funding and project management for NEPA planning and the preliminary design engineering phase of the Oregon 126: Fern Ridge Southern Route Multiuse Path project (Project).
- 1.3 Various roads and streets identified as part of the Project under the terms of IGA #31138 are under jurisdiction of County, ODOT will oversee the project on half of Agency, and County will contribute a cash match contribution toward Project on behalf of Agency.

2. SCOPE OF AGREEMENT.

- 2.1 County shall:
 - .1 Contribute a cash contribution toward Agency's required match for Project's NEPA planning and preliminary engineering phase.
- 2.2 Agency shall:
 - .1 Use County's cash contribution towards it's required match for Project funding for NEPA planning and preliminary engineering phase.

3. DOCUMENTS FORMING THE AGREEMENT

- 3.1 The Agreement. The Agreement consists of this document and all exhibits listed below, which are incorporated into this Agreement.
- 3.2 Exhibits. With this document, the following exhibits are incorporated into the Agreement:
Exhibit – None

4. CONSIDERATION

- 4.1 In consideration for Agency's performance under this Agreement, County shall:
 - .1 Contribute a not-to-exceed amount of \$17,500 towards Agency's required match for Project's NEPA planning and preliminary engineering phase.
- 4.2 In consideration for County's performance under this Agreement, Agency shall:
 - .1 Invoice County for \$17,500 maximum amount to be applied to Agency's required match for funding of Project.

5. EFFECTIVE DATE AND DURATION

- 5.1 Effective Date. Upon the signature of all parties, this Agreement is effective upon signature by all parties.
- 5.2 Duration. Unless extended or terminated earlier in accordance with its terms, this Agreement will terminate 12/31/19. However, such expiration shall not extinguish or prejudice either



LANE COUNTY

party's right to enforce this agreement with respect to any breach or default in performance which has not been cured.

6. INDEMNIFICATION

To the extent permitted by the Oregon Constitution, and to the extent permitted by the Oregon Tort Claims Act, and to the extent otherwise provided for in private contracts of insurance, the parties agree to indemnify, defend, and hold each other, their agents, officers and employees, harmless from all damages, losses and expenses, including but not limited to attorney fees, and to defend all claims, proceedings, lawsuits, and judgments arising out of or resulting from the other party's negligence in the performance of or failure to perform under this Agreement. No party to this Agreement will be required to indemnify or defend the other party for any liability arising solely out of wrongful acts of its own officers, employees or agents.

7. MODIFICATION AND TERMINATION

7.1 Modification. No modification or amendment to this Agreement will bind either party unless in writing and signed by both parties.

7.2 Termination. The parties may jointly agree to terminate this Agreement at any time by written agreement.

8. DISPUTES

The parties are required to exert every effort to cooperatively resolve any disagreements that may arise under this Agreement. This may be done at any management level, including at a level higher than the persons directly responsible for administration of the Agreement. In the event that the parties alone are unable to resolve any conflict under this Agreement, they are encouraged to resolve their differences through mediation or arbitration, using such process as they may choose at the time.

9. MISCELLANEOUS PROVISIONS

9.1 Merger. This Agreement contains the entire agreement of County and Agency with respect to the subject matter of this Agreement, and supersedes all prior negotiations, agreements and understandings.

9.2 Waiver. Failure of either party to enforce any provision of the Agreement does not constitute a waiver or relinquishment by the party of the right to such performance in the future nor of the right to enforce that or any other provision of this Agreement.

9.3 Severability. If any provision of this Agreement is declared by a court to be illegal or in conflict with any law, the validity of the remaining terms and provisions are not affected; and the rights and obligations of the parties are to be construed and enforced as if the Agreement did not contain the particular provision held to be invalid.

9.4 Time is of the Essence. The parties agree that time is of the essence with respect to all provisions of this Agreement.

9.5 Binding on Successors and Assigns. The provisions of this Agreement are binding upon and inure to the benefit of the parties to this Agreement, their respective successors, and assigns.

9.6 No Third-Party Beneficiaries. County and Agency are the only parties to this Agreement and are the only parties entitled to enforce its terms. Nothing in this Agreement gives or may be construed to give or provide any benefit or right to third persons, either directly or indirectly, that is greater than the rights and benefits enjoyed by the general public, unless that party is identified by name in this Agreement.

SIGNATURE PAGE TO FOLLOW



LANE COUNTY

- 9.7 Headings. The headings and captions in this Agreement are for reference and identification purposes only and may not be used to construe the meaning or to interpret the Agreement.
- 9.8 Force Majeure. Neither party will be held responsible for delay or default due to Force Majeure acts, events or occurrences unless they could have been avoided by the exercise of reasonable care, prudence, foresight, and diligence by that party.
- 9.9 Multiple Counterparts. This Agreement and any subsequent amendments may be executed in several counterparts, facsimile or otherwise, all of which when taken together will constitute one agreement binding on all parties, notwithstanding that all parties are not signatories to the same counterpart. Each copy of this Agreement and any amendments so executed will constitute an original.

EACH PARTY, BY EXECUTION OF THIS AGREEMENT, HEREBY ACKNOWLEDGES THAT IT HAS READ THIS AGREEMENT, UNDERSTANDS IT, AND AGREES TO BE BOUND BY ITS TERMS AND CONDITIONS.

AGENCY:

COUNTY:

CITY OF VENETA

LANE COUNTY, OREGON

By: XXXXXXXXXXXXXXXXXX
 Ric Ingham, City Administrator

By: XXXXXXXXXXXXXXXXXX
 Peggy A. Keppler, PE, PLS, County Engineer

Date: _____

Date: _____

City of Veneta
 88184 Eighth Street
 PO Box 458
 Veneta, Oregon 97487
 Phone: (541) 935-2191
 Email: ringham@ci.veneta.or.us

Engineering & Construction Services Division
 3040 North Delta Highway
 Eugene, Oregon 97408
 Phone: (541) 682-6990
 Email: peggy.a.keppler@co.lane.or.us

LOCAL AGENCY AGREEMENT
MULTIMODAL TRANSPORTATION ENHANCE PROGRAM (MTEP)
Oregon Route 126: Fern Ridge Southern Route Multiuse Path
National Environmental Policy Act (NEPA) Planning and Design
City of Veneta

THIS AGREEMENT is made and entered into by and between the STATE OF OREGON, acting by and through its Department of Transportation, hereinafter referred to as “State;” and the CITY OF VENETA, acting by and through its elected officials, hereinafter referred to as “Agency,” both herein referred to individually or collectively as “Party” or “Parties.”

RECITALS

1. By the authority granted in Oregon Revised Statute (ORS) 190.110, 366.572 and 366.576, State may enter into cooperative agreements with counties, cities and units of local governments for the performance of work on certain types of improvement projects with the allocation of costs on terms and conditions mutually agreeable to the contracting parties.
2. Oregon Route 126 is a part of the state highway system under the jurisdiction and control of the Oregon Transportation Commission (OTC). Various roads and streets identified under Terms of Agreement, paragraph 2, are under the jurisdiction of Lane County, as part of their county road system, and City of Veneta, as part of their city street system.
3. A southern route for a separated multiuse path is identified as a design option in the Long-Term Recommendation in the *Highway 126 Fern Ridge Corridor Study (Corridor Plan)* conducted by State. The Lane County Board of Commissioners adopted the Corridor Plan on February 12, 2013 under Ordinance No. PA 1297.
4. Agency has been awarded MTEP funding in the amount of \$140,000 for the preliminary engineering phase of the OR 126: Fern Ridge Southern Route Multiuse Path project.
5. Agency has agreed that State will oversee this project on behalf of the Agency.

NOW THEREFORE the premises being in general as stated in the foregoing Recitals, it is agreed by and between the Parties hereto as follows:

DEFINITIONS

1. “Contract Award” (non-construction projects) means upon completion of final plans and reports.
2. “Funding Ratio” means the relationship between MTEP funds and Total Project Cost and Other Funds and the Total Project Cost. This ratio is established at the time the Agreement is executed and does not change during the course of the project. The ratio governs the obligation of MTEP funds at the time of construction/consultant award or Project Closeout.

3. “Match” means the minimum amount State or Agency must contribute to match the federal aid funding portion of the project.
4. “MTEP” means Multimodal Transportation Enhance Program and may be funded by a combination of federal and state funds.
5. “Other Funds” means other funding required to complete the project including but not limited to state, federal, and agency funds.
6. “Project Closeout” means project is ready to close as there are no more expenditures associated with project.
7. “Project Overruns” means the final cost estimate at Contract Award exceeds the estimated Total Project Cost estimate in this Agreement, or the final actual project costs exceed the final cost estimate at Contract Award.
8. “Project Underrun” means the final cost estimate at Contract Award is below the estimated Total Project Cost in this Agreement, or the final actual project costs are below the final cost estimate at Contract Award.
9. Total Project Cost means the estimated amount as shown in this Agreement. This amount will include MTEP funds, local matching funds, and other funds as required to complete project as stated in this Agreement.

TERMS OF AGREEMENT

1. Under such authority, Agency and State agree that State shall complete NEPA Planning and Preliminary Engineering for a multiuse path connecting the cities of Veneta and Eugene on behalf of Agency, hereinafter referred to as “Project” and is further defined below. The location of the Project is approximately as shown on the map attached hereto, marked “Exhibit A,” and by this reference made a part hereof.
2. The Project Description and Deliverables are as follows:
 - a. Description: Complete NEPA Planning and Preliminary Engineering for a multiuse path connecting Veneta and Eugene.
 - b. Deliverables: This Project includes NEPA planning and preliminary design of the OR 126 Southern Route Multiuse Path, connecting the cities of Veneta and Eugene. The trail will roughly parallel OR 126W between Greenhill Road to the east and Huston Road in Veneta to the west, primarily within the Lane County right of way of K.R. Neilson Road, Cantrell Road, Central Road, and Perkins Road.
3. Both Parties agree that an amendment to this Agreement is required if any changes are made to the Project as described in Project Description and Deliverables above.

4. The Project shall be conducted as a part of the Multimodal Transportation Enhance Program (MTEP) with funds provided under Title 23, United States Code and may include a combination of federal and state funds. The Total Project Cost is estimated at \$175,000, which is subject to change. MTEP funding for this Project shall be limited to \$140,000. Agency shall be responsible for all remaining costs, including the 10.27 percent match for all eligible costs, any non-participating costs, and all costs in excess of the available federal or state funds.
5. The Funding Ratio for this Project is 80% of MTEP funds to 20% Agency funds and applies to Project Underruns. The Funding Ratio for this Project does not apply in the case of Project Overruns.
6. If, at the time of Contract Award or Project Closeout, the Project Underruns the estimated Total Project Cost in this Agreement, MTEP funding and Other Funds will be obligated proportionally based on the Funding Ratio. Any unused MTEP funds, will be retained by State, and will not be available for use by Agency for this Agreement or any other projects.
7. Project Overruns which occur at the time of Contract Award, and or at the time of Project Closeout are the responsibility of the Agency.
8. Project decisions regarding design standards, design exceptions, utility relocation expenses, right of way needs, preliminary engineering charges, construction engineering charges, and Contract Change Orders, as applicable shall be mutually agreed upon between the Agency and the State, as these decisions may impact the Total Project Cost. However, State may award a construction contract at ten (10) percent (%) over engineer's estimate without prior approval of Agency.
9. State will submit the requests for federal funding to Federal Highway Administration (FHWA). The federal funding for this Project is contingent upon approval of each funding request by FHWA. Any work performed prior to acceptance by FHWA or outside the scope of work will be considered nonparticipating and paid for at Agency expense.
10. State considers Agency a subrecipient of the federal funds it receives as reimbursement under this Agreement. The Catalog of Federal Domestic Assistance (CFDA) number and title for this Project is 20.205, Highway Planning and Construction.
11. The term of this Agreement shall begin on the date all required signatures are obtained and shall terminate upon completion of the Project and final payment or ten (10) calendar years following the date all required signatures are obtained, whichever is sooner.
12. This Agreement may be terminated by mutual written consent of both Parties.
13. State may terminate this Agreement effective upon delivery of written notice to Agency, or at such later date as may be established by State, under any of the following conditions:

- a. If Agency fails to provide services called for by this Agreement within the time specified herein or any extension thereof.
 - b. If Agency fails to perform any of the other provisions of this Agreement, or so fails to pursue the work as to endanger performance of this Agreement in accordance with its terms, and after receipt of written notice from State fails to correct such failures within ten (10) days or such longer period as State may authorize.
 - c. If Agency fails to provide payment of its share of the cost of the Project.
 - d. If State fails to receive funding, appropriations, limitations or other expenditure authority sufficient to allow State, in the exercise of its reasonable administrative discretion, to continue to make payments for performance of this Agreement.
 - e. If federal or state laws, regulations or guidelines are modified or interpreted in such a way that either the work under this Agreement is prohibited or if State is prohibited from paying for such work from the planned funding source.
14. a. Information required by 2 CFR 200.331(a), except for (xiii) indirect cost rate, shall be contained in the USDOT FHWA Federal Aid Project Agreement for this Project, a copy of which shall be provided by State to Agency with the Notice to Proceed.
- b. The indirect cost rate for this project at the time the agreement is written is zero (0%) percent.
15. Any termination of this Agreement shall not prejudice any rights or obligations accrued to the Parties prior to termination.
16. The Special and Standard Provisions attached hereto, marked Attachments 1 and 2, respectively, are by this reference made a part hereof. The Standard Provisions apply to all federal-aid projects and may be modified only by the Special Provisions. The Parties hereto mutually agree to the terms and conditions set forth in Attachments 1 and 2. In the event of a conflict, this Agreement shall control over the attachments, and Attachment 1 shall control over Attachment 2.
17. Agency, as a recipient of federal funds, pursuant to this Agreement with the State, shall assume sole liability for Agency's breach of any federal statutes, rules, program requirements and grant provisions applicable to the federal funds, and shall, upon Agency's breach of any such conditions that requires the State to return funds to FHWA, hold harmless and indemnify the State for an amount equal to the funds received under this Agreement; or if legal limitations apply to the indemnification ability of Agency, the indemnification amount shall be the maximum amount of funds available for expenditure, including any available

contingency funds or other available non-appropriated funds, up to the amount received under this Agreement.

18. State and Agency hereto agree that if any term or provision of this Agreement is declared by a court of competent jurisdiction to be invalid, unenforceable, illegal or in conflict with any law, the validity of the remaining terms and provisions shall not be affected, and the rights and obligations of the Parties shall be construed and enforced as if the Agreement did not contain the particular term or provision held to be invalid.
19. Agency certifies and represents that the individual(s) signing this Agreement has been authorized to enter into and execute this Agreement on behalf of Agency, under the direction or approval of its governing body, commission, board, officers, members or representatives, and to legally bind Agency.
20. This Agreement may be executed in several counterparts (facsimile or otherwise) all of which when taken together shall constitute one agreement binding on all Parties, notwithstanding that all Parties are not signatories to the same counterpart. Each copy of this Agreement so executed shall constitute an original.
21. This Agreement and attached exhibits constitute the entire agreement between the Parties on the subject matter hereof. In the event of conflict, the body of this Agreement and the attached Exhibits will control over Project application and documents provided by Agency to State. There are no understandings, agreements, or representations, oral or written, not specified herein regarding this Agreement. No waiver, consent, modification or change of terms of this Agreement shall bind either party unless in writing and signed by both Parties and all necessary approvals have been obtained. Such waiver, consent, modification or change, if made, shall be effective only in the specific instance and for the specific purpose given. The failure of State to enforce any provision of this Agreement shall not constitute a waiver by State of that or any other provision.
22. State contact for this Agreement is Jeffrey Lange, Project Leader, ODOT Region 2, Area 5, 644 “A” Street, Springfield, Oregon 97477; phone: (541) 747-1302; email: jeffrey.r.lange@odot.state.or.us, or assigned designee upon individual’s absence. State shall notify the other Party in writing of any contact information changes during the term of this Agreement.
23. Agency’s contact for this Project is Ric Ingham, City Administrator, City of Veneta, 88184 Eighth Street, PO Box 458, Veneta, Oregon 97477; phone: (541) 935-2191; email: ringham@ci.veneta.or.us, or assigned designee upon individual’s absence. Agency shall notify the other Party in writing of any contact information changes during the term of this Agreement.

THE PARTIES, by execution of this Agreement, hereby acknowledge that their signing representatives have read this Agreement, understand it, and agree to be bound by its terms and conditions.

This Project is in the 2015-2018 Statewide Transportation Improvement Program (STIP), (Key No. 18756) that was adopted by the Oregon Transportation Commission on December 18, 2014 (or subsequently by amendment to the STIP).

CITY OF VENETA, by and through its
elected officials

By XXXXXXXXXXXXXXXXXXXX
Mayor

Date _____

By XXXXXXXXXXXXXXXXXXXX
City Administrator

Date _____

APPROVED AS TO LEGAL FORM

By XXXXXXXXXXXXXXXXXXXX
City Legal Counsel

Date _____

Agency Contact:

Ric Ingham, City Administrator
City of Veneta
88184 Eighth Street
PO Box 458
Veneta, OR 97487
Phone: (541) 935-2191
Email: ringham@ci.veneta.or.us

STATE OF OREGON, by and through
its Department of Transportation

By XXXXXXXXXXXXXXXXXXXX
Region 2 Manager

Date _____

APPROVAL RECOMMENDED

By XXXXXXXXXXXXXXXXXXXX
Area 5 Manager

Date _____

**APPROVED AS TO LEGAL
SUFFICIENCY**

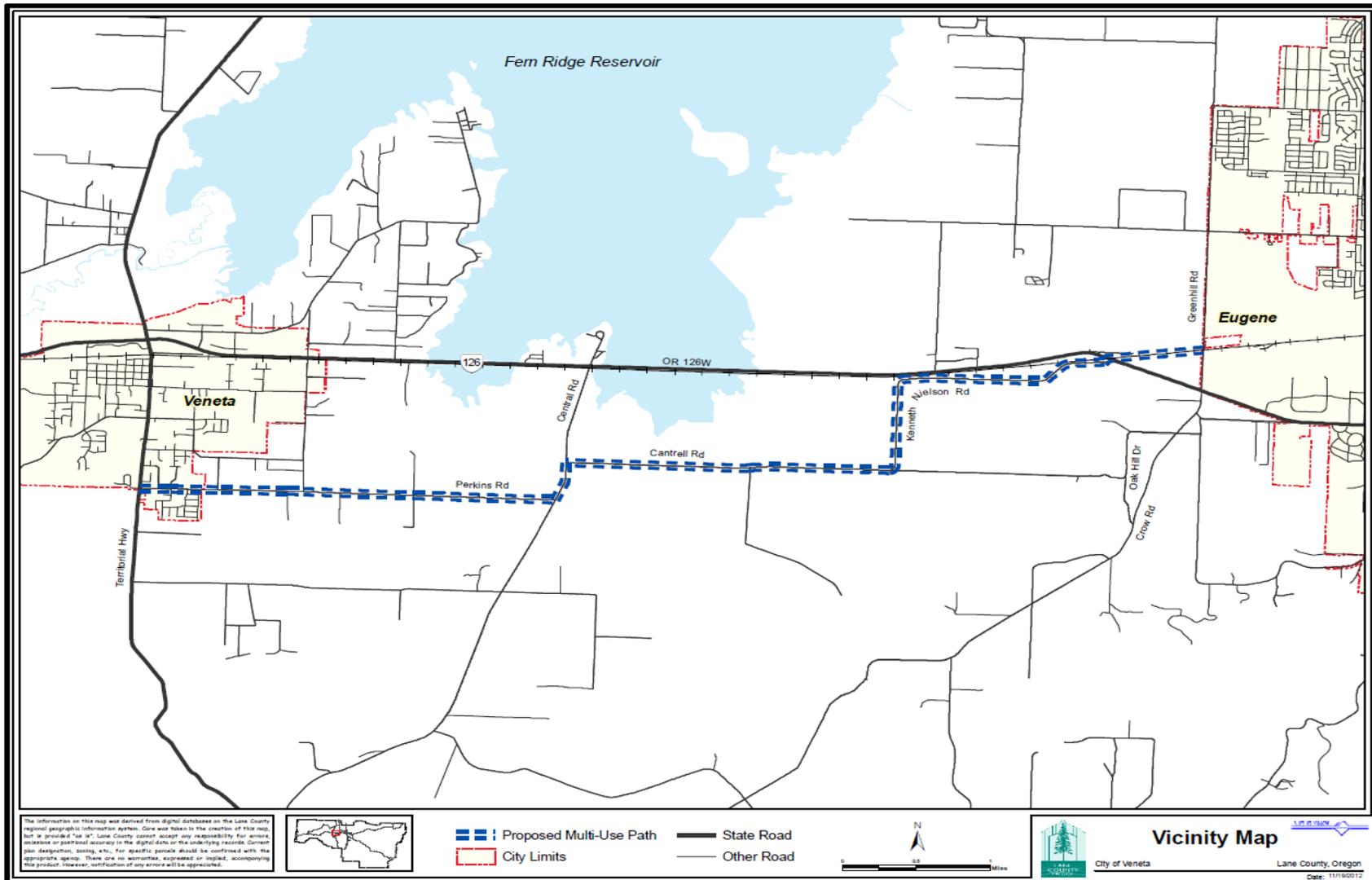
By XXXXXXXXXXXXXXXXXXXX
Assistant Attorney General

Date _____

State Contact:

Jeffrey Lange, Project Leader
ODOT Region 2, Area 5
644 "A" Street
Springfield, OR 97477
Phone: (541) 747-1302
Email: jeffrey.r.lange@odot.state.or.us

EXHIBIT A – Project Location Map



ATTACHMENT NO. 1

SPECIAL PROVISIONS

1. State, or the consultant, shall conduct the necessary field surveys, environmental studies, traffic investigations, foundation explorations, hydraulic studies, and acquire needed permits. State or the consultant shall conduct all work components necessary to complete the Project.
2. Agency guarantees the availability of Agency funding in an amount required to fully fund Agency's share of the Project.
3. State will perform work throughout the duration of the Project and shall provide a preliminary estimate of State costs for this work. Prior to the start of the Preliminary Engineering phase State shall provide an updated estimate of State costs for that phase. Agency understands that State's costs are estimates only and agrees to reimburse State for actual cost incurred per this Agreement.
4. Agency grants State the right to enter onto Agency right of way for the performance of duties as set forth in this Agreement.
5. If Agency fails to meet the requirements of this Agreement or the underlying federal regulations, State may withhold the Agency's proportional share of Highway Fund distribution necessary to reimburse State for costs incurred by such Agency breach. Agency will be ineligible to receive or apply for any Title 23, United States Code funds until State receives full reimbursement of the costs incurred.

ATTACHMENT NO. 2

FEDERAL STANDARD PROVISIONS

PROJECT ADMINISTRATION

1. State (ODOT) is acting to fulfill its responsibility to the Federal Highway Administration (FHWA) by the administration of this Project, and Agency (i.e. county, city, unit of local government, or other state agency) hereby agrees that State shall have full authority to carry out this administration. If requested by Agency or if deemed necessary by State in order to meet its obligations to FHWA, State will act for Agency in other matters pertaining to the Project. Prior to taking such action, State will confer with Agency concerning actions necessary to meet federal obligations. State or its consultant, with Agency involvement shall, if necessary, appoint and direct the activities of a Citizen's Advisory Committee and/or Technical Advisory Committee, conduct a hearing and recommend the preferred alternative. State and Agency shall each assign a person in responsible charge "liaison" to coordinate activities and assure that the interests of both Parties are considered during all phases of the Project.
2. Any project that uses federal funds in project development is subject to plans, specifications and estimates (PS&E) review and approval by FHWA or State acting on behalf of FHWA prior to advertisement for bid proposals, regardless of the source of funding for construction.
3. State will provide or secure services to perform plans, specifications and estimates (PS&E), construction contract advertisement, bid, award, contractor payments and contract administration. A State-approved consultant may be used to perform preliminary engineering, right of way and construction engineering services.

PROJECT FUNDING REQUEST

4. State shall submit a separate written Project funding request to FHWA requesting approval of federal-aid participation for each project phase including a) Program Development (Planning), b) Preliminary Engineering (National Environmental Policy Act - NEPA, Permitting and Project Design), c) Right of Way Acquisition, d) Utilities, and e) Construction (Construction Advertising, Bid and Award). Any work performed prior to FHWA's approval of each funding request will be considered nonparticipating and paid for at Agency expense. State, the consultant or Agency shall not proceed on any activity in which federal-aid participation is desired until such written approval for each corresponding phase is obtained by State. State shall notify Agency in writing when authorization to proceed has been received from FHWA. All work and records of such work shall be in conformance with FHWA rules and regulations.

FINANCE

5. Federal funds shall be applied toward Project costs at the current federal-aid matching ratio, unless otherwise agreed and allowable by law. Agency shall be responsible for the entire match amount for the federal funds and any portion of the Project, which is not covered by federal funding, unless otherwise agreed to and specified in the intergovernmental Agreement (Project Agreement). Agency must obtain written approval from State to use in-kind contributions rather than cash to satisfy all or part of the matching funds requirement. If federal funds are used, State will specify the Catalog of Federal Domestic Assistance (CFDA) number in the Project Agreement. State will also determine and clearly state in the Project Agreement if recipient is a subrecipient or vendor, using criteria 2 CFR 200.330.

6. If the estimated cost exceeds the total matched federal funds available, Agency shall deposit its share of the required matching funds, plus 100 percent of all costs in excess of the total matched federal funds. Agency shall pay one hundred (100) percent of the cost of any item in which FHWA will not participate. If Agency has not repaid any non-participating cost, future allocations of federal funds or allocations of State Highway Trust Funds to Agency may be withheld to pay the non-participating costs. If State approves processes, procedures, or contract administration outside the Local Agency Guidelines Manual that result in items being declared non-participating by FHWA, such items deemed non-participating will be negotiated between Agency and State.
7. Agency agrees that costs incurred by State and Agency for services performed in connection with any phase of the Project shall be charged to the Project, unless otherwise mutually agreed upon by the Parties.
8. Agency's estimated share and advance deposit.
 - a) Agency shall, prior to commencement of the preliminary engineering and/or right of way acquisition phases, deposit with State its estimated share of each phase. Exception may be made in the case of projects where Agency has written approval from State to use in-kind contributions rather than cash to satisfy all or part of the matching funds requirement.
 - b) Agency's construction phase deposit shall be one hundred ten (110) percent of Agency's share of the engineer's estimate and shall be received prior to award of the construction contract. Any additional balance of the deposit, based on the actual bid must be received within forty-five (45) days of receipt of written notification by State of the final amount due, unless the contract is cancelled. Any balance of a cash deposit in excess of amount needed, based on the actual bid, will be refunded within forty-five (45) days of receipt by State of the Project sponsor's written request.
 - c) Pursuant to Oregon Revised Statutes (ORS) 366.425, the advance deposit may be in the form of 1) money deposited in the State Treasury (an option where a deposit is made in the Local Government Investment Pool), and an Irrevocable Limited Power of Attorney is sent to State's Active Transportation Section, Funding and Program Services Unit, or 2) an Irrevocable Letter of Credit issued by a local bank in the name of State, or 3) cash.
9. If Agency makes a written request for the cancellation of a federal-aid project; Agency shall bear one hundred (100) percent of all costs incurred as of the date of cancellation. If State was the sole cause of the cancellation, State shall bear one hundred (100) percent of all costs incurred. If it is determined that the cancellation was caused by third parties or circumstances beyond the control of State or Agency, Agency shall bear all costs, whether incurred by State or Agency, either directly or through contract services, and State shall bear any State administrative costs incurred. After settlement of payments, State shall deliver surveys, maps, field notes, and all other data to Agency.
10. Agency shall follow the requirements stated in the Single Audit Act. Agencies expending \$500,000 or more in Federal funds (from all sources) in its fiscal year beginning prior to December 26, 2014, shall have a single organization-wide audit conducted in accordance with the Single Audit Act of 1984, PL 98-502 as amended by PL 104-156 and subject to the requirements of 49 CFR Parts 18 and 19. Agencies expending \$750,000 or more in federal funds (from all sources) in a fiscal year beginning on or after December 26, 2014 shall have a

single organization-wide audit conducted in accordance with the provisions of 2 CFR part 200, subpart F. Agencies expending less than \$500,000 in Federal funds in a fiscal year beginning prior to December 26, 2014, or less than \$750,000 in a fiscal year beginning on or after that date, is exempt from Federal audit requirements for that year. Records must be available for review or audit by appropriate officials based on the records retention period identified in the Project Agreement. The cost of this audit can be partially prorated to the federal program.

11. Agency shall make additional deposits, as needed, upon request from State. Requests for additional deposits shall be accompanied by an itemized statement of expenditures and an estimated cost to complete the Project.
12. Agency shall present invoices for one hundred (100) percent of actual costs incurred by Agency on behalf of the Project directly to State's Liaison for review, approval and reimbursement to Agency. Costs will be reimbursed consistent with federal funding provisions and the Project Agreement. Such invoices shall identify the Project by the name of the Project Agreement, reference the Project Agreement number, and shall itemize and explain all expenses for which reimbursement is claimed. Invoices shall be presented for periods of not less than one-month duration, based on actual expenses to date. All invoices received from Agency must be approved by State's Liaison prior to payment. Agency's actual costs eligible for federal-aid or State participation shall be those allowable under the provisions of the Federal-Aid Policy Guide (FAPG), Title 23 CFR parts 1.11, 140 and 710. Final invoices shall be submitted to State for processing within forty-five (45) days from the end of each funding phase as follows: a) preliminary engineering, which ends at the award date of construction b) last payment for right of way acquisition and c) contract completion for construction. Partial billing (progress payment) shall be submitted to State within forty-five (45) days from date that costs are incurred. Invoices submitted after 45 days may not be eligible for reimbursement by FHWA. Agency acknowledges and agrees that State, the Oregon Secretary of State's Office, the federal government, and their duly authorized representatives shall have access to the books, documents, papers, and records of Agency which are directly pertinent to the Project Agreement for the purpose of making audit, examination, excerpts, and transcripts for a period ending on the later of six (6) years following the date of final voucher to FHWA or after resolution of any disputes under the Project Agreement. Copies of such records and accounts shall be made available upon request. For real property and equipment, the retention period starts from the date of disposition (2 CFR 200.333(c).
13. Agency shall, upon State's written request for reimbursement in accordance with Title 23, CFR part 630.112(c) 1 and 2, as directed by FHWA, reimburse State for federal-aid funds distributed to Agency if any of the following events occur:
 - a) Right of way acquisition is not undertaken or actual construction is not started by the close of the twentieth federal fiscal year following the federal fiscal year in which the federal-aid funds were authorized for right of way acquisition. Agency may submit a written request to State's Liaison for a time extension beyond the twenty (20) year limit with no repayment of federal funds and State will forward the request to FHWA. FHWA may approve this request if it is considered reasonable.
 - b) Right of way acquisition or actual construction of the facility for which preliminary engineering is undertaken is not started by the close of the tenth federal fiscal year following the federal fiscal year in which the federal-aid funds were authorized. Agency may submit a written request to State's Liaison for a time extension beyond the ten (10)

year limit with no repayment of federal funds and State will forward the request to FHWA. FHWA may approve this request if it is considered reasonable.

14. State shall, on behalf of Agency, maintain all Project documentation in keeping with State and FHWA standards and specifications. This shall include, but is not limited to, daily work records, quantity documentation, material invoices and quality documentation, certificates of origin, process control records, test results, and inspection records to ensure that the Project is completed in conformance with approved plans and specifications.
15. State shall submit all claims for federal-aid participation to FHWA in the normal manner and compile accurate cost accounting records. State shall pay all reimbursable costs of the Project. Agency may request a statement of costs-to-date at any time by submitting a written request. When the actual total cost of the Project has been computed, State shall furnish Agency with an itemized statement of final costs. Agency shall pay an amount which, when added to said advance deposit and federal reimbursement payment, will equal one hundred (100) percent of the final total actual cost. Any portion of deposits made in excess of the final total costs of the Project, minus federal reimbursement, shall be released to Agency. The actual cost of services provided by State will be charged to the Project expenditure account(s) and will be included in the total cost of the Project.

STANDARDS

16. Agency and State agree that minimum design standards on all local agency jurisdictional roadway or street projects on the National Highway System (NHS) and projects on the non-NHS shall be the American Association of State Highway and Transportation Officials (AASHTO) standards and be in accordance with State's Oregon Bicycle & Pedestrian Design Guide (current version). State or the consultant shall use either AASHTO's *A Policy on Geometric Design of Highways and Streets* (current version), or State's Resurfacing, Restoration and Rehabilitation (3R) design standards for 3R projects. State or the consultant may use AASHTO for vertical clearance requirements on Agency's jurisdictional roadways or streets.
17. Agency agrees that if the Project is on the Oregon State Highway System or State-owned facility, that design standards shall be in compliance with standards specified in the current ODOT Highway Design Manual and related references. Construction plans for such projects shall be in conformance with standard practices of State and all specifications shall be in substantial compliance with the most current Oregon Standard Specifications for Highway Construction and current Contract Plans Development Guide.
18. State and Agency agree that for all projects on the Oregon State Highway System or State-owned facility any design element that does not meet ODOT Highway Design Manual design standards must be justified and documented by means of a design exception. State and Agency further agrees that for all projects on the NHS, regardless of funding source; any design element that does not meet AASHTO standards must be justified and documented by means of a design exception. State shall review any design exceptions on the Oregon State Highway System and retains authority for their approval. FHWA shall review any design exceptions for projects subject to Focused Federal Oversight and retains authority for their approval.
19. Agency agrees all traffic control devices and traffic management plans shall meet the requirements of the current edition of the Manual on Uniform Traffic Control Devices and Oregon Supplement as adopted in Oregon Administrative Rule (OAR) 734-020-0005. State or

the consultant shall, on behalf of Agency, obtain the approval of the State Traffic Engineer prior to the design and construction of any traffic signal, or illumination to be installed on a state highway pursuant to OAR 734-020-0430.

20. The standard unit of measurement for all aspects of the Project shall be English Units. All Project documents and products shall be in English. This includes, but is not limited to, right of way, environmental documents, plans and specifications, and utilities.

PRELIMINARY & CONSTRUCTION ENGINEERING

21. Preliminary engineering and construction engineering may be performed by either a) State, b) State-approved consultant, or c) certified agency. Engineering work will be monitored by State or certified agency to ensure conformance with FHWA rules and regulations. Project plans, specifications and cost estimates shall be performed by either a) State, b) State-approved consultant or c) certified agency. State shall review and approve Project plans, specifications and cost estimates. State shall, at project expense, review, process and approve, or submit for approval to the federal regulators, all environmental statements. State shall, offer Agency the opportunity to review and approve the documents prior to advertising for bids.
22. Agency may request State's two-tiered consultant selection process as allowed by OAR 137-048-0260 to perform architectural, engineering, photogrammetry, transportation planning, land surveying and related services (A&E Services) as needed for federal-aid transportation projects. Use of the State's processes is required to ensure federal reimbursement. State will award and execute the contracts. State's personal services contracting process and resulting contract document will follow Title 23 CFR part 172, 2 CFR part 1201, ORS 279A.055, 279C.110, 279C.125, OAR 137-048-0130, OAR 137-048-0220(4) and State Personal Services Contracting Procedures as approved by the FHWA. Such personal services contract(s) shall contain a description of the work to be performed, a project schedule, and the method of payment. No reimbursement shall be made using federal-aid funds for any costs incurred by Agency or the consultant prior to receiving authorization from State to proceed.
23. The party responsible for performing preliminary engineering for the Project shall, as part of its preliminary engineering costs, obtain all Project related permits necessary for the construction of said Project. Said permits shall include, but are not limited to, access, utility, environmental, construction, and approach permits. All pre-construction permits will be obtained prior to advertisement for construction.
24. State or certified agency shall prepare construction contract and bidding documents, advertise for bid proposals, and award all construction contracts.
25. Upon State's or certified agency's award of a construction contract, State or certified agency shall perform quality assurance and independent assurance testing in accordance with the FHWA-approved Quality Assurance Program found in State's Manual of Field Test Procedures, process and pay all contractor progress estimates, check final quantities and costs, and oversee and provide intermittent inspection services during the construction phase of the Project.
26. State shall, as a Project expense, assign a liaison to provide Project monitoring as needed throughout all phases of Project activities (preliminary engineering, right-of-way acquisition, and construction). State's liaison shall process reimbursement for federal participation costs.

**REQUIRED STATEMENT FOR UNITED STATES DEPARTMENT OF
TRANSPORTATION (USDOT) FINANCIAL ASSISTANCE AGREEMENT**

27. By signing the Federal-Aid Agreement to which these Federal Standard Provisions are attached, Agency agrees to adopt State's DBE Program Plan, available at https://www.oregon.gov/ODOT/CS/CIVILRIGHTS/Pages/dbe_prog_plan.aspx. Agency shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of any USDOT-assisted contract or in the administration of its DBE program or the requirements of 49 CFR part 26. Agency agrees to take all necessary and reasonable steps under 49 CFR part 26 to ensure nondiscrimination in the award and administration of USDOT-assisted contracts. State's DBE program, as required by 49 CFR part 26 and as approved by USDOT, is incorporated by reference in this Project Agreement. Implementation of this program is a legal obligation and failure to carry out its terms shall be treated as a violation of this Project Agreement. Upon notification to the recipient of its failure to carry out its approved program, the USDOT may impose sanctions as provided for under part 26 and may, in appropriate cases, refer the matter for enforcement under 18 United States Code (USC) 1001 and/or the Program Fraud Civil Remedies Act of 1986 (31 USC 3801 et seq.).

DISADVANTAGED BUSINESS ENTERPRISES (DBE) OBLIGATIONS

28. State and Agency agree to incorporate by reference the requirements of 49 CFR part 26 and State's DBE Program Plan, as required by 49 CFR part 26 and as approved by USDOT, into all contracts entered into under this Project Agreement. The following required DBE assurance shall be included in all contracts:

"The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of Title 49 CFR part 26 in the award and administration of federal-aid contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as Agency deems appropriate. Each subcontract the contractor signs with a subcontractor must include the assurance in this paragraph (see 49 CFR 26.13(b))."

29. State and Agency agree to comply with all applicable civil rights laws, rules and regulations, including Title V and Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990 (ADA), and Titles VI and VII of the Civil Rights Act of 1964.

30. The Parties hereto agree and understand that they will comply with all applicable federal, state, and local laws, regulations, executive orders and ordinances applicable to the work including, but not limited to, the provisions of ORS 279C.505, 279C.515, 279C.520, 279C.530 and 279B.270, incorporated herein by reference and made a part hereof; Title 23 CFR parts 1.11, 140, 635, 710, and 771; Title 49 CFR parts 24 and 26; , 2 CFR 1201; Title 23, USC, Federal-Aid Highway Act; Title 41, Chapter 1, USC 51-58, Anti-Kickback Act; Title 42 USC; Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970, as amended, the provisions of the FAPG and *FHWA Contract Administration Core Curriculum Participants Manual & Reference Guide*. State and Agency agree that FHWA-1273 Required Contract Provisions shall be included in all contracts and subcontracts verbatim and not by reference.

RIGHT OF WAY

31. State and the consultant, if any, agree that right of way activities shall be in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, ORS Chapter 35, FAPG, CFR, and the *ODOT Right of Way Manual*, Title 23 CFR part 710 and Title 49 CFR part 24. State, at Project expense, shall review all right of way activities engaged in by Agency to ensure compliance with all laws and regulations.
32. State is responsible for proper acquisition of the necessary right of way and easements for construction and maintenance of projects. State or the consultant may perform acquisition of the necessary right of way and easements for construction and maintenance of the Project in accordance with the *ODOT Right of Way Manual*, and with the prior approval from State's Region Right of Way office.
33. Regardless of who acquires or performs any of the right of way activities, a right of way services agreement shall be created by State's Region Right of Way office setting forth the responsibilities and activities to be accomplished by each Party. If the Project has the potential of needing right of way, to ensure compliance in the event that right of way is unexpectedly needed, a right of way services agreement will be required. State, at Project expense, shall be responsible for requesting the obligation of project funding from FHWA. State, at Project expense, shall be responsible for coordinating certification of the right of way, and providing oversight and monitoring. Funding authorization requests for federal right of way funds must be sent through State's Liaison, who will forward the request to State's Region Right of Way office on all projects. State or the consultant must receive written authorization to proceed from State's Right of Way Section prior to beginning right of way activities. All projects must have right of way certification coordinated through State's Region Right of Way office to declare compliance and project readiness for construction (even for projects where no federal funds were used for right of way, but federal funds were used elsewhere on a project). State's Liaison shall contact State's Region Right of Way office for additional information or clarification on behalf of Agency.
34. Agency agrees that if any real property purchased with federal-aid participation is no longer needed for the originally authorized purpose, the disposition of such property shall be subject to applicable rules and regulations, which are in effect at the time of disposition. Reimbursement to State and FHWA of the required proportionate shares of the fair market value may be required.
35. State or the consultant shall ensure that all project right of way monumentation will be conducted in conformance with ORS 209.155.
36. State and Agency grants each other authority to enter onto the other's right of way for the performance of non-construction activities such as surveying and inspection of the Project.

RAILROADS

37. State or Agency shall follow State established policy and procedures when impacts occur on railroad property. The policy and procedures are available through the State's Liaison, who will contact State's Railroad Liaison on behalf of Agency. Only those costs allowable under Title 23 CFR part 140 subpart I, and Title 23 part 646 subpart B shall be included in the total Project costs; all other costs associated with railroad work will be at the sole expense of Agency, or others. Agency may request State, in writing and, at Project expense, to provide railroad coordination and negotiations through the State's Utility & Railroad Liaison on behalf of Agency. However, State is under no obligation to agree to perform said duties.

UTILITIES

38. State, the consultant, or Agency shall follow State established statutes, policies and procedures when impacts occur to privately or publicly-owned utilities. Policy, procedures and forms are available through the State Utility Liaison or State's Liaison. State, the consultant or Agency shall provide copies of all signed utility notifications, agreements and Utility Certification to the State Utility & Railroad Liaison. Only those utility relocations, which are eligible for reimbursement under the FAPG, Title 23 CFR part 645 subparts A and B, shall be included in the total Project costs; all other utility relocations shall be at the sole expense of Agency, or others. Agency may send a written request to State, at Project expense, to arrange for utility relocations/adjustments lying within Agency jurisdiction. This request must be submitted no later than twenty-one (21) weeks prior to bid let date. Agency shall not perform any utility work on state highway right of way without first receiving written authorization from State.

GRADE CHANGE LIABILITY

39. Agency, if a County, acknowledges the effect and scope of ORS 105.755 and agrees that all acts necessary to complete construction of the Project which may alter or change the grade of existing county roads are being accomplished at the direct request of the County.
40. Agency, if a City, hereby accepts responsibility for all claims for damages from grade changes. Approval of plans by State shall not subject State to liability under ORS 105.760 for change of grade.
41. Agency, if a City, by execution of the Project Agreement, gives its consent as required by ORS 373.030(2) to any and all changes of grade within the City limits, and gives its consent as required by ORS 373.050(1) to any and all closure of streets intersecting the highway, if any there be in connection with or arising out of the Project covered by the Project Agreement.

MAINTENANCE RESPONSIBILITIES

42. Agency shall, at its own expense, maintain operate, and provide power as needed upon Project completion at a minimum level that is consistent with normal depreciation and/or service demand and throughout the useful life of the Project. The useful life of the Project is defined in the Special Provisions. State may conduct periodic inspections during the life of the Project to verify that the Project is properly maintained and continues to serve the purpose for which federal funds were provided. Maintenance and power responsibilities shall survive any termination of the Project Agreement. In the event the Project will include or affect a state highway, this provision does not address maintenance of that state highway.

CONTRIBUTION

43. If any third party makes any claim or brings any action, suit or proceeding alleging a tort as now or hereafter defined in ORS 30.260 ("Third Party Claim") against State or Agency with respect to which the other Party may have liability, the notified Party must promptly notify the other Party in writing of the Third Party Claim and deliver to the other Party a copy of the claim, process, and all legal pleadings with respect to the Third Party Claim. Each Party is entitled to participate in the defense of a Third Party Claim, and to defend a Third Party Claim with counsel of its own choosing. Receipt by a Party of the notice and copies required in this paragraph and meaningful opportunity for the Party to participate in the investigation, defense and settlement of the Third Party Claim with counsel of its own choosing are conditions precedent to that Party's liability with respect to the Third Party Claim.

44. With respect to a Third Party Claim for which State is jointly liable with Agency (or would be if joined in the Third Party Claim), State shall contribute to the amount of expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred and paid or payable by Agency in such proportion as is appropriate to reflect the relative fault of State on the one hand and of Agency on the other hand in connection with the events which resulted in such expenses, judgments, fines or settlement amounts, as well as any other relevant equitable considerations. The relative fault of State on the one hand and of Agency on the other hand shall be determined by reference to, among other things, the Parties' relative intent, knowledge, access to information and opportunity to correct or prevent the circumstances resulting in such expenses, judgments, fines or settlement amounts. State's contribution amount in any instance is capped to the same extent it would have been capped under Oregon law, including the Oregon Tort Claims Act, ORS 30.260 to 30.300, if State had sole liability in the proceeding.
45. With respect to a Third Party Claim for which Agency is jointly liable with State (or would be if joined in the Third Party Claim), Agency shall contribute to the amount of expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred and paid or payable by State in such proportion as is appropriate to reflect the relative fault of Agency on the one hand and of State on the other hand in connection with the events which resulted in such expenses, judgments, fines or settlement amounts, as well as any other relevant equitable considerations. The relative fault of Agency on the one hand and of State on the other hand shall be determined by reference to, among other things, the Parties' relative intent, knowledge, access to information and opportunity to correct or prevent the circumstances resulting in such expenses, judgments, fines or settlement amounts. Agency's contribution amount in any instance is capped to the same extent it would have been capped under Oregon law, including the Oregon Tort Claims Act, ORS 30.260 to 30.300, if it had sole liability in the proceeding.

ALTERNATIVE DISPUTE RESOLUTION

46. The Parties shall attempt in good faith to resolve any dispute arising out of this Project Agreement. In addition, the Parties may agree to utilize a jointly selected mediator or arbitrator (for non-binding arbitration) to resolve the dispute short of litigation.

WORKERS' COMPENSATION COVERAGE

47. All employers, including Agency, that employ subject workers who work under this Project Agreement in the State of Oregon shall comply with ORS 656.017 and provide the required Workers' Compensation coverage unless such employers are exempt under ORS 656.126. Employers Liability Insurance with coverage limits of not less than five hundred thousand (\$500,000) must be included. State and Agency shall ensure that each of its contractors complies with these requirements.

LOBBYING RESTRICTIONS – pursuant to Form FHWA-1273, Required Contract Provisions

48. Agency certifies by signing the Project Agreement that:
- a) No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the

entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.

- b) If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- c) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subgrants, and contracts and subcontracts under grants, subgrants, loans, and cooperative agreements) which exceed one hundred thousand dollars (\$100,000), and that all such subrecipients shall certify and disclose accordingly.
- d) This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Title 31, USC Section 1352.
- e) Any person who fails to file the required certification shall be subject to a civil penalty of not less than ten thousand dollars (\$10,000) and not more than one hundred thousand dollars (\$100,000) for each such failure.

City of Veneta
Financial Activity and Fund Balance Report
For July 1, 2016 through June 30, 2017

Fund	Beginning Fund Balance July 1, 2016		New Revenue			Expenditures			Ending Fund Balance September 30, 2016	
	Adopted Budget	Actual	Adopted Budget	Actual Year-to-Date	% of Budget Received	Adopted Budget	Actual Year-to-Date	% of Budget Expended	Adopted Budget	Actual
GENERAL:	\$ 1,230,620	\$ 1,242,105.07							\$ 1,096,717	\$ 1,231,985.26
Property Taxes			259,452	3,422.51	1%					
Governmental Agencies			84,253	6,247.59	7%					
Franchise Fees			105,459	7,901.07	7%					
User Fees			99,862	76,926.98	77%					
Interest Earnings			4,152	3,101.44	75%					
Grants and Donations			28,000	42,312.60	151%					
Licenses & Permits			4,900	827.00	17%					
Fines			13,000	3,643.37	28%					
Loan Proceeds			-	-	n/a					
All Other			14,996	710.43	5%					
Transfers-In			3,000	-	0%					
Personal Services						326,910	\$ 80,142.30	25%		
Materials & Services						324,567	75,070.50	23%		
Transfers-Out						-	-	n/a		
Capital Outlay						24,500	-	0%		
Contingency						75,000	-	0%		
DEBT SERVICE:	169,598	138,247.52							171,342	119,457.56
Property Taxes			87,787	666.80	1%					
Interest Earnings			561	345.19	62%					
Debt Service						86,604	19,801.95	23%		
LAW ENFORCEMENT:	218,192	271,250.64							117,186	275,721.92
Property Taxes			722,680	4,104.96	1%					
Interest Earnings			2,236	677.29	30%					
Licenses & Permits			35,000	(188.63)	-1%					
Grants and Donations			-	-	n/a					
Transfers-In			10,000	-	0%					
All Other			4,025	-	0%					
Materials & Services						871,997	122.34	0%		
Capital Outlay						450	-	0%		
Contingency						2,500	-	0%		
PARKS & RECREATION:	523,913	563,958.07							368,521	456,995.54
Property Taxes			201,646	1,222.29	1%					
Governmental Agencies			41,904	-	0%					
User Fees			46,700	29,470.46	63%					
Interest Earnings			1,000	1,408.14	141%					
Grants and Donations			10	-	0%					
All Other			5,050	210.00	4%					
Transfers-In			20,000	-	0%					
Personal Services						235,895	87,228.54	37%		
Materials & Services						195,007	52,044.88	27%		
Capital Outlay						20,800	-	0%		
Contingency						20,000	-	0%		

City of Veneta
Financial Activity and Fund Balance Report
For July 1, 2016 through June 30, 2017

Fund	Beginning Fund Balance July 1, 2016		New Revenue			Expenditures			Ending Fund Balance September 30, 2016	
	Adopted Budget	Actual	Adopted Budget	Actual Year-to-Date	% of Budget Received	Adopted Budget	Actual Year-to-Date	% of Budget Expended	Adopted Budget	Actual
PLANNING	186,880	205,112.97							136,970	165,368.31
Property Taxes			176,185	797.13	0%					
Governmental Agencies			-	-	n/a					
User Fees			15,000	9,460.69	63%					
Interest Earnings			1,023	512.14	50%					
Grants and Donations			25		0%					
All Other			188	25.00	13%					
Personal Services						165,144	39,102.66	24%		
Materials & Services						45,287	11,436.96	25%		
Capital Outlay						6,900	-	0%		
Contingency						25,000	-	0%		
MUNICIPAL WATER:	2,287,023	2,329,640.19							2,319,555	2,246,524.78
User Fees			955,499	355,663.48	37%					
Interest Earnings			8,863	5,816.87	66%					
Licenses & Permits			10,400	4,900.00	47%					
All Other			14,244	4,080.53	29%					
Transfers-In			144,000	-	0%					
Personal Services						292,155	69,192.92	24%		
Materials & Services						389,240	92,232.37	24%		
Transfers-Out						5,000	-	0%		
Capital Outlay						24,500	-	0%		
Debt Service						289,579	292,151.00	101%		
Contingency						100,000	-	0%		
MUNICIPAL SEWER:	1,674,208	1,713,973.69							1,319,066	1,589,446.01
User Fees			996,876	258,308.86	26%					
Interest Earnings			7,719	427.90	6%					
Licenses & Permits			2,600	1,600.00	62%					
All Other			9,625	2,474.00	26%					
Transfers-In			-	-	n/a					
Personal Services						358,575	85,206.00	24%		
Materials & Services						503,238	70,834.44	14%		
Transfers-Out						195,000	-	0%		
Capital Outlay						24,500	-	0%		
Debt Service						190,649	231,298.00	121%		
Contingency						100,000	-	0%		

City of Veneta
 Financial Activity and Fund Balance Report
 For July 1, 2016 through June 30, 2017

Fund	Beginning Fund Balance July 1, 2016		New Revenue			Expenditures			Ending Fund Balance September 30, 2016	
	Adopted Budget	Actual	Adopted Budget	Actual Year-to-Date	% of Budget Received	Adopted Budget	Actual Year-to-Date	% of Budget Expended	Adopted Budget	Actual
STREETS	1,226,370	1,261,405.50							983,102	1,248,239.42
Governmental Agencies			256,601	20,267.52	8%					
Franchise Fees			105,459	7,901.07	7%					
User Fees			177,355	30,799.54	17%					
Interest Earnings			7,499	3,149.60	42%					
Grants and Donations			50		0%					
Licenses & Permits			520	280.00	54%					
All Other			25		0%					
Transfers-In			476,700	-	0%					
Personal Services						170,615	40,751.82	24%		
Materials & Services						604,762	34,654.49	6%		
Capital Outlay						383,100	157.50	0%		
Transfers-Out						9,000	-	0%		
Contingency						100,000	-	0%		
STORMWATER DRAINAGE:	160,107	166,388.13							104,435	173,294.63
User Fees			60,851	16,746.64	28%					
Interest Earnings			689	415.45	60%					
All Other			25		0%					
Personal Services						34,653	8,394.71	24%		
Materials & Services						41,134	1,860.88	5%		
Capital Outlay						6,450	-	0%		
Transfers-Out						25,000	-	0%		
Contingency						10,000	-	0%		
PUBLIC WORKS EQUIPMENT:	192,117	197,385.41							182,850	197,878.26
Interest Earnings			733	492.85	67%					
Transfers-In			15,000	-	0%					
Capital Outlay						25,000	-	0%		
CAPITAL CONSTRUCT: GOV'T	1,120,541	1,191,100.79							1,170,007	1,243,432.23
User Fees			99,709	49,374.89	50%					
Interest Earnings			3,857	2,974.05	77%					
Capital Outlay						39,800	17.50	0%		
Transfers-Out						14,300	-	0%		
CAPITAL CONSTRUCT: WATER & SEWER	217,276	293,569.73							9,715	193,048.58
User Fees			82,927	38,273.34	46%					
Interest Earnings			1,116	733.01	66%					
Transfers-In					n/a					
Materials & Services						25	-	0%		
Capital Outlay						150,000	522.50	0%		
Debt Service						141,579	139,005.00	98%		

City of Veneta
Financial Activity and Fund Balance Report
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	Adopted Budget	Actual	Adopted Budget	Actual Year-to-Date	% of Budget Received	Adopted Budget	Actual Year-to-Date	% of Budget Expended	Adopted Budget	Actual
CAPITAL CONSTRUCT: SEWER &	2,160,585	2,224,229.05							1,822,481	2,282,657.43
User Fees			72,501	52,874.70	73%					
Interest Earnings			7,331	5,553.68	76%					
Transfers-In					n/a					
Materials & Services						25	-	0%		
Capital Outlay						5,000	-	0%		
Debt Service						412,911	-	0%		
2007 INVERSE CONDEMNATION	64,735	66,510.53							1,645	44,154.59
Interest Earnings			10	166.06	1661%					
Transfers-In			180,000	-	0%					
Materials & Services						100	-	0%		
Debt Service						243,000	22,522.00	9%		
ZUMWALT CAMPGROUND:	113,655	122,684.06							105,562	157,290.41
User Fees			65,800	60,199.25	91%					
Interest Earnings			400	306.33	77%					
All Other			275	700.00	255%					
Materials & Services						42,568	26,599.23	62%		
Transfers-Out						32,000	-	0%		
BUSINESS ASSISTANCE GRANT:	147,002	155,877.10							107,422	156,266.31
Interest Earnings			450	389.21	86%					
All Other			20	-	0%					
Materials & Services						39,050	-	0%		
Transfers-Out						1,000	-	0%		
CAP PROJ-NEW POOL FACILITIE	7,115	7,779.50							6,415	13,288.81
Interest Earnings			-	19.43	n/a					
Grants and Donations			25	5,509.31	22037%					
Transfers-In			64,300	-	0%					
Materials & Services						25	-	0%		
Capital Outlay						65,000	-	0%		
CAP PROJ-W. B'WAY DEVELOP	57,718	58,006.52							57,593	58,151.35
Interest Earnings			150	144.83	97%					
Grants and Donations			50	-	0%					
All Other					n/a					
Transfers-In										
Materials & Services						300	-	0%		
Capital Outlay						25	-	0%		
LOCAL IMPROVEMENTS	265,285	334,805.29							4,481	334,836.01
Interest Earnings			360	835.97	232%					
All Other			10,085	526.00	5%					
Transfers-In			35,000	-	0%					
Materials & Services						550	-	0%		

City of Veneta
 Financial Activity and Fund Balance Report
 For July 1, 2016 through June 30, 2017

Fund	Beginning Fund Balance July 1, 2016		New Revenue			Expenditures			Ending Fund Balance September 30, 2016	
	Adopted Budget	Actual	Adopted Budget	Actual Year-to-Date	% of Budget Received	Adopted Budget	Actual Year-to-Date	% of Budget Expended	Adopted Budget	Actual
Capital Outlay						135,000	1,331.25	1%		
Debt Service						170,699	-	0%		
RESERVE: GOV'T	1,055,149	1,058,023.04							911,363	1,060,664.82
Interest Earnings			2,214	2,641.78	119%					
Transfers-In			4,000	-	0%					
Transfers-Out						150,000	-	0%		
RESERVE: ENTERPRISE	1,345,040	1,348,441.52							1,351,159	1,351,808.43
Interest Earnings			6,119	3,366.91	55%					
CITY WIDE TOTALS:	\$ 14,423,129	\$ 14,950,494.32	\$ 5,876,126	\$ 1,131,717.51	19.3%	\$ 7,951,668	\$ 1,481,682	18.6%	\$ 12,347,587	\$ 14,600,511

Property Taxes	1,447,750.00	10,213.69	Personal Services	1,583,947.00	410,018.95
Franchise Fees	210,918.00	15,802.14	Materials & Services	3,057,875.00	364,856.09
Governmental Agencies	382,758.00	26,515.11	Transfers-Out	431,300.00	2,028.75
Interest Earnings	56,482.00	33,478.13	Capital Outlay	911,025.00	704,777.95
Loan Proceeds	-	-	Debt Service	1,535,021.00	-
Transfers-In	952,000.00	-	Contingency	432,500.00	-
Grants and Donations	28,160.00	47,821.91	Total	<u>\$ 7,951,668.00</u>	<u>\$ 1,481,681.74</u>
All Other	58,558.00	8,725.96			
Licenses & Permits	53,420.00	7,418.37			
Fines	13,000.00	3,643.37			
User Fees	2,673,080.00	978,098.83			
Total	<u>\$ 5,876,126.00</u>	<u>\$ 1,131,717.51</u>			

VENETA CITY COUNCIL AGENDA ITEM SUMMARY

Title/Topic: Adoption of the 2016 Wastewater Master Plan and Recommended Capital Improvement Plan.

Meeting Date: November 14, 2016
Department: Public Works

Staff Contact: Kyle Schauer
Email: kschauer@ci.veneta.or.us
Telephone Number: 541-935-2191 Ext. 313

ISSUE STATEMENT

Will the City Council adopt the 2016 Wastewater Master Plan and Recommended Capital Improvement Plan?

BACKGROUND

On October 12, 2015, the City Council authorized the City Engineer to update the 2009 Wastewater Master Plan. The intent of the update was to evaluate the assumptions that were made for the 2009 plan and determine if they were still feasible based on actual growth rates from 2009 to current. Another goal was to update the Capital Improvement Plan to reflect any changes as well as align the schedule for implementation to the current growth data.

Civil West Engineering Services, Inc., has completed the update. The updated plan was presented to City Council in a work session September 26, 2016. Recommendations from that work session, including updates to the engineer's estimates to include potential land acquisition, have been included in the final version.

RELATED CITY POLICIES

The 2009 Wastewater Master Plan was adopted May 11, 2009 by Resolution No. 1001.
The current Capital Improvement Plan was adopted July 12, 2010 by Resolution No. 1034.

COUNCIL OPTIONS

1. Approve the adoption of the 2016 Wastewater Master Plan and recommended Capital Improvement Plan.
2. Deny the request.
3. Postpone decision pending more information.

CITY ADMINISTRATOR'S RECOMMENDATION

The City Council approve the adoption of the 2016 Wastewater Master Plan and recommended Capital Improvement Plan by resolution.

SUGGESTED MOTION

"I make a motion to adopt Resolution No. 1210, a resolution adopting the 2016 Wastewater Plan and Recommended Capital Improvement Plan and repealing Resolution No. 1001"

ATTACHMENTS

1. 2016 Wastewater Master Plan Executive Summary.

VENETA

oregon

Inc. 1962

City of Veneta

LANE COUNTY, OREGON

2016 Wastewater Master Plan & Recommended Capital Improvement Plan

November 2016



Executive Summary



Background

Veneta was incorporated in 1962, chiefly in an effort to provide clean water for the growing town. Incorporation meant that the town would be able to create a taxing entity that would enable the town to form public utility districts. High on the list of utilities were safe water and wastewater treatment facilities. The first wastewater treatment system was completed in 1970 and consisted of a single cell, 3.86-acre facultative lagoon followed by chlorination for winter discharges. The wastewater treatment plant was upgraded in 1976 to include two facultative lagoons with a total of 14.71 acres, a submerged rock filter, and a larger chlorine contact chamber. The existing Biolac wastewater treatment plant was brought online in 2002, employing a poplar plantation north of highway 126 for summer discharge.

In 2009, Weber Elliott Engineers, P.C. completed a “Wastewater System Master Plan & Capital Improvement Plan”. The 2009 WWMP/CIP made recommendations for the 20-year period 2010-2030. At the time of the 2009 report, Veneta had been experiencing almost a decade of rapid population growth and desired to be prepared for expansion of the community. Due to socio-economic factors in the area, the City has not grown at the rates predicted in the 2009 plan. As such, the recommendations and capacity projections were overstated.

The forecasted 2030 population from the 2009 Wastewater System Master Plan and Capital Improvement Plan was 9960 persons. This number was based on the 2004 adopted forecast for the year 2030 from the Lane Council of Governments estimate. Current data from the Coordinated Population Forecast for Lane County predicts a 2036 population of 7,795, which is still only 78% of the 2009 report’s 2030 projection. Because of the diminished population growth that the City has seen since the report was done in 2009, many of the upgrades recommended in the 2009 Wastewater Master Plan are not required as soon as the capital improvement schedule indicated.

The current Wastewater Treatment Plant has a Class 1 rated design capacity of 1.25 MGD. Over the 5-year study period flow to the plant has exceeded capacity 72 times. Many of the flows were close to double the 1.25 MGD capacity. Projected peak hourly flows for the year 2036 will exceed 3.5 MGD. In the 2009 WWMP/CIP, the Biolac basins were considered to be running at 85% of the 1.25 MGD firm design capacity. Current loading is somewhat larger than the 2009 loading, putting the Biolac aeration basins close to design capacity. Increased development/flow would further compound the need to upgrade capacity of the Biolac system.

The wastewater treatment plant has been able to operate within allotted permit levels by the use of a 4-million-gallon surge pond connected to the influent lift station. Based on population growth projections, the buffering capacity of the surge pond would reach the 4-million-gallon capacity in 2026 at a population of 6200. This estimate is population driven and therefore upgrades may be required sooner or later than 2026 due to development or lack thereof.

Prior to the population increasing to 6200, it is recommended that the Biolac basins be upgraded to handle the projected flows. The existing two Biolac aeration basins would need to be expanded to a four basin system. The headworks would also need to either be replaced or modified to handle the increased flows and in particular, the flow splitting necessary to accommodate the new four basin Biolac.

Much of the older portion of the wastewater collection system in Veneta was constructed from asbestos concrete sewer pipe. After time, these pipe sections are known for having leaky joints due to the degradation of grout or gasket material in the joint. The City has been diligent with replacing sections of pipe that previous I/I studies have identified as contributors to infiltration. Current deficiencies in the collection system may still exist from those identified in the 2009 WWMP/CIP. Flow mapping and smoke testing may help to confirm the effectiveness of the recent repairs, and can also help to identify smaller sources of I/I that were masked during prior studies by larger I/I sources.

The firm design capacity for the Jeans Road lift station is 130 gpm which is inadequate for the calculated PIF of 215 gpm for the service area. This lift station should either be upgraded to pump the calculated peak flow in the near future, or it should be rebuilt.

Based on city limits, topography and population density, the areas of the town most apt to see larger growth rates are the area north of Highway 126, and the eastern end of town. Typically, when isolated development occurs, the entire sewer main connecting the proposed development would have to be analyzed to ensure it has sufficient capacity to carry the increased flows.

Currently, the Pine Street lift station is operating on a duplex system with both pumps occasionally running more than 12 hours. To meet DEQ redundancy requirements, the lift station must be able to handle the PIF with the largest pump out of service. The Pine Street lift station would need to be upgraded to meet this requirement.

Section 6 identifies several options to provide sewer service to the east portion of the City. Option 3 is the recommended option, it recommends relocating the Jeans Road lift station and building a new east side lift station. The new east side lift station would be located near the intersection of Huston Road and Hunter Road. The new east side lift station would bypass the existing central gravity system and would pump flow up to the gravity system at Jeans Road and Hope Lane. The existing gravity system in Jeans Road would need to be upsized to handle both projected east side flows and projected flows in the area local to the gravity system. A new gravity system would connect the gravity system at the existing Jeans Road Lift Station at the corner of Jeans Road and Hwy 126 to a new Jack Kelly Drive Lift Station near the intersection of Jack Kelly Drive and 8th Street. The Jack Kelly Drive Lift Station would be built to handle the flows from the area north of the highway in addition to the flows pumped from the new east side lift station.

Recommended Improvement Projects

Due to the age and deficiencies of portions of the City's wastewater system, we have evaluated options for improvements. Project classification and summary of the final recommendations are below:

Priority 1 Projects: Priority 1 projects are the most critical and should be undertaken as soon as possible in order to meet DEQ requirements. Priority 1 projects should be considered as the most immediate needs for the City's wastewater system.

Priority 2 Projects: These are projects that should be undertaken within the first half of the planning period to restore aging facilities to newer operating conditions. While they do not have to be undertaken immediately, the City should include them in their Capital Improvement Plan and obtain funding to undertake these projects.

Priority 3 Projects: Priority 3 projects are projects that are primarily dependent on development and expansion of the collection system to provide sewer service to new areas. Priority 3 projects are driven by development and the need to expand the collection system to service new properties and new subdivisions. Funding for Priority 3 projects are to be financed through a combination of City funds, SDC funds, and developer contributions. As these projects are development driven, they need not be scheduled for implementation. They should, however, be included within the CIP and considered within any wastewater SDC methodology developed by the City.

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Project CWC2 - 2017: Pine Street lift station does not currently meet the redundancy requirements as outlined by the Department of Environmental Quality. New pumps should be installed which would increase the capacity of the lift station to meet the required standards.

Project CWC3 - 2017: Jeans Road lift station does not currently meet the redundancy requirements as outlined by the Department of Environmental Quality. New pumps should be installed which would increase the capacity of the lift station to meet the required standards. Note, if CWC1 occurs prior to CWC3, then CWC3 is not necessary.

Priority 2 Projects:

Project CWT2 - 2020: DMRs from 2010 – 2015 indicate that the effluent values for TSS loading have been exceeded on two days. This project provides for the installation of a disk type effluent filter that would be used during high flow events to keep the effluent TSS loading within the permitted values.

Project CWC1 - 2017: This project significantly upgrades and relocates Jeans Road lift station to handle future peak flows. The Jeans Road lift station is near capacity with the current pumps. The new lift station should be sized to accommodate the projected peak flows from Basins 6 and 7. This project includes the new lift station, force main, new gravity system along Jack Kelly Drive and capacity upgrades to the existing gravity system from Jeans Road and Hope Lane to the new lift station.

Project CWC4 - 2019: This project provides for the construction of the east side lift station and force main. The lift station would be built near the intersection of Huston Road and Hunter Road. The 10" force main would run north up Huston Road and turn west at Highway 126. The force main would then turn north at Cornerstone Drive. The force main would then turn west on Jeans Road for 400' and connect to the existing gravity system. This project should be scheduled for design to begin two years prior to any future east side development.

Priority 3 Projects:

Project T3 2022: Upgrades to the headworks and influent lift station to accommodate larger future flows. These upgrades would need to be done eventually regardless of the rate of development in the City, and it would need to be done sooner if the City's rate of development is accelerated. These upgrades coincide with the Biolac basin expansion and should all be in place prior to the population reaching 6200, or at current growth rates the year 2026.

Project T4 2022: This project involves the abandonment of the existing FSLs to make room for the creation of the (2) new Biolac aeration basins. This project should also incorporate the construction of replacement FSLs. This project needs to take place prior to the Biolac expansion, and like the other priority 2 projects, is driven by the population reaching 6200.

Project T5 2022: This project provides for the design and installation of the (2) new Biolac aeration basins. Projects T2, T3 and T4 need to be complete prior to starting construction on the new Biolac basins.

Summary of Capital Improvement Plan

Recommended Improvements			
Priority 1 Projects			
Start Date for Design	Facility	Description	Total Cost
ASAP	WW Treatment Plant – CWT1	Outfall Diffuser	\$25,000
2017	Conveyance System – CWC2	Upgrade Pine Street Lift Station Capacity	\$54,000
2017	Conveyance System – CWC3*	Upgrade Jeans Road Lift Station Capacity	\$107,000
Total Priority 1 Projects:			\$186,000
Priority 2 Projects			
Start Date for Design	Facility	Description	Total Cost
2020	WW Treatment Plant – CWT2	Disk Filter	\$384,000
2017	Conveyance System – CWC1*	Install Jack Kelly Drive Lift Station/Force Main/Gravity Line	\$3,051,000
2019	Conveyance System – CWC4	Install Huston Road Lift Station/Force Main	\$1,996,000
Total Priority 2 Projects:			\$5,431,000
Priority 3 Projects			
Start Date for Design	Facility	Description	Total Cost
2022	WW Treatment Plant – T3	Upgrade Headworks	\$90,000
2021	WW Treatment Plant – T4	Demo/Relocate FSLs	\$890,000
2022	WW Treatment Plant – T5	Construct Biolac Basins	\$2,500,000
Total Priority 3 Projects:			\$3,480,000
Total All Projects:			\$9,097,000
* Note, if CWC1 occurs prior to CWC3, then CWC3 is not necessary.			

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Inc. 1962

City of Veneta

LANE COUNTY, OREGON

2016 Wastewater Master Plan & Recommended Capital Improvement Plan

November 2016



Table of Contents

Executive Summary	1
Background	1
Recommended Improvement Projects	3
Summary of Capital Improvement Plan	5
1 Introduction	7
1.1 Background and Need	7
1.1.1 Community Background	7
1.1.2 Wastewater System Background	7
1.1.3 Prior Study and Planning Documents	7
1.1.4 Need for Master Plan Update	7
1.1.5 Study Authorization	8
2 Study Area	9
2.1 General Information	9
2.1.1 Planning Area Location	9
2.1.2 Cultural Resources	10
2.1.3 Land Use	10
2.1.4 Zoning Information	10
2.1.5 Socio-Economic Conditions and Trends	12
2.2 Physical Environment	13
2.2.1 Topography	13
2.2.2 Climate	13
2.2.3 Air	14
2.2.4 Soils	15
2.2.5 Wetlands	15
2.2.6 Water	16
2.2.7 Environmentally Sensitive Areas	16
2.2.8 Flora and Fauna	16
2.2.9 Coastal Resources	16
2.2.10 Flooding	17
2.3 Population	18
2.3.1 Historic Growth Rate	18
2.3.1 2009 vs Current Planning	19
3 Existing Wastewater Facilities	20
3.1 Service Area	20
3.2 History	20
3.3 Collection System Infrastructure	23
3.3.1 Basin 1	23
3.3.2 Basin 2	23
3.3.3 Basin 3	23
3.3.4 Basin 4	24
3.3.5 Basin 5	24
3.3.6 Basin 6	24
3.3.7 Basin 7	24
3.3.8 Lift Stations	32
3.4 Wastewater Treatment Facilities	32
3.4.1 Influent Lift Station	35
3.4.2 Surge Basin	35
3.4.3 Headworks	35
3.4.4 Biolac Aeration Basins	35

3.4.5	Facultative Sludge Lagoons	35
3.4.6	UV Disinfection	35
3.4.7	Treated Effluent Storage	35
3.4.8	Irrigation Lift Station	35
3.4.9	Effluent Outfall	36
4	Wastewater Flows	37
4.1	Wastewater Volume	37
4.1.1	Flow Definitions.....	37
4.1.2	Municipal Wastewater - Summary of Available Data	38
4.1.3	Dry Weather Flow	39
4.1.4	Wet Weather Flow	40
4.1.5	Infiltration and Inflow	43
4.1.6	Summary of Existing Flows	44
4.1.7	Projected Municipal Wastewater Flows.....	46
4.2	Wastewater Composition	47
4.2.1	Introduction	47
4.2.2	Analysis of Plant Records	47
4.2.3	Municipal Wastewater Composition Summary	50
4.2.4	Projected Municipal Wastewater Characteristics.....	51
5	Basis for Planning	53
5.1	Regulatory Requirements.....	53
5.1.1	Minimum Design Criteria for Wastewater Treatment and Control of Wastes.....	53
5.1.2	Sanitary Sewage Overflows (SSOs).....	54
5.1.2	Water Quality Status of Receiving Waterbody	54
5.2	Aging Infrastructure.....	56
5.2.1	Wastewater System Deficiencies	56
5.2.2	Violation History.....	57
5.2.3	Reasonable Growth	57
5.3	Design Capacity of Conveyance System and Wastewater Treatment Plant	58
5.3.1	Conveyance System	58
5.3.3	Wastewater Treatment Plant Facilities.....	58
6	Development Options	60
6.1	2009 WWMP/CIP Summary	60
6.1.1	2009 Introduction Summary.....	60
6.1.2	2009 Study Area Summary	60
6.1.3	2009 Collection System Summary	61
6.1.4	2009 Regulatory Criteria Summary	61
6.1.5	2009 Treatment Process Summary.....	61
6.1.6	2009 Water Reuse Summary	62
6.1.7	2009 Capital Improvement Plan Summary	62
6.2	Conveyance System Options	62
6.2.1	Option 1 – Long Force Main and Two Lift Stations	64
6.2.2	Option 2 – Two Force Mains and Two Lift Stations	65
6.2.3	Option 3 – Two Force Mains, Short Gravity Line and Two Lift Stations	66
6.2.4	Option 4 – Two Force Mains, Long Gravity Line and Two Lift Stations.....	67
6.2.5	Option 5 – Do Nothing.....	68
6.3	Extension of Conveyance System to Areas Currently Not Serviced with Sewer	71
6.4	Lift Station Options.....	72
6.4.1	Upgrade Lift Stations	72
6.4.2	Replace Lift Stations.....	73
6.4.3	Lift Station Summation and Recommendations.....	74

6.5	Wastewater Treatment Plant Options.....	75
6.5.1	Influent Lift Station.....	75
6.5.2	Surge Basin	75
6.5.3	Headworks.....	75
6.5.4	Biolac Basin Expansion	75
6.5.5	Effluent Flow Splitter – Disk Filter.....	76
6.5.6	Wastewater Treatment Summation and Recommendations.....	76
6.6	Basis for Cost Estimates	77
6.6.1	Cost Estimate Components	77
6.6.2	Construction Costs	77
6.6.3	Contingencies.....	78
6.6.4	Engineering	78
6.6.5	Legal and Management	79
6.6.6	Land Acquisition.....	79
7	Recommended CIP	80
7.1	Capital Improvement Plan	80
7.1.1	Collection System Projects.....	80
7.1.2	Wastewater Treatment Plant Projects	81
7.2	CIP Cost Summary	84

Table of Figures and Tables

Figure 2.1.1: Location Map of City of Veneta.....	9
Figure 2.1.4: Zoning Map (Veneta Maps – 2016)	11
Figure 2.1.5: Employment in Veneta.....	12
Figure 2.2.2A: Temperature Normals, WWCC 1943-2015.....	13
Figure 2.2.2B: Precipitation Normals, NCDC 1943-2015	14
Figure 2.2.3: Air Quality Index Graph.....	15
Figure 2.2.5: National Wetland Inventory Map.....	16
Table 2.3A: Historical Population Growth, the City of Veneta.....	18
Table 2.3B: Veneta Population Projections (PSU Population Research Center, 2015).....	19
Figure 3.1A: Existing Facilities Map.....	21
Figure 3.1B: Service Area Map	22
Table 3.3: Collection System Pipe Size and Age Summary	23
Figure 3.3.1: Basin 1 Map.....	25
Figure 3.3.2: Basin 2 Map.....	26
Figure 3.3.3: Basin 3 Map.....	27
Figure 3.3.4: Basin 4 Map.....	28
Figure 3.3.5: Basin 5 Map.....	29
Figure 3.3.6: Basin 6 Map.....	30
Figure 3.3.7: Basin 7 Map.....	31
Figure 3.4.1: Existing Treatment Process Schematic.....	33
Figure 3.4.2: Hydraulic Profile	34
Table 4.1.3: Average Rainfall and Wastewater Flows, 2010-2015	40
Figure 4.1.3: MMDWF ₅ & MMWWF ₁₀ Calculation Based on 2011-2014 Flow Rates.....	40
Table 4.1.4: Significant Rainfall Data for the City of Veneta, 2011-2013	41
Figure 4.1.4: PDAF ₅ Determination Graph.....	42
Figure 4.1.4A: PIF Calculation Log-Log Graph.....	43
Table 4.1.5: Inflow and Infiltration Summary	44
Table 4.1.6: Summary of Existing Wastewater Flows, Based on 2010-2015 Data	45
Figure 4.1.6: Measured Flows at Veneta Wastewater Treatment Plant.....	45
Table 4.1.7: Summary of Current and Projected Wastewater Flows.....	46
Figure 4.2.2A: Wastewater Treatment Plant Influent BOD Composition	47
Figure 4.2.2B: Wastewater Treatment Plant Influent BOD Influent Loading.....	48
Figure 4.2.2C: Wastewater Treatment Plant Influent TSS Composition.....	49
Figure 4.2.2D: TSS Influent Loading	50
Table 4.2.3A: Existing Municipal Wastewater Composition	51
Table 4.2.4: Summary of Current and Projected Wastewater Influent Loads	52
Table 5.1.2.1: Willamette Basin Water Quality Status	55
Figure 6.1: Conveyance Options Map	69
Table 6.1: Summary of Conveyance System Options	70
Table 6.5.1: Wastewater Treatment Upgrades Cost Estimate.....	77
Table 6.6.2: ENR Construction Cost Index History	78
Table 7.1: 2009/2016 CIP Comparison.....	83
Table 7.2: CIP Timeline.....	85

APPENDICES

Appendix A:	NPDES Permit
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Executive Summary



Background

Veneta was incorporated in 1962, chiefly in an effort to provide clean water for the growing town. Incorporation meant that the town would be able to create a taxing entity that would enable the town to form public utility districts. High on the list of utilities were safe water and wastewater treatment facilities. The first wastewater treatment system was completed in 1970 and consisted of a single cell, 3.86-acre facultative lagoon followed by chlorination for winter discharges. The wastewater treatment plant was upgraded in 1976 to include two facultative lagoons with a total of 14.71 acres, a submerged rock filter, and a larger chlorine contact chamber. The existing Biolac wastewater treatment plant was brought online in 2002, employing a poplar plantation north of highway 126 for summer discharge.

In 2009, Weber Elliott Engineers, P.C. completed a “Wastewater System Master Plan & Capital Improvement Plan”. The 2009 WWMP/CIP made recommendations for the 20-year period 2010-2030. At the time of the 2009 report, Veneta had been experiencing almost a decade of rapid population growth and desired to be prepared for expansion of the community. Due to socio-economic factors in the area, the City has not grown at the rates predicted in the 2009 plan. As such, the recommendations and capacity projections were overstated.

The forecasted 2030 population from the 2009 Wastewater System Master Plan and Capital Improvement Plan was 9960 persons. This number was based on the 2004 adopted forecast for the year 2030 from the Lane Council of Governments estimate. Current data from the Coordinated Population Forecast for Lane County predicts a 2036 population of 7,795, which is still only 78% of the 2009 report’s 2030 projection. Because of the diminished population growth that the City has seen since the report was done in 2009, many of the upgrades recommended in the 2009 Wastewater Master Plan are not required as soon as the capital improvement schedule indicated.

The current Wastewater Treatment Plant has a Class 1 rated design capacity of 1.25 MGD. Over the 5-year study period flow to the plant has exceeded capacity 72 times. Many of the flows were close to double the 1.25 MGD capacity. Projected peak hourly flows for the year 2036 will exceed 3.5 MGD. In the 2009 WWMP/CIP, the Biolac basins were considered to be running at 85% of the 1.25 MGD firm design capacity. Current loading is somewhat larger than the 2009 loading, putting the Biolac aeration basins close to design capacity. Increased development/flow would further compound the need to upgrade capacity of the Biolac system.

The wastewater treatment plant has been able to operate within allotted permit levels by the use of a 4-million-gallon surge pond connected to the influent lift station. Based on population growth projections, the buffering capacity of the surge pond would reach the 4-million-gallon capacity in 2026 at a population of 6200. This estimate is population driven and therefore upgrades may be required sooner or later than 2026 due to development or lack thereof.

Prior to the population increasing to 6200, it is recommended that the Biolac basins be upgraded to handle the projected flows. The existing two Biolac aeration basins would need to be expanded to a four basin system. The headworks would also need to either be replaced or modified to handle the increased flows and in particular, the flow splitting necessary to accommodate the new four basin Biolac.

Much of the older portion of the wastewater collection system in Veneta was constructed from asbestos concrete sewer pipe. After time, these pipe sections are known for having leaky joints due to the degradation of grout or gasket material in the joint. The City has been diligent with replacing sections of pipe that previous I/I studies have identified as contributors to infiltration. Current deficiencies in the collection system may still exist from those identified in the 2009 WWMP/CIP. Flow mapping and smoke testing may help to confirm the effectiveness of the recent repairs, and can also help to identify smaller sources of I/I that were masked during prior studies by larger I/I sources.

The firm design capacity for the Jeans Road lift station is 130 gpm which is inadequate for the calculated PIF of 215 gpm for the service area. This lift station should either be upgraded to pump the calculated peak flow in the near future, or it should be rebuilt.

Based on city limits, topography and population density, the areas of the town most apt to see larger growth rates are the area north of Highway 126, and the eastern end of town. Typically, when isolated development occurs, the entire sewer main connecting the proposed development would have to be analyzed to ensure it has sufficient capacity to carry the increased flows.

Currently, the Pine Street lift station is operating on a duplex system with both pumps occasionally running more than 12 hours. To meet DEQ redundancy requirements, the lift station must be able to handle the PIF with the largest pump out of service. The Pine Street lift station would need to be upgraded to meet this requirement.

Section 6 identifies several options to provide sewer service to the east portion of the City. Option 3 is the recommended option, it recommends relocating the Jeans Road lift station and building a new east side lift station. The new east side lift station would be located near the intersection of Huston Road and Hunter Road. The new east side lift station would bypass the existing central gravity system and would pump flow up to the gravity system at Jeans Road and Hope Lane. The existing gravity system in Jeans Road would need to be upsized to handle both projected east side flows and projected flows in the area local to the gravity system. A new gravity system would connect the gravity system at the existing Jeans Road Lift Station at the corner of Jeans Road and Hwy 126 to a new Jack Kelly Drive Lift Station near the intersection of Jack Kelly Drive and 8th Street. The Jack Kelly Drive Lift Station would be built to handle the flows from the area north of the highway in addition to the flows pumped from the new east side lift station.

Recommended Improvement Projects

Due to the age and deficiencies of portions of the City's wastewater system, we have evaluated options for improvements. Project classification and summary of the final recommendations are below:

Priority 1 Projects: Priority 1 projects are the most critical and should be undertaken as soon as possible in order to meet DEQ requirements. Priority 1 projects should be considered as the most immediate needs for the City's wastewater system.

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Total Priority 3 Projects:			\$3,480,000
Total All Projects:			\$9,097,000
* Note, if CWC1 occurs prior to CWC3, then CWC3 is not necessary.			

1 Introduction

1.1 Background and Need

1.1.1 Community Background

The City of Veneta was laid out adjacent to the railroad from Eugene to the coast in 1912 by Edmund Hunter. The City is located in Lane County, Oregon 14 miles east of Eugene and just south of the Fern Ridge Reservoir. Veneta was incorporated in 1962 and has a current population of 4690.

1.1.2 Wastewater System Background

Veneta was incorporated in 1962, chiefly in an effort to provide clean water for the growing town. Incorporation meant that the town would be able to create a taxing entity enabling the town to form public utility districts. High on the list of utilities were safe water and wastewater treatment facilities. The first wastewater treatment system was completed in 1970 and consisted of a single cell, 3.86-acre facultative lagoon followed by chlorination for winter discharges. The wastewater treatment plant was upgraded in 1976 to include two facultative lagoons with a total of 14.71 acres, a submerged rock filter, and a larger chlorine contact chamber. The existing Biolac wastewater treatment plant was brought online in 2002, employing a poplar plantation north of highway 126 for sludge application and summer discharge.

1.1.3 Prior Study and Planning Documents

The following provides a summary of the recent wastewater planning efforts done for the City of Veneta. These documents were used to develop the existing system and history:

1. City of Veneta Wastewater System Master Plan & Capital Improvement Plan: Completed in April 2009 by Weber Elliott Engineers, P.C. This study recommended capital improvements to the wastewater collection, wastewater treatment, and water reuse systems.

1.1.4 Need for Master Plan Update

The City of Veneta operates and maintains wastewater facilities spread throughout the town. Components of the wastewater system include collection, conveyance, treatment, discharge and reuse. In 2009, Weber Elliott Engineers, P.C. completed a “Wastewater System Master Plan & Capital Improvement Plan” which is, essentially, a wastewater facilities plan for the City of Veneta. The 2009 WWMP/CIP made recommendations for the 20-year period 2010-2030. At the time of the 2009 report, Veneta had been experiencing almost a decade of rapid population growth and desired to be prepared for expansion of the community. Due to socio-economic factors in the area, the City has not grown at the rates predicted in the 2009 plan. As such, the recommendations and capacity projections are overstated. The City wishes to update the 2009 plan, to reevaluate projected flows based on current data, and to modify the Capital Improvement Plan accordingly.

1.1.5 Study Authorization

The City of Veneta authorized Civil West to develop a Wastewater Master Plan Update by a contract dated September 28, 2015. Services are in accordance with this professional services contract and the Civil West proposal for the project which was presented to the City on September 24, 2015. A kick-off meeting was conducted on October 15, 2015 with Civil West and City staff to initiate the planning work and to begin the necessary data collection.

2 Study Area

2.1 General Information

This section provides a detailed description of the project location, physical environment along with an evaluation of the population trends and projections.

2.1.1 Planning Area Location

The City of Veneta is a small community located in Lane County, Oregon, about 14 miles west of Eugene, and adjacent to the Long Tom River. Oregon State Highway 126 intersects the City and is the primary transportation route to and from the City as well as the primary route between Eugene and the coast. The City's Coordinates are 44°3'0"N 123°21'9"W. A location map identifying the City of Veneta relative to the State of Oregon is presented in Figure 2.1.1



Figure 2.1.1: Location Map of City of Veneta

2.1.2 Cultural Resources

There are no historic landmarks in or near the City. However, the City is in close proximity to Fern Ridge Reservoir and has an abundance of wildlife and regions with natural areas for hiking and camping. The City has also been the site of the Oregon Country Fair since 1970.

2.1.3 Land Use

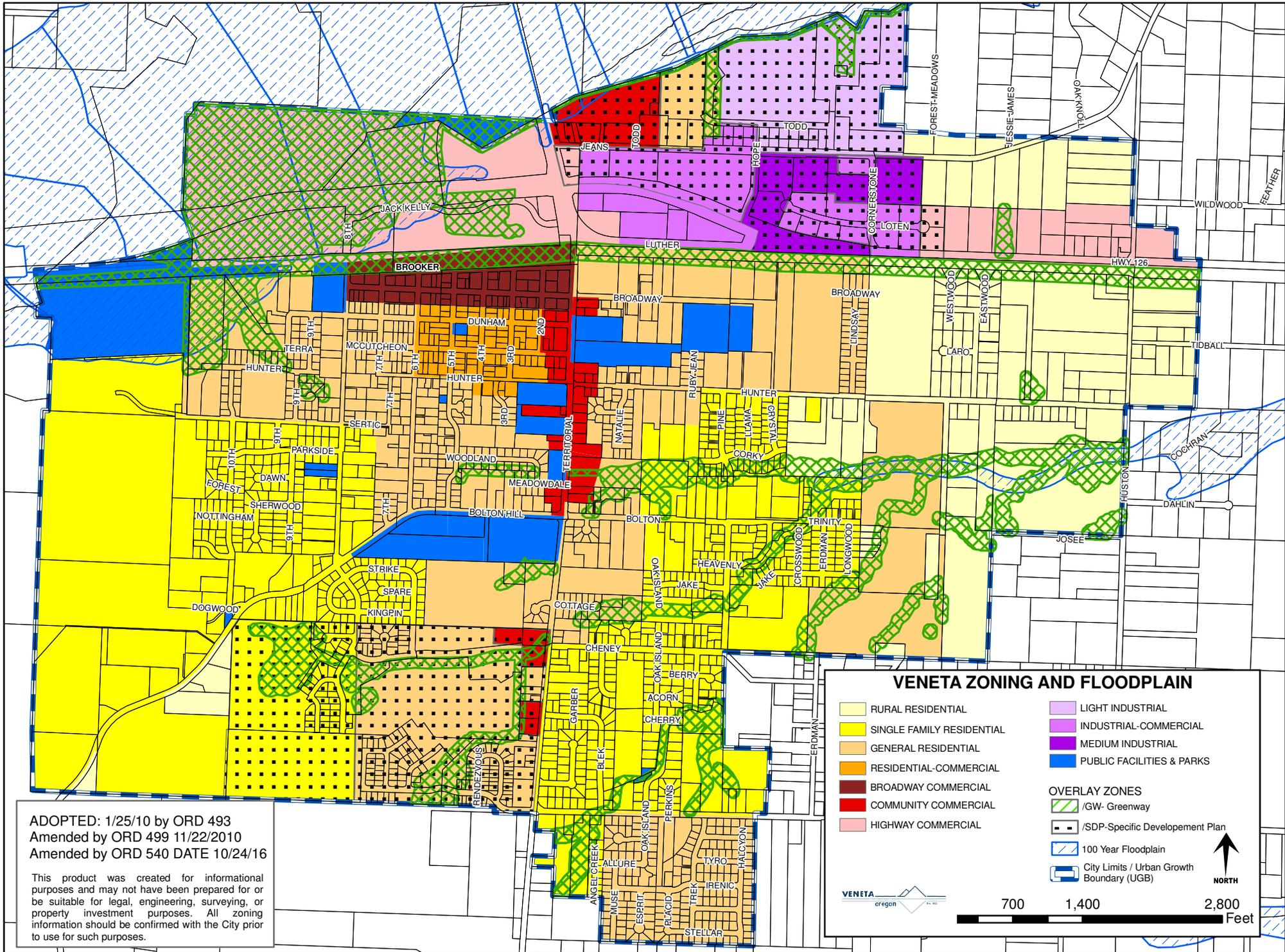
The City of Veneta is surrounded by agricultural land, ranging from farms to wineries. Land use within the City is a mixture of residential, commercial, and industrial. The City has a total area of 2.57 square miles and is at an average elevation of 418 feet above sea level.

2.1.4 Zoning Information

According to the Veneta Land Development Ordinance No. 493 (City of Veneta, 2015), the following zones have been established:

- Rural Residential
- Single-Family Residential
- General Residential
- Residential-Commercial
- Broadway Commercial
- Community Commercial
- Highway Commercial
- Industrial-Commercial
- Light Industrial
- Medium Industrial
- Public Facilities and Parks

A Zoning Map of the City limits and the Urban Growth Boundary is provided as Figure 2.1.4

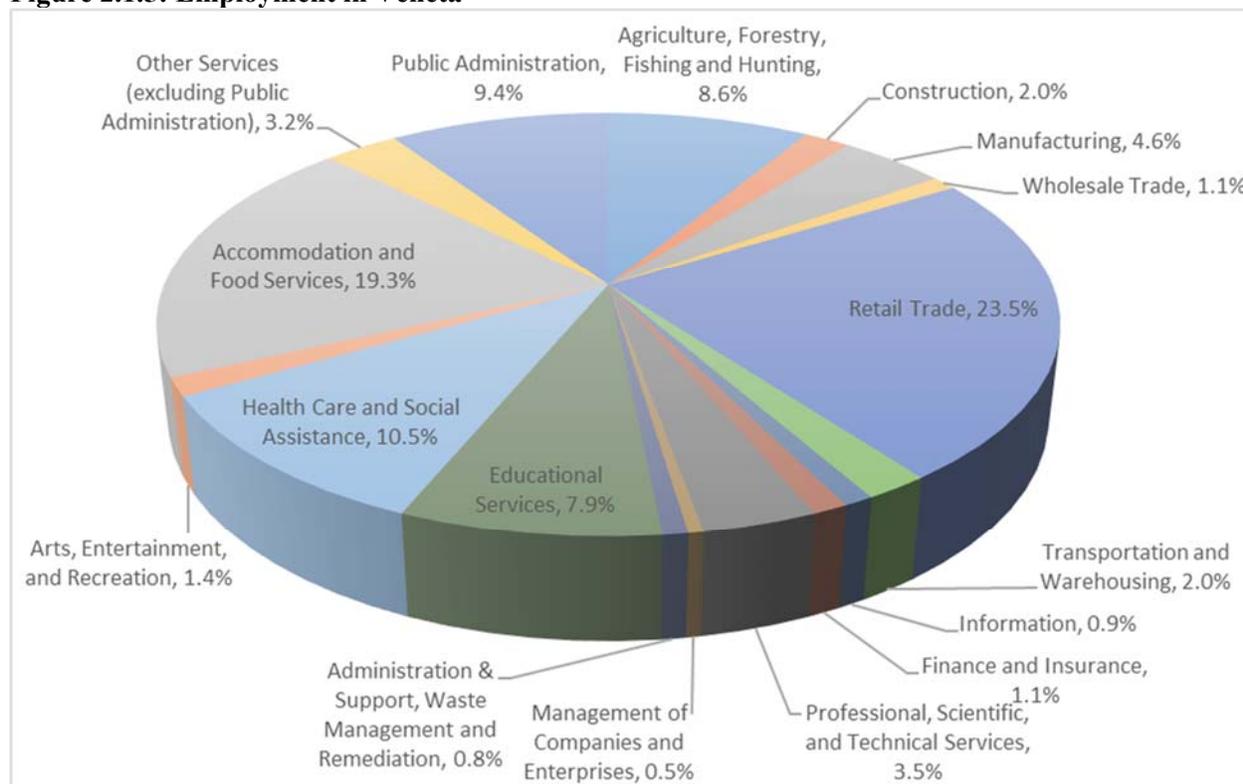


2.1.5 Socio-Economic Conditions and Trends

The 2014 average Median Household Income (MHI) for Veneta was \$45,705, which is higher than the Lane County MHI of \$42,628 (Workshop, 2015). The state MHI was \$50,036. The City of Veneta is composed of 1730 households.

The City of Veneta has similar poverty rates compared to the national average and the Oregon average. In 2013, the U.S. Census Bureau found that 14.4% of all people living in Veneta had incomes below the poverty level, compared to 20.0% in Lane County and 16.2% in Oregon. The percentage of people living in the United States below the poverty line in 2013 was 14.5% (Gabe, 2015).

Figure 2.1.5: Employment in Veneta



2.2 Physical Environment

2.2.1 Topography

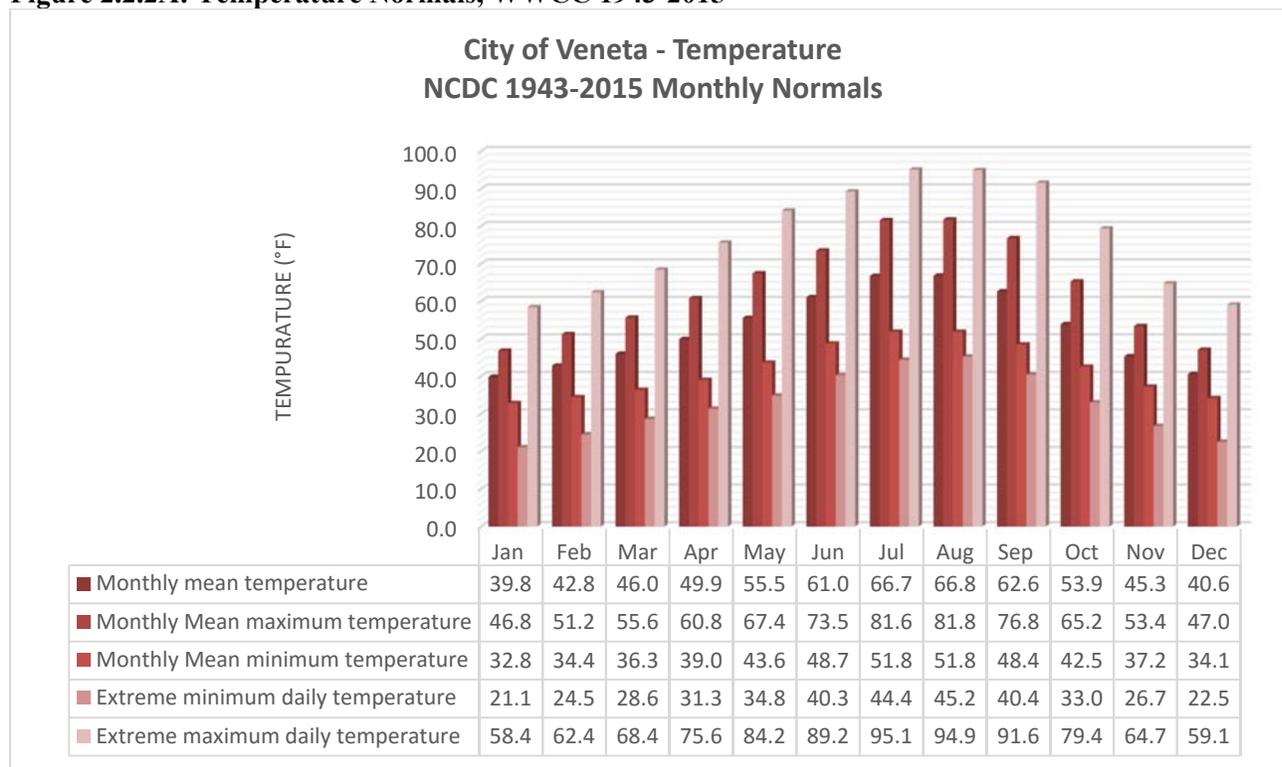
The topography of the area is such that highest elevations are along the southwestern City limits along the base of Bolton Hill which rises approximately 400' above the city. The rest of the City has relatively level ground. There is a small ridge that runs from the southwest side of town to the northeast side of town. This ridge bisects the town into an east side and a west side, requiring a pumping station in the east side to convey wastewater to the wastewater treatment plant on the west side of town.

2.2.2 Climate

Climate data was obtained using long-term records collected at the closest weather station, GHCND: USC00352867 located at the City of Veneta wastewater treatment plant, as reported by the National Oceanic and Atmospheric Administration (NOAA).

The average annual temperature in Veneta ranges from 46°F to 81°F with an annual mean of 63°F. A record high temperature of 108°F was recorded in August 2002. A record low temperature of -2.9°F was recorded in December 1972. July and August are statistically the warmest months with a mean of 81°F while December and January are the coldest with a mean of 47°F. Temperature normals are shown in Figure 2.2.2A

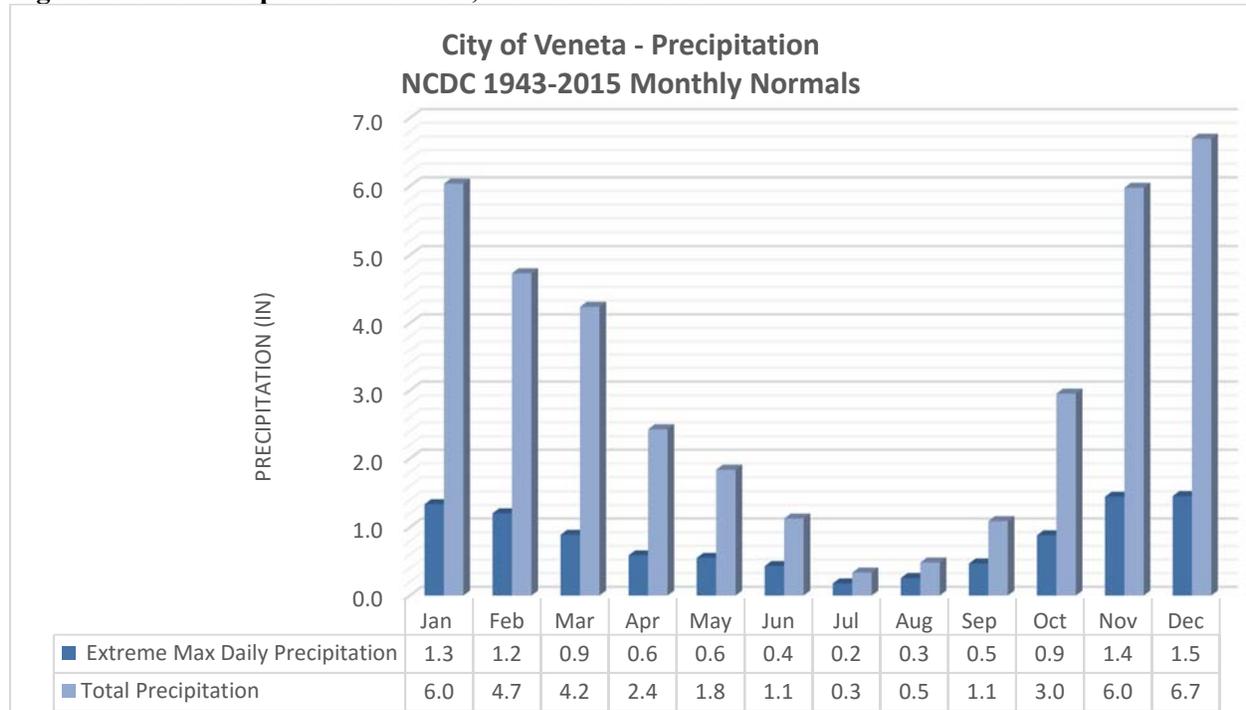
Figure 2.2.2A: Temperature Normals, WWCC 1943-2015



Average annual precipitation is approximately 41.18-inches in Veneta. Record low and high precipitation years recorded were 18.3-inches in 1991 and 67.1-inches in 2012. The maximum recorded 24-hour rainfall was 5.67-inches on November 19, 1996. On average, 46% of the annual precipitation occurs in December, January and February. Snowfall is minimal with most years recording little snowfall;

however, record snowfall of 30.9-inches was reported for the month of January in 1969. The mean annual snowfall during the period from 1943 to 2012 is 2.8-inches. Based on the NOAA Atlas 2, Volume X Isopluvial maps, the 5-year storm 24-hour rainfall is 4.2 inches. Precipitation normals from the NCDC are shown in Figure 2.2.2B

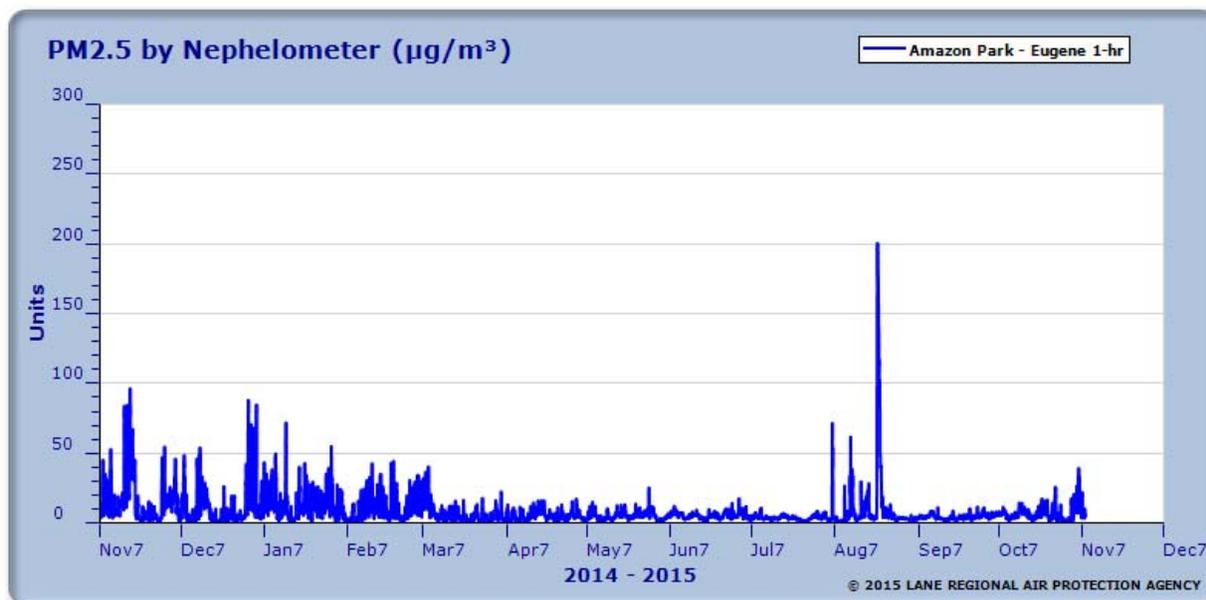
Figure 2.2.2B: Precipitation Normals, NCDC 1943-2015



2.2.3 Air

The Air Quality Index (AQI) for Veneta has averaged 6.7 over the past 5 years where 0-50 is good air quality. The annual high was 35.5. The United States mean AQI is 42. Figure 2.2.3 is from the Lane Regional Air Protection Agency air quality monitoring site, DEQ#18524, EPA#410390060, and shows the AQI by each month for Eugene Oregon, only 14 miles from Veneta.

Figure 2.2.3: Air Quality Index Graph



2.2.4 Soils

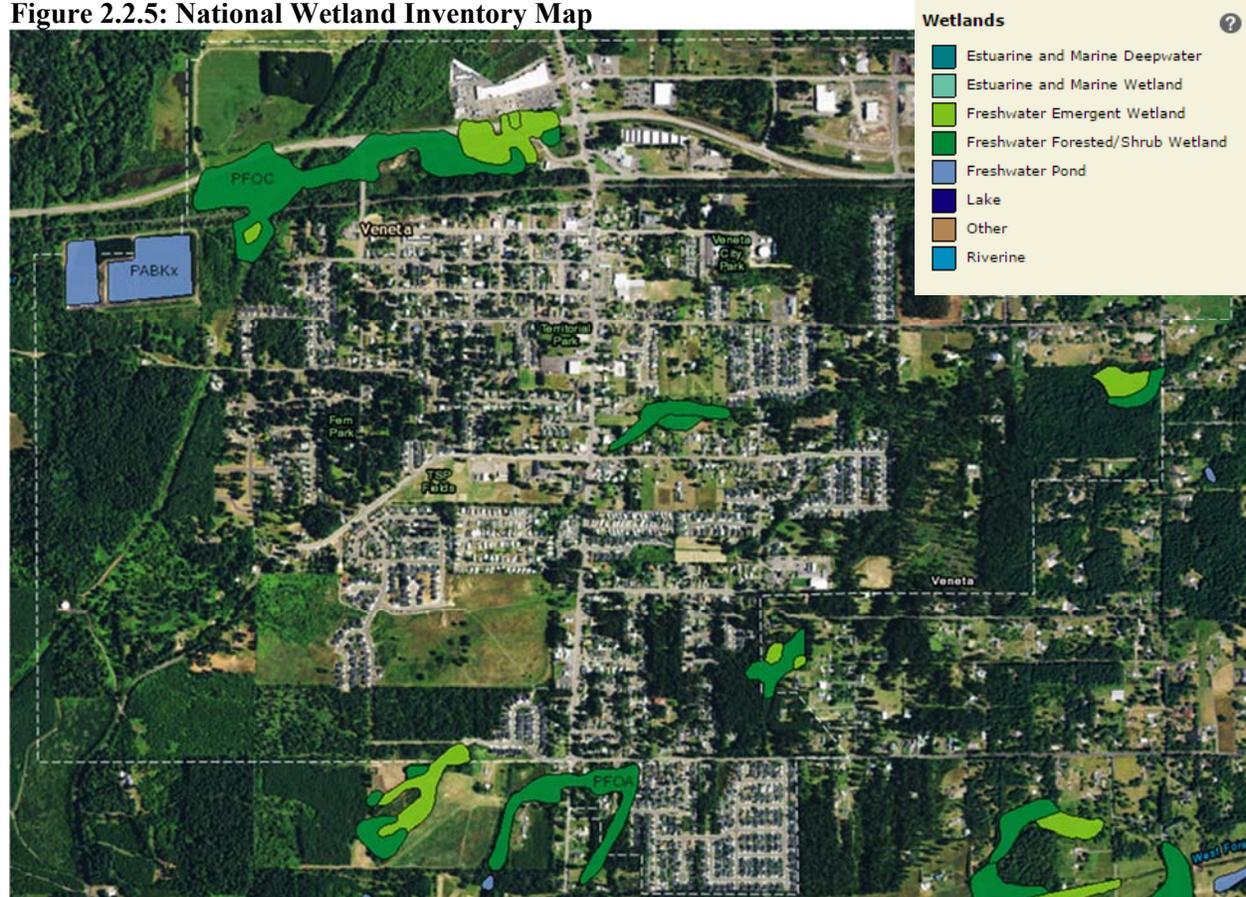
According to the 1997 Wastewater Facilities Plan the City of Veneta’s predominate soil is McBee silty clay loam that is about 24” thick. This has a subsoil of mostly silty loam about 17” thick with moderate permeability.

A Linslaw loam and Salkum silty clay loam are the other soils found in the area around the Long Tom River, also there is a Dupee silty loam and a Bellpine silty clay loam around the Bolton Hill area.

2.2.5 Wetlands

The National Wetlands Inventory lists seven wetlands within city limits, it should be noted that there are many more undocumented wetlands. The largest is located along the Long Tom River on the north end of the city. Smaller wetlands are located throughout the city. The wetlands fall in to one of two categories: Freshwater Emergent and Freshwater Forested/Shrub. A map of the wetlands is shown in Figure 2.2.5.

Figure 2.2.5: National Wetland Inventory Map



2.2.6 Water

The City provides potable water service to all areas within the current City limits and Urban Growth Boundary (UGB). The City's source for water comes from three deep wells that are augmented with finished water purchased directly from EWEB (Eugene Water & Electric Board).

2.2.7 Environmentally Sensitive Areas

In discussion with the City, it was noted that there is a stand of an endangered herb, *Lomatium bradshawii*, located just west of the “Welcome to Veneta” sign located on Territorial Hwy on the north end of town. It should be noted that if construction is necessary near this area for wastewater system improvements, it would be necessary to perform both archeological and biological surveys to ensure that no impacts to possible historical sites or threatened/endangered species occur.

2.2.8 Coastal Resources

The City of Veneta is not located within the coastal zone.

2.2.9 Flooding

The City of Veneta has areas defined on FEMA maps as susceptible to flooding in a 100-year flood event. This area is limited primarily to the southeastern side of the river. However, FEMA has mapped the site with an “un-numbered ‘A’ zone. An un-numbered ‘A’ zone designation means that FEMA has not done a detailed study to estimate and assign an actual flood elevation for the 100-year floodwater surface. See the zoning map on page 11 for flood hazard details.

2.3 Population

The population in the City of Veneta grew quickly during the first decade of the 21st century with growth rates that were previously unprecedented. The year 2005 marked a high with an 8.31% growth rate. Since that time the growth of the City has decreased significantly compared with the previous decade, but has continued to show a positive growth rate.

2.3.1 Historic Growth Rate

Historic population data is based on U.S. Census data. The following table displays the historical population for the City of Veneta (United States Census Bureau, 2015).

Table 2.3A: Historical Population Growth, the City of Veneta

City of Veneta - Historic Population & Annual Growth Rates						
Year	1990	1995	2000	2001	2002	2003
Population	2489	2698	2771	2787	2846	2958
Annual Growth Rate	0.00%	1.41%	0.32%	0.57%	2.07%	3.79%
Year	2004	2005	2006	2007	2008	2009
Population	3189	3478	3766	4088	4247	4400
Annual Growth Rate	7.24%	8.31%	7.65%	7.88%	3.74%	3.48%
Year	2010	2011	2012	2013	2014	2015
Population	4571	4602	4632	4657	4690	4721
Annual Growth Rate	3.74%	0.67%	0.65%	0.54%	0.70%	0.66%

This report is intended to provide the City with pertinent planning information through the year 2036. Forecast trends for Lane County anticipate a growth in the county population of more than 152,400 persons by the year 2065. This would result in a total population of 513,982 equaling a 42% increase. This increase is based on the assumption that Lane County would continue to enjoy a positive economic atmosphere. The forecasted growth rate is expected to be the highest in the current term (2015-2035).

The City of Eugene is one of the two largest UBGs in the county and is expected to have an average annual growth rate (AAGR) of 1.0% from 2015-2035. The City of Veneta sits in the shadow of the Eugene/Springfield area as a bedroom community with many enticing amenities. It is expected that Veneta, due to its appeal as a family community and the convenience of its proximity to Eugene/Springfield, would also have a sustained growth during this period with an AAGR of 2.5%. (PSU Population Research Center, 2015)

Table 2.3B displays the anticipated growth rate in the City and UGB during the planning period covered by this plan.

Table 2.3B: Veneta Population Projections (PSU Population Research Center, 2015)

Population Projections		
Year	Population	Ave. Annual Growth Rate
2015	4,721	
2020	5,752	3.88%
2025	6,397	2.10%
2030	7,042	1.90%
2035 ²	7,687	1.74%

(1) Data based on The Coordinated Population Forecast for Lane County

(2) The year 2035 represents the end of the 20-yr planning period.

2.3.1 2009 vs Current Planning

2009

Although the City experienced rapid growth from 2004 to 2007 it has since slowed significantly. As shown in the Historical Population growth of Table 2.3A the growth of the City slowed considerably after 2010. While remaining positive, the City’s AAGR has been just over 0.50%.

The forecasted 2030 population from the 2009 Wastewater System Master Plan and Capital Improvement Plan was 9960 persons. This number was based on the 2004 adopted forecast for the year 2030 from the Lane Council of Governments estimate.

Current

Pushing the population forecast to 2036, we see an estimated population of 7,795, which is still only 78% of the 2009 report’s 2030 projection. In light of the diminished population growth that the City has seen since the report was done in 2009, many of the upgrades in the 2009 Wastewater Master Plan may be scheduled much sooner than are actually necessary.

This change in total population projection would play a significant role in planning. The overall affects will be discussed in Sections 4 and 5.

3 Existing Wastewater Facilities

3.1 Service Area

The City of Veneta's wastewater treatment plant currently services most of the developed area within the urban growth boundary, with the exception of a small percentage of homes on the easternmost side of the town. Due to the limited scope of this report a full analysis of the collection system was not performed. Information regarding the current state of the collection system was obtained from the 2009 WWMP and as reported by City staff.

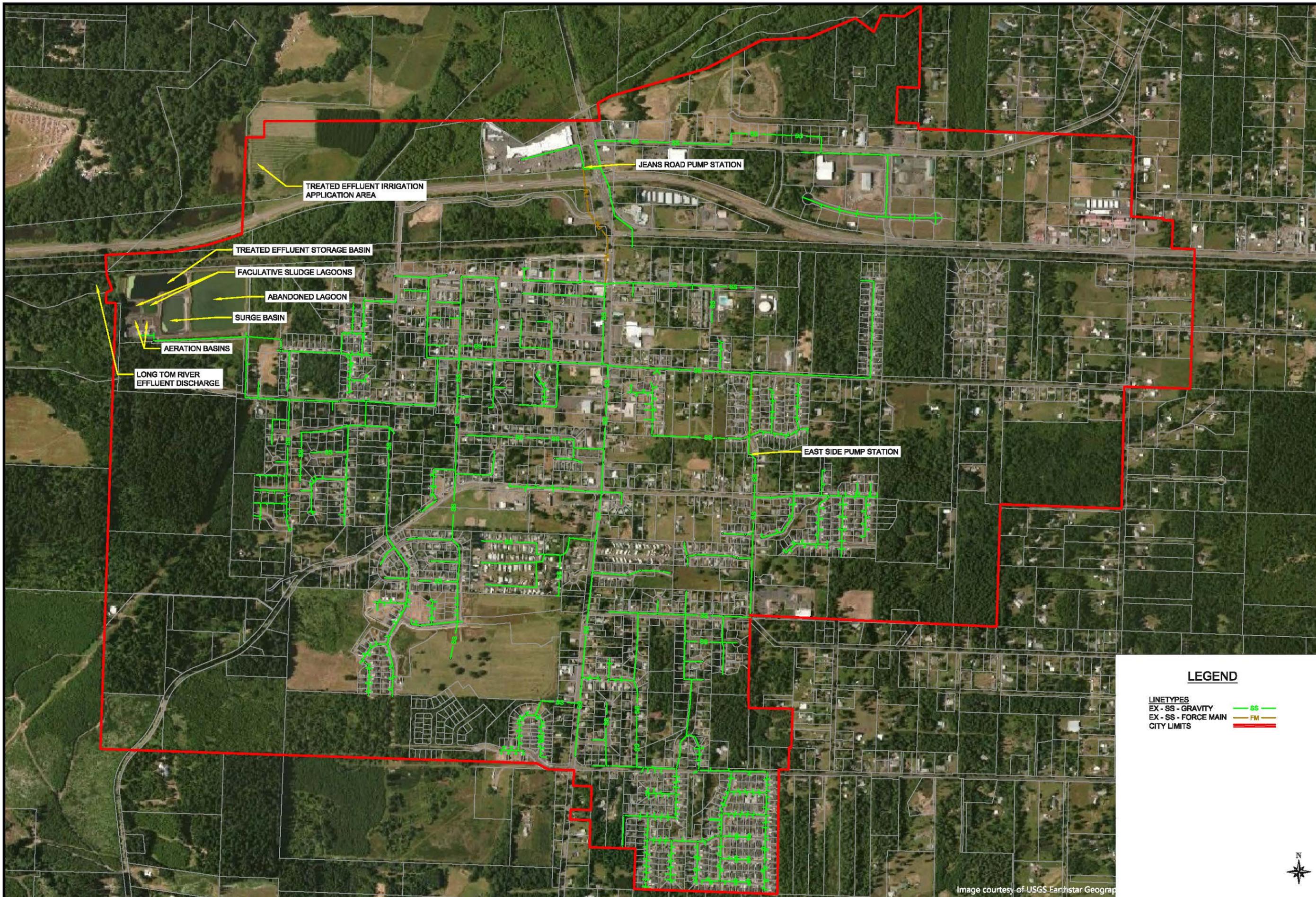
The City of Veneta's Wastewater Facilities include approximately:

- 60,580 linear feet of gravity sewer main
- 413 Manholes
- 2 Wastewater lift stations
- 2,200 linear feet of pressure force main
- Wastewater Treatment Plant including;
 - Surge Basin
 - Influent lift station
 - Headworks screen
 - 2 aeration basins/clarifiers
 - UV disinfection system
 - Sludge Basin
 - Effluent holding pond and irrigation system
 - 700 linear feet of 18" ductile iron effluent discharge pipe to the Long Tom River

The City of Veneta's wastewater facility currently provides services to most of the developed area within the City limits and the UGB. The City's Wastewater Facilities Plan is shown in Figure 3.1A and the Overall Sewer Basin Map is shown in Figure 3.1B.

3.2 History

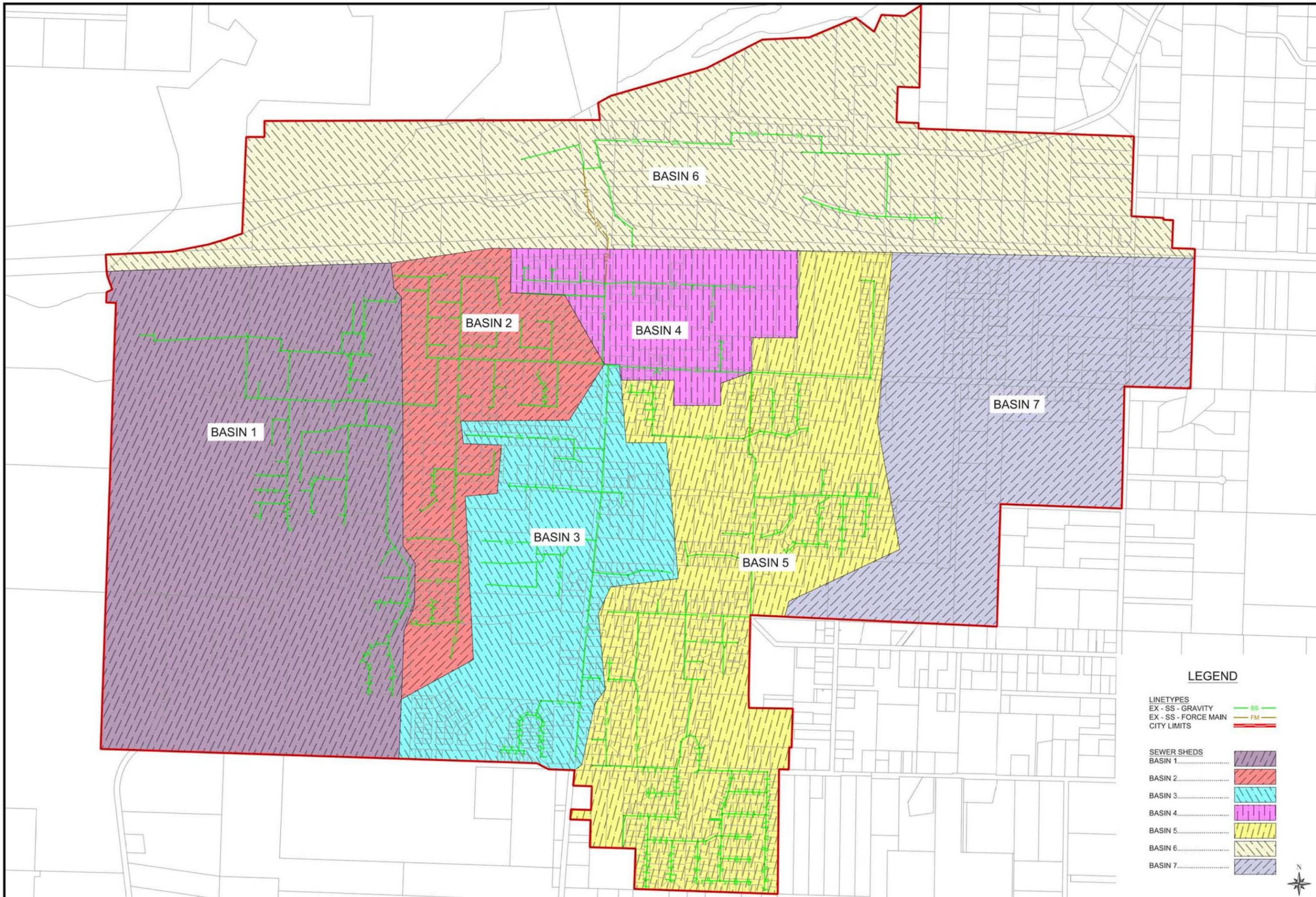
The City of Veneta was incorporated in 1962 and the first wastewater collection system was completed in 1972 and the first wastewater treatment plant was completed in 1979. Throughout the following 21 years, expansions to the collection system were made as the City continued to grow. In March of 2000 the City began construction on a new wastewater treatment facility based around the Biolac treatment process. Recent upgrades to the facility have included an expansion of the UV disinfection facilities and installation of a new headworks screen. The most recent improvements have included the replacement of the air piping for the aeration basins, which were installed in open trenches for maintenance access.



LEGEND

- LINETYPES
 EX - SS - GRAVITY SS
 EX - SS - FORCE MAIN FM
 CITY LIMITS

Image courtesy of USGS Earthstar Geograph



3.3 Collection System Infrastructure

Veneta’s collection system consists of several gravity networks and two lift stations.

Per the 2009 Wastewater Master Plan, the gravity system contains over 60,000 feet of sloped pipe. Over half of the gravity pipe is the original asbestos cement piping that was used when the collection system was built in 1972. Later expansions and upgrades to the system were built using PVC, most recently the size upgrade of 2,290’ of 8” asbestos concrete pipe running under Territorial Highway. See Table 3.3.

Table 3.3: Collection System Pipe Size and Age Summary

Pipe Type, Size and Age Summary			
Type	Size	Age	Quantity (feet)
Asbestos Concrete*	8”	~45 years	36,000
Asbestos Concrete*	12”	~45 years	900
Asbestos Concrete*	15”	~45 years	1,500
Asbestos Concrete*	18”	~45 years	1,400
Asbestos Concrete*	21”	~45 years	1,600
PVC	8”	~30 years to present	12,000
PVC	10”	~30 years to present	2,500
PVC	12”	~30 years to present	1,000
PVC	15”	~30 years to present	500
PVC	21”	~30 years to present	1,700
PVC	27”	~30 years to present	1,400
Total:			60,500

*Note: Some of the original asbestos concrete pipe throughout the town has been replaced with PVC for either capacity upgrades or I/I abatement projects.

The following sections define the sewerage basins within the City. The boundaries between basins are based on both topography and the existing collection system.

3.3.1 Basin 1

Basin 1 covers the west end of the City, it is about 65% developed. Mostly the slopes of Bolton Hill in the southern part on Basin 1 remain undeveloped. Currently, all of the flows from the other basins flow through Basin 1 before reaching the wastewater treatment plant on the west side of the basin. See Figure 3.3.1.

3.3.2 Basin 2

Basin 2 is just to the east of Basin 1 and is about 90% developed. It also receives the flow from all of the other basins in town except for Basin 1. See Figure 3.3.2.

3.3.3 Basin 3

Basin 3 is southeast of Basin 2. Basin 3 is about 65% developed. Basin 3 connects to the central gravity system at Hunter Road and Territorial Highway. The southern half of Territorial Highway runs through Basin 3. See Figure 3.3.3.

3.3.4 Basin 4

Basin 4 is east of Basin 2 and services a roughly square area to the south of Highway 126 and to the east of Territorial Highway. Basin 4 is about 50% developed. Basin 4 is fed via force main from Basin 5. See Figure 3.3.4.

3.3.5 Basin 5

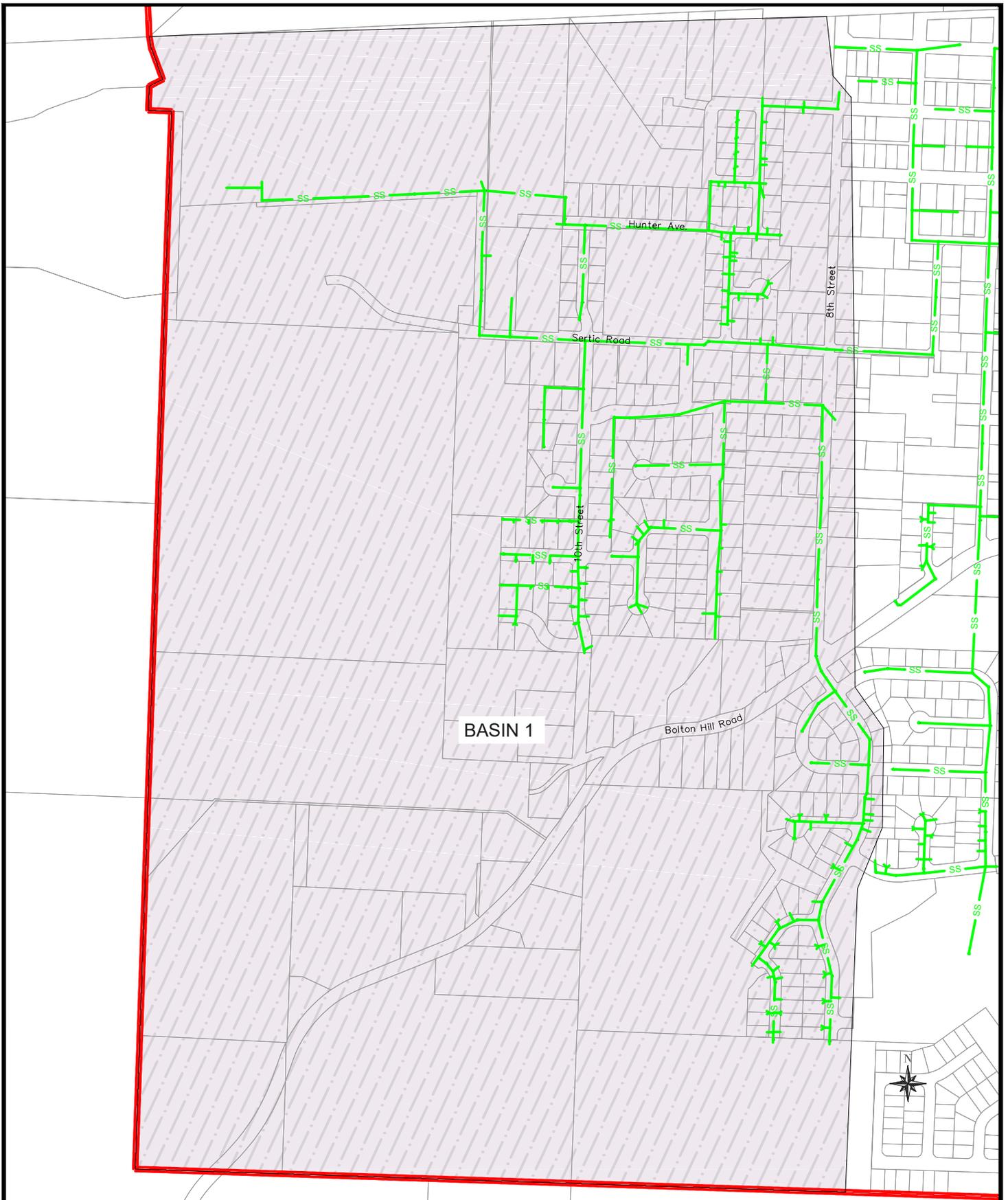
Basin 5 is south of Basin 4 and lays just east of Territorial Highway in the southern half of the town. Basin 5 is about 60% developed. See Figure 3.3.5.

3.3.6 Basin 6

Basin 6 is the whole area north of the railroad tracks, it runs from the west side all the way to the east side. Basin 6 is about 20% developed. Basin 6 is zoned for mainly commercial development. There appears to be ample space in Basin 6 for future development. See Figure 3.3.6.

3.3.7 Basin 7

Basin 7 is the remainder of the town to the east of Basin 4 and 5, and sits south of the train tracks and Basin 6. Basin 7 currently has no sewer service. Basin 7 has the greatest potential for growth and is about 20% developed. See Figure 3.3.7.



BASIN 1

Bolton Hill Road

Hunter Ave

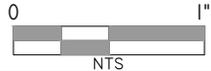
Sertic Road

8th Street

10th Street



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DATE: FEB 2016



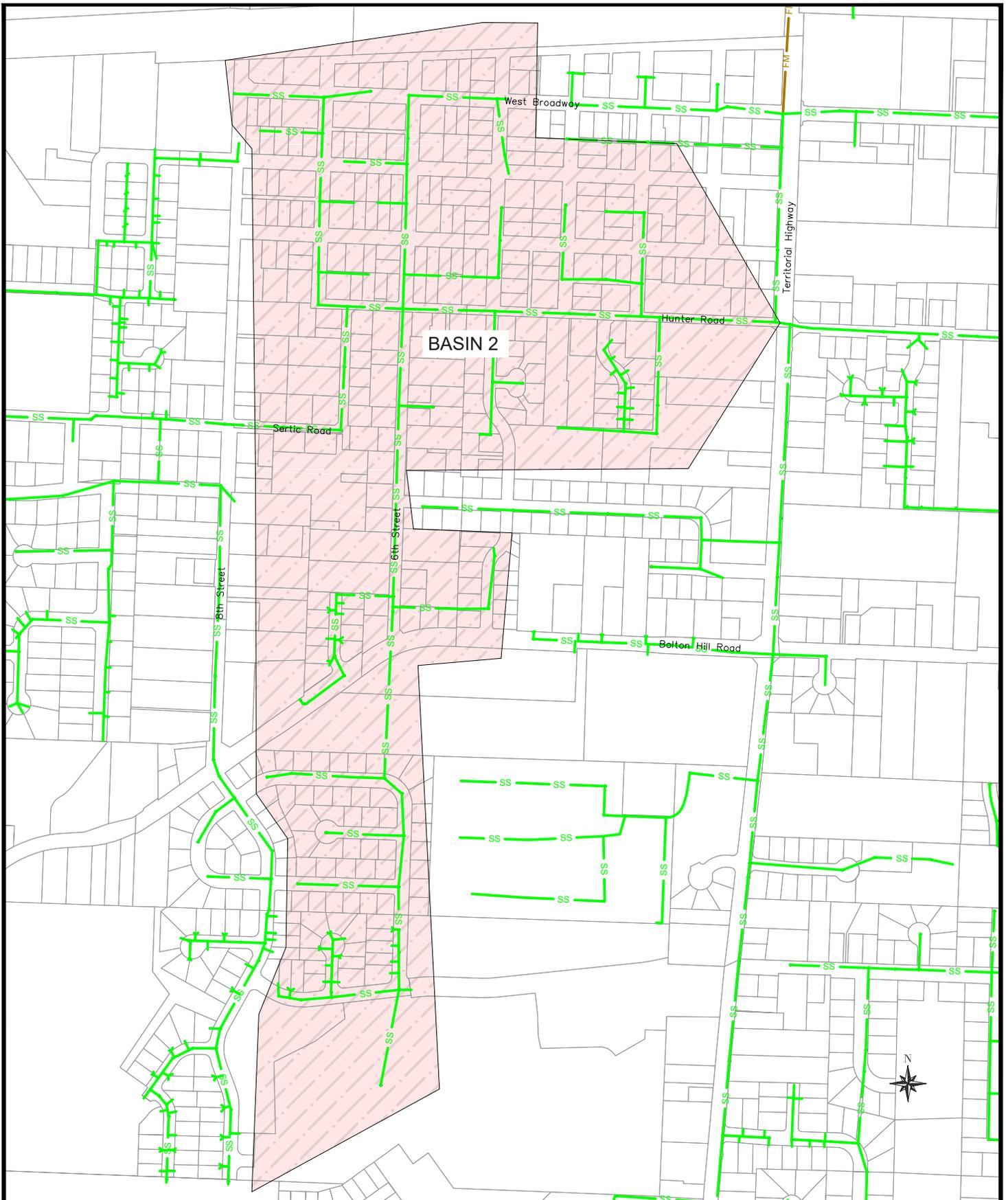
BASIN MAP

FIGURE

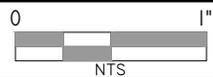
WASTEWATER FACILITIES PLAN

CITY OF VENETA
LANE COUNTY, OR

3.3.1



DRAWN BY: JBJ
DATE: FEB 2016



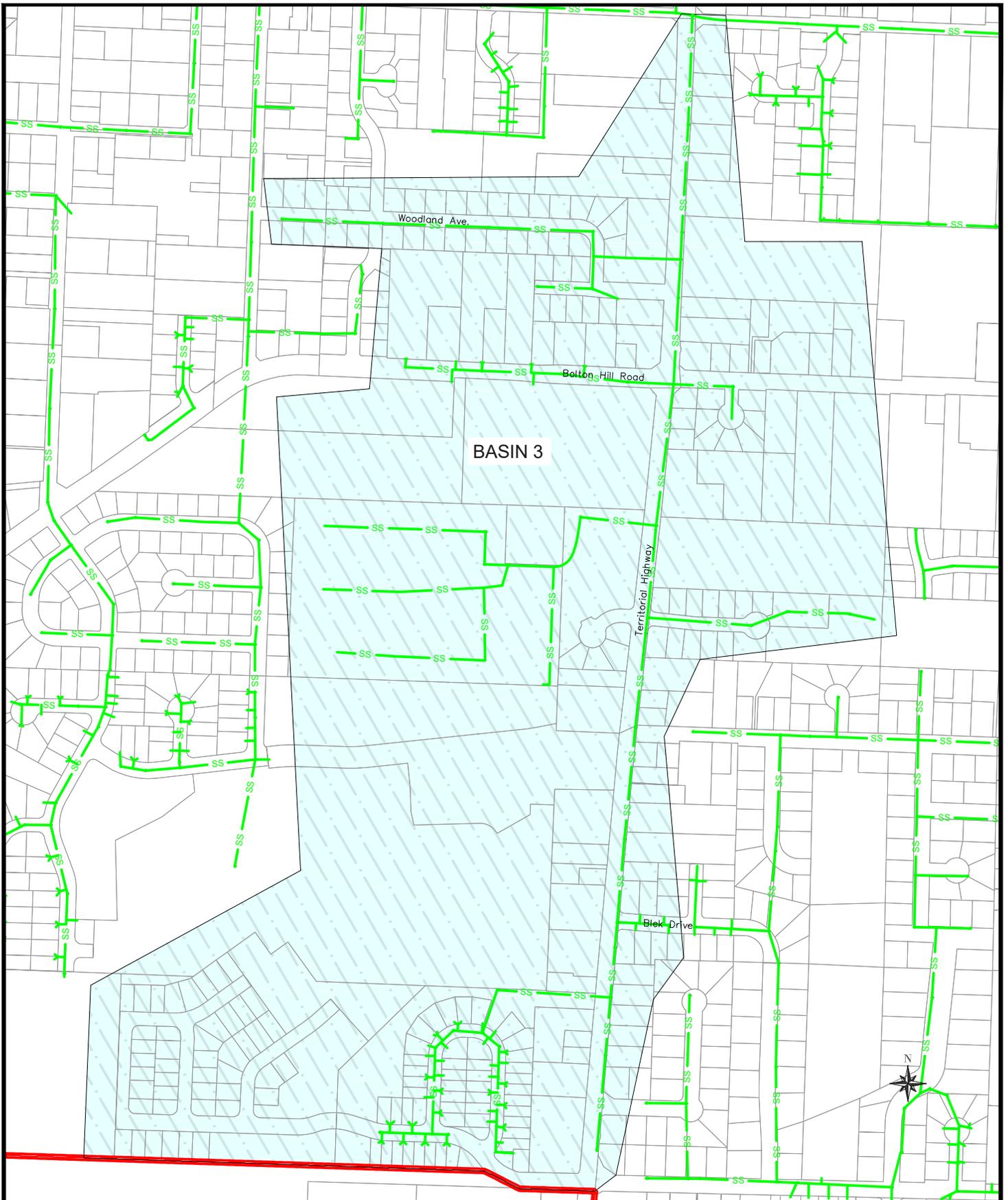
BASIN MAP

FIGURE

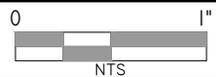
WASTEWATER FACILITIES PLAN

CITY OF VENETA
LANE COUNTY, OR

3.3.2



DRAWN BY: JBJ
DATE: FEB 2016



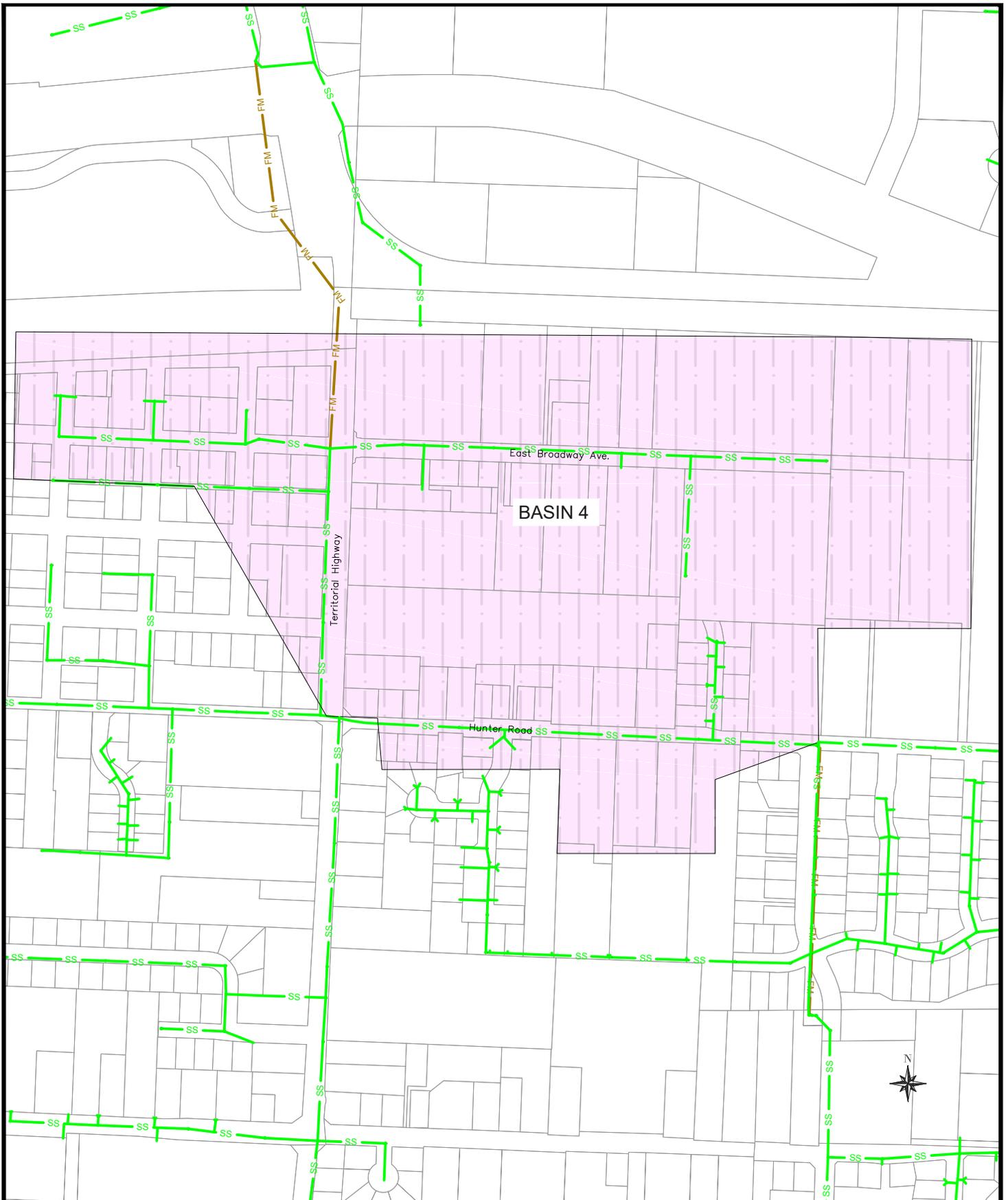
BASIN MAP

FIGURE

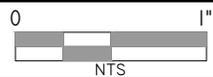
WASTEWATER FACILITIES PLAN

CITY OF VENETA
LANE COUNTY, OR

3.3.3



DRAWN BY: JBJ
DATE: FEB 2016



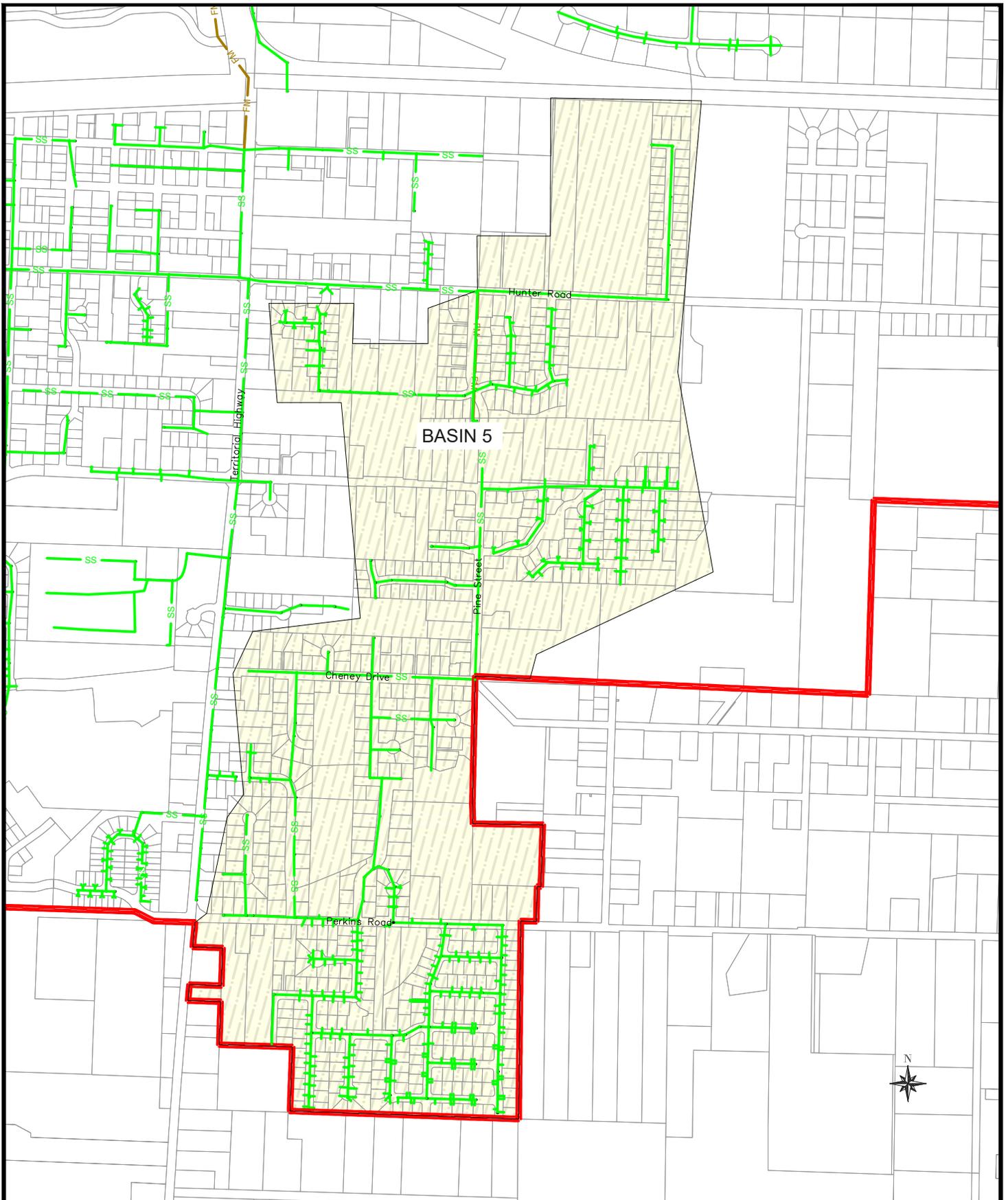
WASTEWATER FACILITIES PLAN

BASIN MAP

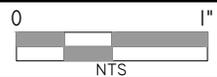
CITY OF VENETA
LANE COUNTY, OR

FIGURE

3.3.4



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DATE: FEB 2016



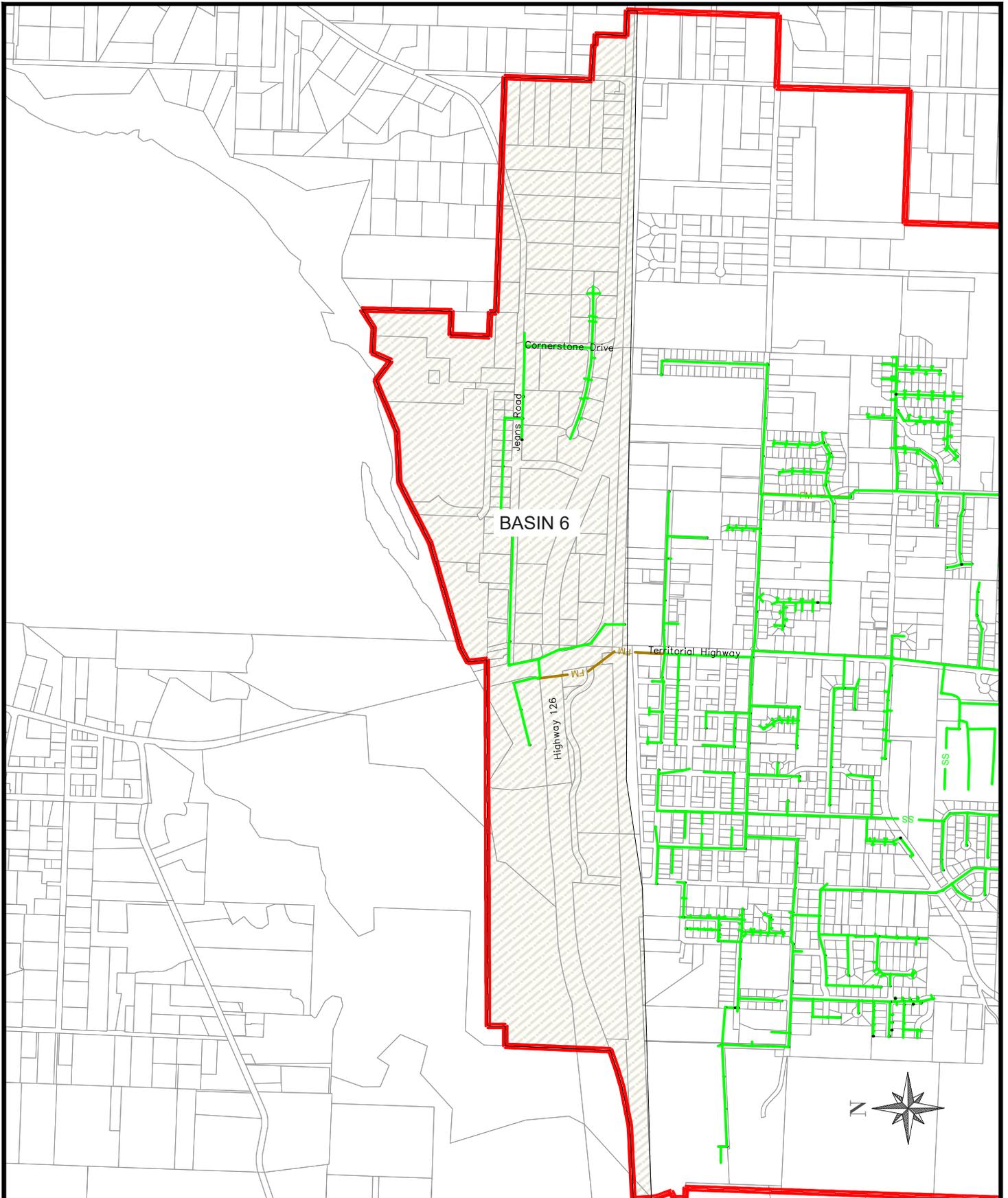
WASTEWATER FACILITIES PLAN

BASIN MAP

CITY OF VENETA
LANE COUNTY, OR

FIGURE

3.3.5



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DATE: FEB 2016



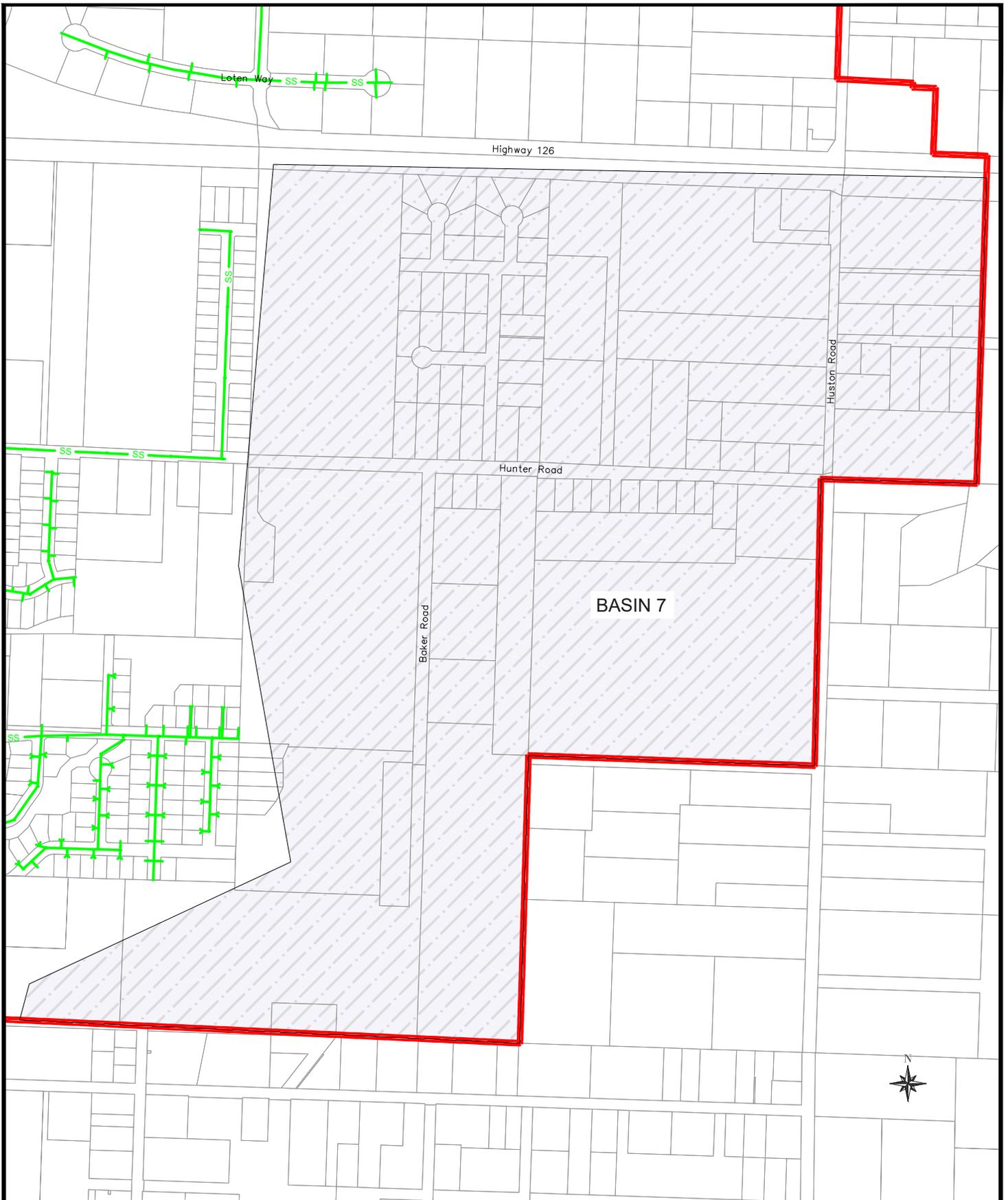
WASTEWATER FACILITIES PLAN

BASIN MAP

CITY OF VENETA
LANE COUNTY, OR

FIGURE

3.3.6



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DATE: FEB 2016



BASIN MAP

FIGURE

WASTEWATER FACILITIES PLAN

CITY OF VENETA
LANE COUNTY, OR

3.3.7

3.3.8 Lift Stations

There are currently two lift stations, Jeans Road and Pine Street.

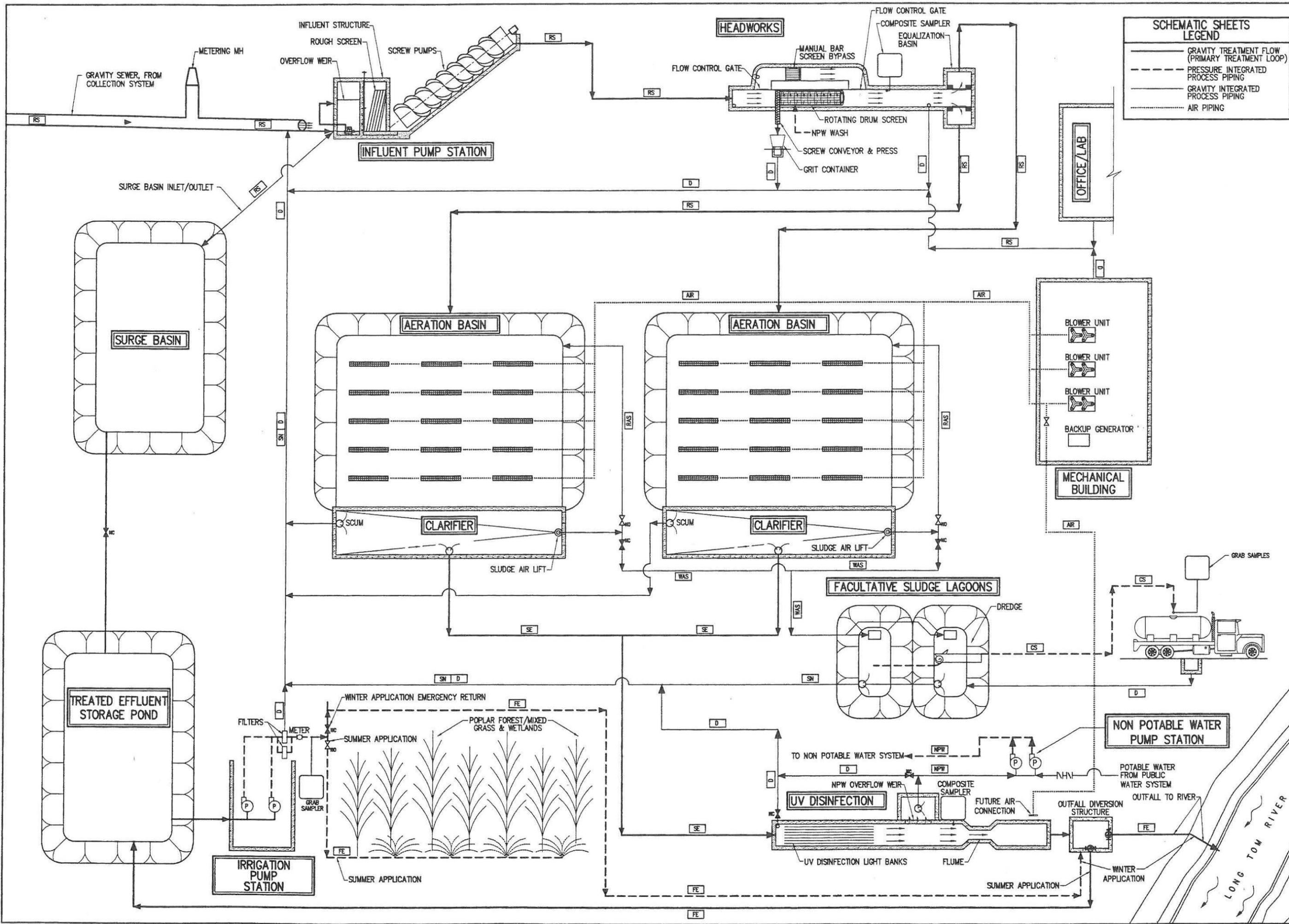
The Jeans Road lift station was built in 1988 and is located on the NW corner of Territorial Highway and Highway 126. It is a packaged wetwell, and is equipped with two dry mounted pumps. The pump motors are 460 V, three phase, constant speed and are rated at 10 hp. The lift station is able to deliver 130 gpm at 52' TDH per pump in the current configuration. This lift station does not have a dedicated source of auxiliary power, but, has a plug to attach a portable generator in the case of a power outage. This lift station runs ~1400' of 6" diameter asbestos concrete pipe running to the intersection of Broadway and Territorial Highway. Jeans Road lift station currently handles all of Basin 6.

The Pine Street lift station was built in 2001 and is located on the SW corner of Pine Street and Corky Lane. It two pumps mounted on grade with uplift intakes. The pump motors are 208 V, three phase, constant speed and are rated at 7.5 hp. The lift station is able to deliver 350gpm at 25' TDH per pump in the current configuration. This lift station runs ~900' of 10" ductile iron pipe to the intersection of Hunter Road and Pine Street where wastewater then flows by gravity down Hunter Road. Pine Street lift station currently handles all of Basin 5.

3.4 Wastewater Treatment Facilities

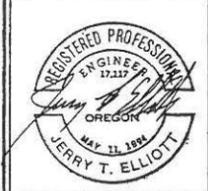
Veneta's first wastewater treatment system was completed in 1970. The wastewater treatment system consisted of a 3.86-acre single cell facultative lagoon and chlorination. Discharge during the winter was routed to the Long Tom River. In 1976 two facultative lagoons were built and the chlorination chamber was expanded.

In 2002 the existing wastewater treatment plant was built. The system has a firm design capacity of 1.25 MGD, matching the capacity of the screw type influent lift pumps feeding the headworks. Chlorination was removed and replaced with a low pressure UV disinfection system. A larger capacity expandable UV system was completed in 2012 with the older system retained for redundancy. See Figure 3.4.1 on the next page for the process schematic.



SCHEMATIC SHEETS LEGEND

- GRAVITY TREATMENT FLOW (PRIMARY TREATMENT LOOP)
- - - PRESSURE INTEGRATED PROCESS PIPING
- GRAVITY INTEGRATED PROCESS PIPING
- ⋯ AIR PIPING



SYSTEMS WEST ENGINEERS, INC.
 Eugene, Oregon 97401
 1600 Valley River Drive
 Suite 310 • Phone (541) 342-7210 • Fax (541) 342-7220

CITY OF YENETA
WASTEWATER TREATMENTS
SYSTEM IMPROVEMENTS
LANE COUNTY OREGON

PROCESS SCHEMATIC

DESIGNED	JSA
DRAWN	JSA
CHECKED	JSA
SCALE	AS SHOWN
DATE	MAR 2000
PROJECT	3033.20



SYSTEMS WEST ENGINEERS, INC.
 1600 Valley River Drive
 Eugene, Oregon 97401
 Phone (541) 342-7210 • Fax (541) 342-7220
 Suite 310 • Phone (541) 342-7210 • Fax (541) 342-7220

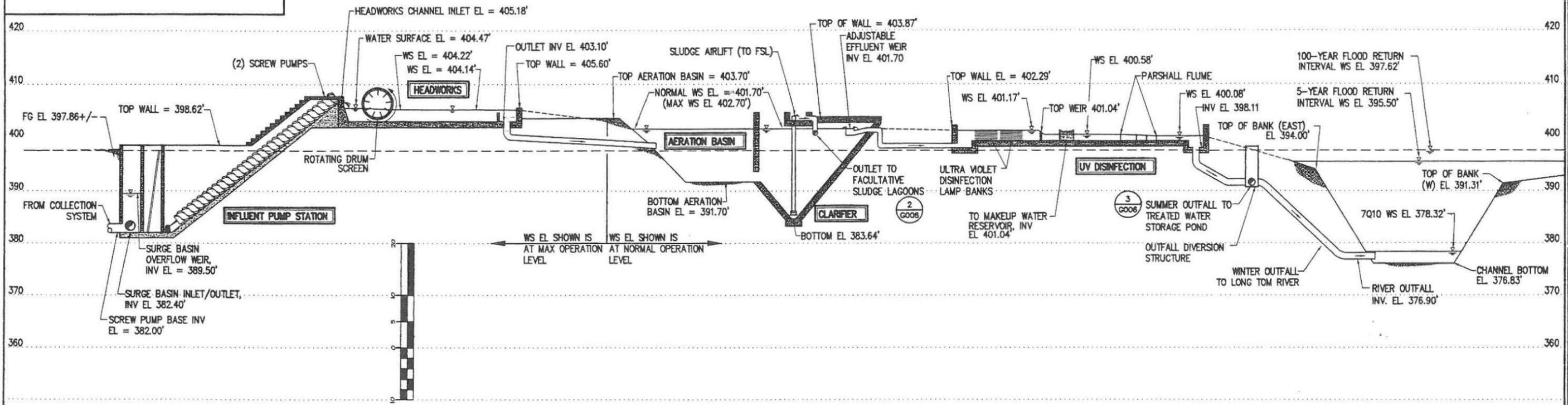
**CITY OF VENETA
 WASTEWATER TREATMENT SYSTEM IMPROVEMENTS
 LANE COUNTY OREGON**

SYN	DATE	REVISION	DRAWN	CHECKED

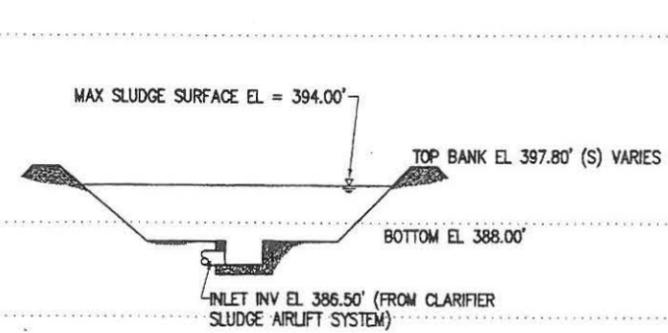
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 PROJECT 02EE06

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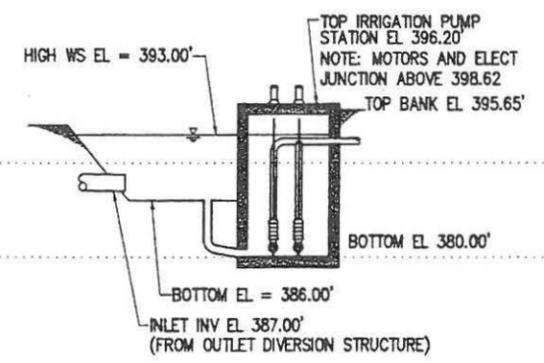
LEGEND	
---	HYDRAULIC GRADE LINE = 1.25 MGD
- - - -	100 YEAR FLOOD INTERVAL ELEVATION
.....	GRID LINE



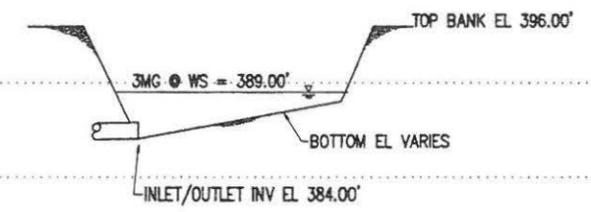
WWTP HYDRAULIC PROFILE 1
 SCALE: HORZ.: NTS
 VERT.: 1" = 10'



FACULTATIVE SLUDGE LAGOON 2
 SCALE: HORZ.: NTS
 VERT.: 1" = 10'



TREATED WATER STORAGE POND 3
 SCALE: HORZ.: NTS
 VERT.: 1" = 10'



SURGE BASIN 4
 SCALE: HORZ.: NTS
 VERT.: 1" = 10'

3.4.1 Influent Lift Station

The influent lift station uses two 1.25 million gallon per day Archimedes type screw pumps. The screw pumps pump from an influent structure that has a provision for redirecting flows greater than 1.25 MGD to the adjacent surge basin. To meet redundancy requirements, the lift station is rated at 1.25 MGD.

3.4.2 Surge Basin

The wastewater treatment plant includes a 4-million-gallon surge basin that is connected to the influent structure with an overflow weir. Flows in excess of 1.25 MGD are directed to the surge basin for retention. When the influent flow decreases below 1.25 MGD, the flow to the surge basin reverses and is sent back to the influent lift station. Using the surge basin for large flows has worked well for the City, but it has limited capacity. Assuming a peak day flow occurring at the end of a peak week that also happens during a maximum month, flows could potentially compound and overcome the capacity of the surge basin as soon as 2026, or once the population reaches 6200.

3.4.3 Headworks

The headworks has a design flow of 1.25 MGD, and a two-way splitter.

3.4.4 Biolac Aeration Basins

The wastewater treatment plant uses two Biolac aeration basins for sedimentation and secondary treatment. Each Biolac basin is designed to handle a peak flow of 1.25 MGD. Each basin is design rated to handle 143 mg/L of BOD at a 0.92 MGD flowrate, or 1243 lbs./day. The Biolac system employs an integrated clarifier built into each aeration basin.

3.4.5 Facultative Sludge Lagoons

There are two lined, 460,000-gallon facultative sludge lagoons, approximately 16,000 square feet in area each. Their operating depth is 5.5' with a maximum depth of 6.5'. The ponds are designed to handle 20 lbs. VSS per 1,000 square feet per day. For both ponds, this calculates out to 640 lbs. of VSS per day. The facultative sludge lagoons are located just north of the current Biolac aeration basins.

3.4.6 UV Disinfection

The current UV disinfection system was upgraded in early 2012 expanding the firm design capacity from 1.25 MGD to 2.80 MGD with the capability for expansion to 6.88 MGD. With expansion, the UV system is more than capable of handling current and projected peak flows.

3.4.7 Treated Effluent Storage

Treated effluent is stored in a lined, 7-million-gallon storage pond located north of the facultative sludge lagoons.

3.4.8 Irrigation Lift Station

Treated wastewater is pumped for reuse during the summer months from the irrigation lift station to grass fields north of the wastewater treatment plant.

3.4.9 Effluent Outfall

Treated effluent is discharged through an open ended 18” ductile iron pipe. It is approximately 150’ long and runs from the outfall diversion structure to the Long Tom River. The NPDES permit allows discharge to the river only during the period of October 1st through May 31st. During the period of June 1st through September 30th, the valve to the Long Tom River outfall is closed. Excess effluent during the summer months is stored in the effluent storage pond, which feeds the irrigation lift station used for irrigation of the grass fields north of the wastewater treatment plant.

4 Wastewater Flows

4.1 Wastewater Volume

The City of Veneta’s Wastewater Treatment Plant is unique in that a surge pond is employed prior to the headworks. The surge pond allows the plant a buffer to redirect a portion of peak flows that can be treated later when the flow has diminished. The capacity of the 1.25 MDG influent lift station regulates the flow through the plant, thus providing a more consistent flow, and increases the operational stability of the plant.

The location of the wastewater treatment plant flow measuring device is on the effluent side of the plant, and records the flow going through the plant. Flow data in the plant DMRs does not reflect “real time” flows coming in from the collection system due to the diversion of peak flows to the surge pond. This must be accounted for when making flow projections, as the data will show peak flows truncated by the maximum flow generated by the influent lift station.

4.1.1 Flow Definitions

Wastewater is typically described through flow and loading characteristics. Flow characteristics define the hydraulic volumes that the lift station and wastewater treatment plant experience and what they must be capable of processing. Loading characteristics describe what is in the wastewater (i.e. contaminants, waste products, chemicals, etc.) that must be substantially removed before the water can be discharged into the environment as effluent.

The following terms will be used in flow analysis and flow projections in this Study:

Dry Weather Period: Defined as the period when the precipitation and stream flows are low. This period is defined in the Oregon Administrative Rules (OAR 340-041-207) as May 1 through October 31.

Wet Weather Period: Defined as the period when stream flows, rainfall and groundwater levels are high. This period is defined in OAR 340-041-207 as November 1 through April 30.

Average Annual Flow (AAF): Total wastewater flow for an average 12-month period, from January 1 through December 31, divided by the total number of days in the year.

Base Sewerage: Average wastewater flow for the period between July 1 and September 31. This is used as a basis to calculate I/I.

Average Dry-Weather Flow (ADWF): Total wastewater flow for the dry-weather period divided by the number of days in the period.

Maximum Month Dry-Weather Flow (MMDWF): Total wastewater flow for the month with the highest flow during the dry-weather period, divided by the number of days in the month.

Average Wet-Weather Flow (AWWF): Total wastewater flow for the wet-weather period divided by the number of days in the period.

Maximum Month Wet-Weather Flow (MMWWF): Total wastewater flow for the month with the highest flow during the wet-weather period, divided by the number of days in the month.

Peak Day Average Flow (PDAF): Total flow for the day with the highest wastewater flow during the year.

Peak Week Flow (PWF): Average Daily Flow during the peak 7-day flow period.

Peak Instantaneous Flow (PIF): Flow for the highest peak of the year, expressed as a daily flow. The following terms will be used in the statistical analysis of flow rates:

Ten-year Maximum Month Dry-Weather Flow (MMDWF₁₀): The monthly average dry-weather flow with a 10% probability of occurrence.

Five-year Maximum Month Wet-Weather Flow (MMWWF₅): The monthly average wet-weather flow with a 20% probability of occurrence.

Five-year Peak Day Average Flow (PDAF₅): The peak day average flow associated with a five-year storm event.

Five-year Peak Instantaneous Flow (PIF₅): The peak instantaneous flow during a five-year storm event.

The following terms will be used in the Inflow and Infiltration Analysis:

Base Infiltration Flow The base daily average flow in the wastewater collection system due to inflow and infiltration. It is calculated by subtracting the base sewer flow rate from the average dry-weather flow.

Average Wet-Weather Inflow and Infiltration Flow (AWW I/I) The daily average flow in the wastewater collection system due to inflow and infiltration. It is calculated by subtracting the base sewer flow rate from the average wet-weather flow.

Maximum Monthly Wet-Weather Inflow and Infiltration Flow (MMWW I/I) The average daily flow during the maximum monthly occurrence in the wastewater collection system due to inflow and infiltration. It is calculated by subtracting the base sewer flow rate from the system maximum monthly wet-weather flow.

Peak Day Inflow and Infiltration Flow (PD I/I) The maximum daily flow in the wastewater collection system due to inflow and infiltration. It is calculated by subtracting the base sewer flow rate from the system peak daily average flow.

Peak Instantaneous Inflow and Infiltration Flow (PIF I/I) The peak instantaneous or peak hourly flow in the wastewater collection and wastewater treatment system due to inflow and infiltration. It is calculated by subtracting the base sewer flow rate from the system peak instantaneous flow.

4.1.2 Municipal Wastewater - Summary of Available Data

Effluent flow data obtained from the Discharge Monitoring Reports (DMRs) from January 2010 through October of 2015 have been used for flow analysis and wastewater characteristics. Flow calculations were calculated on an average across the six years of available data.

Daily rainfall totals were also referenced from the Wastewater Treatment Plant DMRs.

Based on the DMR data described above, some of the current design flows can be calculated. Since the data being used represents multiple years the time period in each of the following equations must be multiplied by the total number of years represented by the data set. In this case from 2010 to 2015, or six years. Below is the calculation AAF, Base Sewerage, ADWF, and AWWF:

$$AAF = \frac{\text{Total Wastewater Flow}}{\text{Days in Year} * 6} = \frac{1,157.6 \text{ MG}}{2129 \text{ Days}} = 0.54 \text{ Million Gallons/Day}$$

$$\text{Base Sewerage} = \frac{\text{Total Flow During July – Sept.}}{\text{Days in July – Sept.} * 6} = \frac{170.5 \text{ MG}}{553 \text{ Days}} = 0.31 \text{ Million Gal/day}$$

$$ADWF = \frac{\text{Total Flow During Dry Period}}{\text{Days in Dry Period} * 6} = \frac{382.7 \text{ MG}}{1102 \text{ Days}} = 0.35 \text{ Million Gal/Day}$$

$$AWWF = \frac{\text{Total Flow During Wet Period}}{\text{Days in Wet Period} * 6} = \frac{744.89 \text{ MG}}{1027 \text{ Days}} = 0.73 \text{ Million Gal/Day}$$

4.1.3 Dry Weather Flow

As indicated in the referenced DEQ guidelines, the ten-year Maximum Monthly Average Dry-Weather Flow (MMDWF₁₀) would be the monthly average flow in the rainiest summer month of high groundwater. West of the Oregon Cascades, the MMDWF₁₀ almost invariably occurs in May. The 10-Year MMDWF represents the anticipated monthly flow corresponding to the monthly rainfall accumulation during May with a 10% probability of occurrence in any given year.

Precipitation probabilities for various locations in Oregon are included in the report entitled “Climatology of the United States No. 20, Monthly Station Climate Summaries, 1971 – 2000” as published by the National Climatic Data Center. The closest probabilistic data sets are for the Fern Ridge Dam and have been used for this analysis.

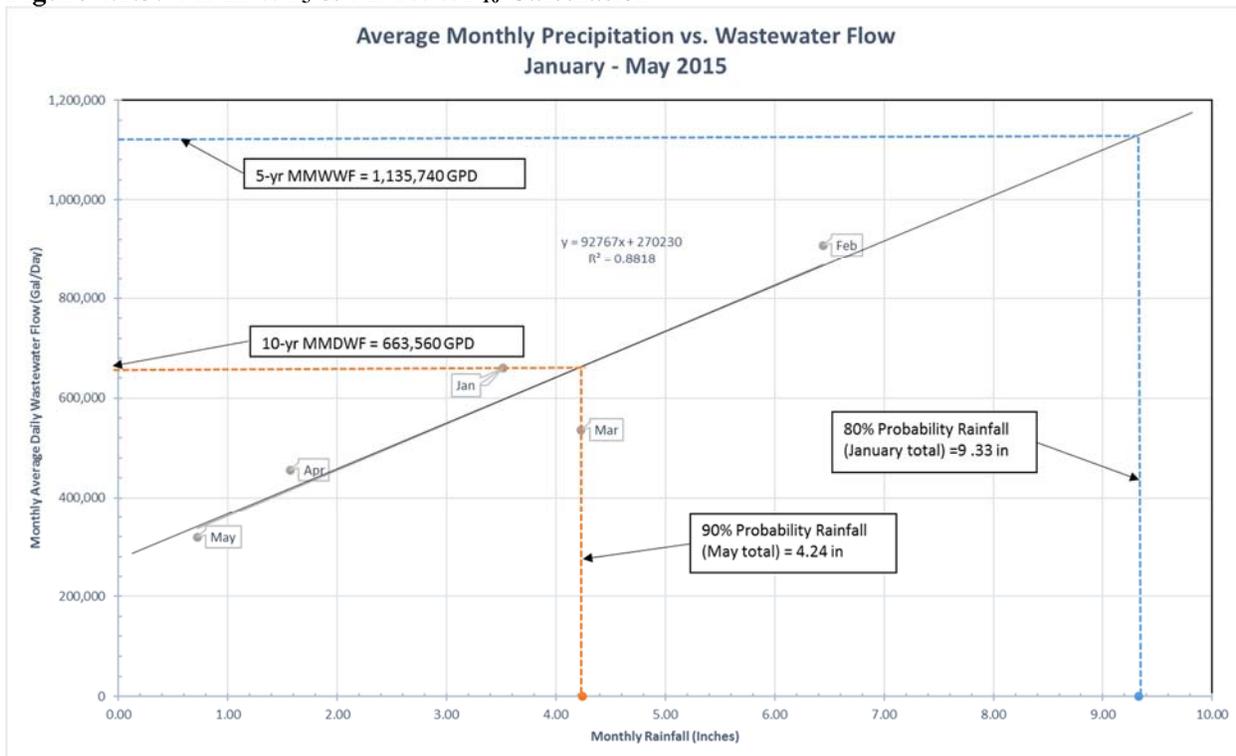
The graph in Figure 4.1.3 is based on five data points representing the average daily wastewater flows versus average monthly rainfall totals shown in Table 4.1.3 below. The points generate a trend line which can be used to predict average wastewater flows from a given monthly rainfall total. The 10-year MMDWF is the flow corresponding to the 10% probability precipitation (10.9 (May)) of 4.24 inches for the month of May, as determined by the above referenced climatology report. As shown in Figure 4.1.3, the corresponding MMDWF₁₀ is 663,560 gallons per day.

Table 4.1.3: Average Rainfall and Wastewater Flows, 2010-2015

Precipitation and Rainfall Averages		
Month	Monthly Rainfall (in/month)	Monthly Avg. Day Flow (gpd)
Jan	3.52	660,323
Feb	6.44	908,143
Mar	4.23	536,258
Apr	1.57	455,867
May	0.72	319,355
¹ 0.8 (Jan)		9.33
¹ 0.9 (May)		4.24

**Data from Climatology of the United States No. 20, 1971-2000, for Fern Ridge Dam, OR., published by the National climate Data Center*

Figure 4.1.3: MMDWF₅ & MMWFF₁₀ Calculation



4.1.4 Wet Weather Flow

Like many communities in western Oregon, the City of Veneta struggles with high volume wastewater flows caused by inflow and infiltration into the sanitary sewer system during the wet season. The flow

analysis presented in the following section is based on the *Oregon DEQ Guidelines for Making Wet-Weather and Peak Flow Projections for Sewage Treatment in Western Oregon* (first published in 1996). These guidelines describe a detailed method for estimating wet-weather flow and peak flows in wastewater collection systems. This method is used to develop the minimum estimate for current flows from which to project future flows.

The referenced DEQ design guidelines indicate that high groundwater, west of the Cascades, is usually not attained until January, and heavy storms generally do not begin to cause a reliable or consistent infiltration response until January. Therefore, the MMWWF is expected to occur in January. The five-year January (¹0.8 (Jan)) accumulation of 9.33 inches is indicated in the climatology report based on rainfall probability data for Fern Ridge Dam. When plotted with actual recorded events, the current five-year MMWWF is calculated to be 1,135,744 gallons per day, as shown in Figure 4.1.3 above.

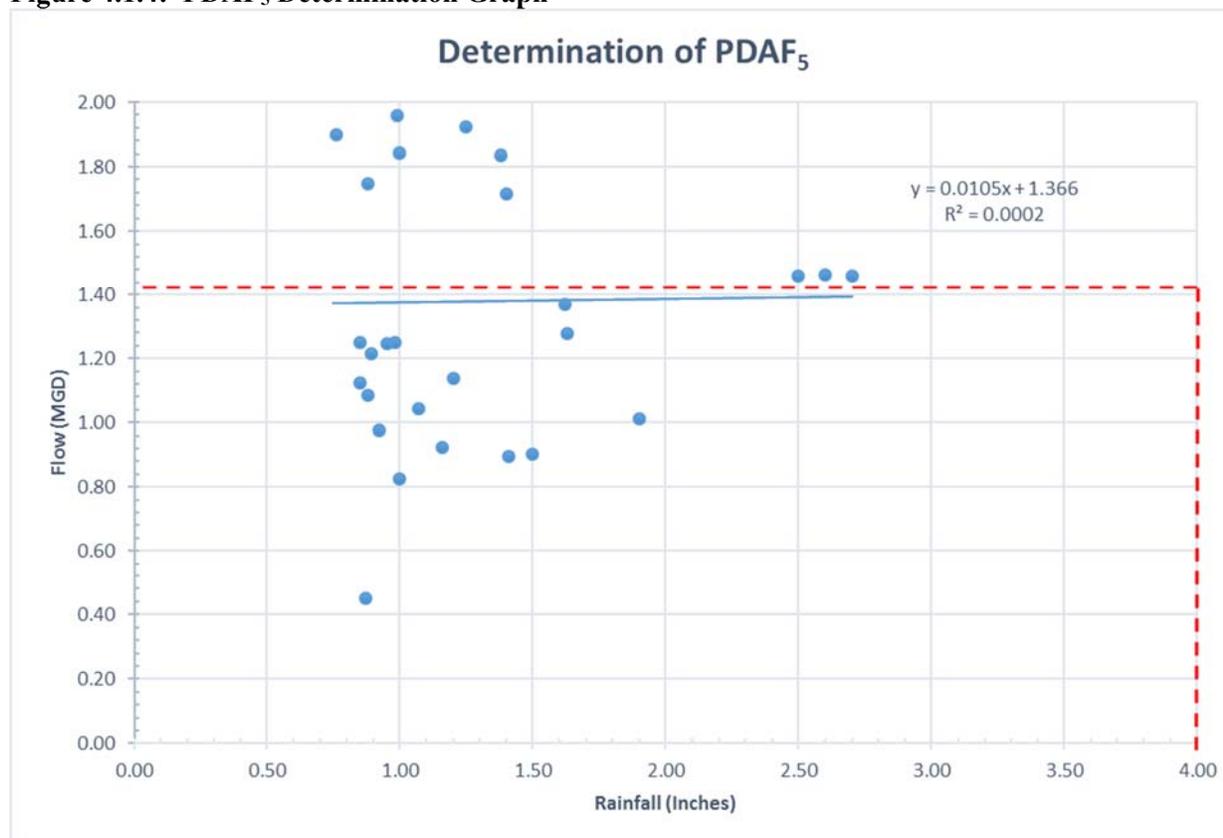
The Peak Day Average Flow (PDAF₅) corresponds to the five-year 24-hour storm event as defined by the NOAA isopleth maps. Based on the NOAA maps, the five-year 24-hour event for the Veneta area is 4.0 inches of rain.

To determine the PDAF₅ using the DEQ methodology, actual events are plotted and a best-fit trend line is used to approximate the character of the system under different rainfall events. Rainfall data from the years 2010 through 2015 is used in the PDAF₅ calculation. Data points were selected based on the criteria that the daily rainfall was in excess of 3/4 inches and the 3-day cumulative rainfall prior to the event was in excess of 1.0 inches. A summary of the data points used are included in Table 4.1.4. Results are graphed in Figure 4.1.4.

Table 4.1.4: Significant Rainfall Data for the City of Veneta, 2010-2015

Date	Rainfall(in)	WW Flow (MGD)	Date	Rainfall(in)	WW Flow (MGD)
1/16/2010	0.88	1.084	1/11/2014	0.87	0.451
3/29/2010	1.41	0.894	1/12/2014	0.98	1.251
3/30/2010	1.5	0.902	2/12/2014	1.9	1.01
4/2/2010	0.76	1.898	2/14/2014	1.37	2.027
2/16/2011	0.85	1.249	2/15/2014	0.75	2.033
3/16/2011	1.2	1.136	2/16/2014	0.88	1.747
1/18/2012	2.6	1.462	2/19/2014	0.99	1.959
1/19/2012	2.7	1.461	3/6/2014	1.16	0.922
1/20/2012	2.5	1.461	3/9/2014	1.07	1.042
1/21/2012	1.4	1.717	3/29/2014	0.95	1.245
1/25/2012	1	1.844	4/27/2014	0.92	0.975
3/1/2012	1.38	1.834	1/18/2015	1	0.827
3/15/2012	0.89	1.214	2/7/2015	1.62	1.369
3/16/2012	1.63	1.278	2/9/2015	0.85	1.125
3/31/2012	1.25	1.923	2/10/2015	1.09	2.043

Figure 4.1.4: PDAF₅ Determination Graph



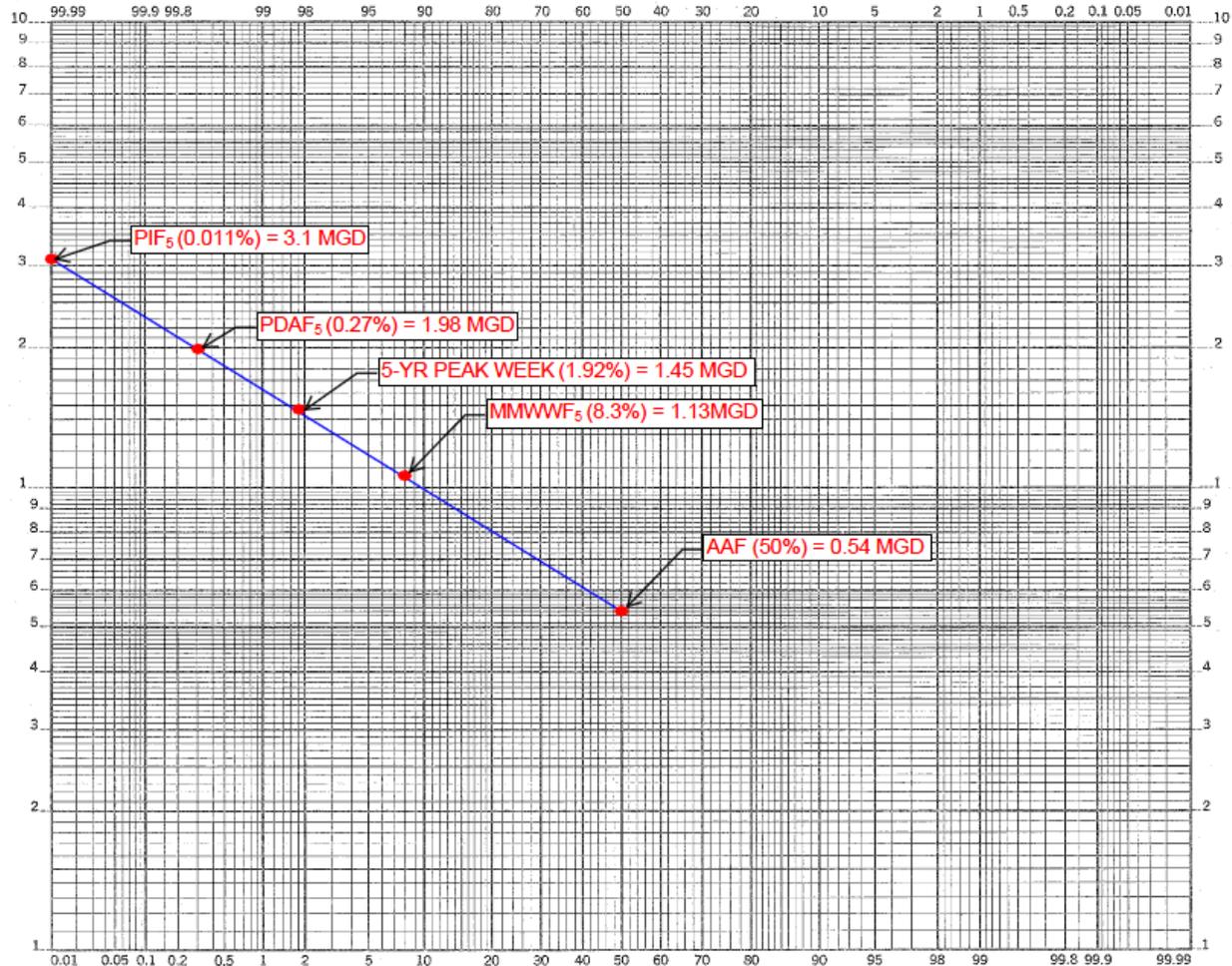
Based on Figure 4.1.4 above, the current PDAF₅ is approximately 1.408 MGD. Unfortunately, the R² factor for this graph is too low for the information to be deemed a reliable prediction of possible future flows. Based on plant discharge monitoring reports for the years 2010-2015, the largest four flows in the past 5 years have been 2,339,000 gpd, 2,185,000 gpd, 2,139,000 gpd, and 2,118,000 gpd. Using these four data points, a conservative PDAF₅ value of 1,980,000 gpd has been chosen as the design value.

DEQ guidelines for wastewater facilities design require critical plant and lift station components to be sized for the projected peak instantaneous flow (PIF₅). The current PIF₅, PDAF₅ and 5-year peak week flow for the City of Veneta have been estimated using a probability graph on logarithmic probability paper based on the data summarized below:

- The average annual flow (AAF) rate is the mean of the summer (ADWF) and winter (AWWF) flow rates. The probability of exceeding the AAF is 6/12, or 50%. AAF = 0.54 MGD.
- The MMWWF₅, as determined in Figure 2.5.2.1, has a probability of exceedance of 1/12, or 8.33%. MMWWF₅ = 1.13 MGD.
- The peak week flow occurs one week out of the year, for a probability of exceedance of 1/52, or 1.92%.
- The PDAF₅ is the daily flow associated with the 5-year storm. The probability of exceeding the PDAF is 1/365, or 0.27%. As determined above, the PDAF₅ from the calculation is unreliable so the trend line generated on the probability graph will be used to interpolate the value.
- The PIF, or “peak hourly flow” occurs once per year for a probability of exceedance of: $\frac{1 \text{ hour}}{\text{year}} * \frac{1 \text{ year}}{365 \text{ days}} * \frac{1 \text{ day}}{24 \text{ hours}} = \frac{1}{8760} = .011\%$.

- Assuming, as allowed by the DEQ guidelines, that the maximum PIF occurs during the peak day, peak week and peak month, we can create the graph shown in Figure 4.1.4A

Figure 4.1.4A: PIF Calculation Log-Log Graph



4.1.5 Infiltration and Inflow

Nearly all communities in Oregon struggle with the issue of inflow and infiltration (I/I) within their wastewater collection systems. Inflow and infiltration are defined as follows:

Infiltration: Flows that enter the collection system through underground paths. Infiltration can be caused by high groundwater levels, rain-induced groundwater, leaky water and storm drain systems, and other sources. Infiltration flows make their way into the collection system through cracks in pipe, open or offset pipe joints, broken piping sections, leaks in manholes, and other below-grade openings in the collection system.

Inflow: Flows that enter the collection system through above ground paths. Inflow is often related to building downspouts being connected to sanitary sewer service laterals, interconnections with storm drain systems that have not been separated, water flowing over manholes and entering in through the openings

in the lids, catch basins, or area drains being connected to the sewer system, and other surface water sources.

When combined, Infiltration and Inflow (I/I) can result in a tremendous increase in flows during the winter, particularly during prolonged storm events. Comparison of the records of daily rainfall and the WWTP flows shows a marked increase in wastewater flows during heavy rain events. The following table summarizes current I/I levels based on the flow calculations shown above.

Table 4.1.5: Inflow and Infiltration Summary

Current Inflow and Infiltration								
Item				MGD		I/I FLOW		Per Capita
AWW I/I	= AWWF	- Base Sewerage	→	0.54	- 0.31 =	0.23 MGD	→	48.7 gpcd
MMWW I/I	= MMWWF ₅	- Base Sewerage	→	1.13	- 0.31 =	0.82 MGD	→	173.7 gpcd
Peak Day I/I	= PDAF ₅	- Base Sewerage	→	1.98	- 0.31 =	1.67 MGD	→	353.7 gpcd
PI I/I	= PIF ₅	- Base Sewerage	→	3.1	- 0.31 =	2.79 MGD	→	591.0 gpcd

Based on the EPA I/I Analysis and Project Certification publication (#97-03) (EPA, 1985), the determination of "excessive" or "non-excessive" infiltration is based on an average flow rate during a period of seasonal high groundwater. For the purposes of this analysis, the average flow for the month of May (319,355 gpd) as shown in Table 4.1.3 was used as a characteristic flow meeting the definition above. Per the EPA publication, any flow greater than 120 gpcd indicates the infiltration may be "excessive". Converting 319,355 gpd to a per capita flow rate is done by dividing by the population served (4,721 persons). Performing this calculation leads to a daily per capita flow rate of 67 gpcd. This is well below the EPA maximum rate. Therefore, per the EPA publication, the City of Veneta does not have excessive infiltration.

Per the same EPA publication, excessive inflow is determined by the "highest daily flow recorded during a storm event." By this definition, the comparison should be made to the peak day average flow (PDAF). If the wet weather flow is below 275 gpcd, the inflow is considered non-excessive. I/I for a peak day average flow for Veneta, as determined above, is 1.67 MGD. Dividing by the estimated current population (4721 persons), a flow rate of 354 gpcd is obtained. This is in excess of the limit (275 gpcd) presented by the EPA. Therefore, per the EPA publication, the City of Veneta may have excessive inflow.

The final determination as to whether I/I flows are actually excessive depends on the cost effectiveness of needed repairs.

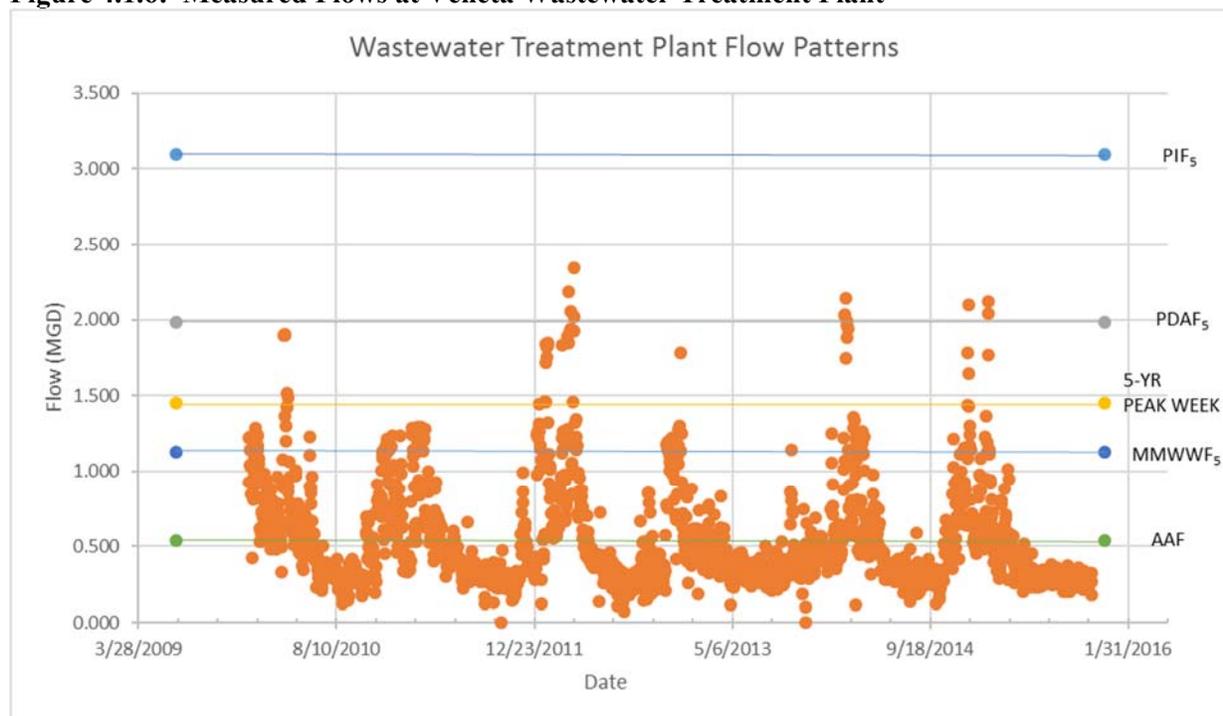
4.1.6 Summary of Existing Flows

Table 4.1.6 below, summarizes the current dry and wet weather flows for the City of Veneta. Definitions for the different flow criteria are provided in Section 4.1.1. Figure 4.1.6 shows the historical daily flows at the plant and how they relate to the identified flow parameters.

Table 4.1.6: Summary of Existing Wastewater Flows, Based on 2010-2015 Data

Summary of Current Wastewater Flows			
Parameter	2010-2015 Flow (GPD)	Basis	Per Capita Flow ¹ (GPD)
Dry Weather Flows			
ADWF	347,892	Analysis of 2010-2015 DMRs (May - Oct)	74
Base Sewerage	303,361	Assume no I/I (July - Sept)	64
Base Infiltration	44,531	ADWF - Base Sewerage	9
MMDWF ₁₀	663,561	Figure 4.1.3 (DEQ Graph No. 1)	141
Annual Flows			
AAF	535,032	Analysis of 2010-2015 DMRs (May - Oct)	113
Wet Weather Flows			
AWWF	725,305	Analysis of 2010-2015 DMRs (Nov - Apr)	154
MMWWF ₅	1,135,744	Figure 4.1.3 (DEQ Graph No. 1)	241
Peak Week	1,450,000	Figure 4.1.4 (DEQ Graph No. 3)	307
Peak Day (PDAF)	1,980,000	Figure 4.1.4 (DEQ Graph No. 3)	419
Peak Hourly (PIF)	3,100,000	Figure 4.1.4 (DEQ Graph No. 3)	657
Inflow and Infiltration			
AWW I/I	421,944	AWWF - Base Sewerage	89
MMWW I/I	832,382	MMWWF - Base Sewerage	176
Peak Day I/I	1,676,639	PDAF - Base Sewerage	355
Peak Hourly I/I	2,796,639	PIF - Base Sewerage	592

Figure 4.1.6: Measured Flows at Veneta Wastewater Treatment Plant



4.1.7 Projected Municipal Wastewater Flows

Projected wastewater flows are developed based on the assumption that base sewerage flow per capita would hold constant. This results in the increase in projected flows being proportional to the population growth. Per Section 2.3, the population may increase by over 16% from 2015 data to the end of the 20-year planning cycle.

Projected peak flows are calculated assuming current I/I flows remaining constant and projected base sewerage increases with population. The City has plans to address I/I issues and to continue monitoring and repairing the worst I/I areas, which would lead to less I/I. However, assuming a no decrease to current I/I flows would lead to conservative design flows and is therefore the approach taken to flow projections.

The tables below summarize the projected growth of Veneta for the next 20 years and the associated flow (Table 4.1.7) increases that would be assumed to occur with the growth. All methods and calculations used to determine current and projected flows are found in section 4.1.7

Table 4.1.7: Summary of Current and Projected Wastewater Flows

Summary of Current & Projected Wastewater Flows								
Parameter	Base Sewerage Peaking Factors*	I/I (Gal/Day)*	2015 Population	2015 Base Sewerage (Gal/Day)	2015 Flow (Gal/Day)	2035 Population	2035 Base Sewerage (Gal/Day)	2035 Flow (Gal/Day)
Dry Weather Flows								
Base Sewerage	1.00	0	4,721	303,361	303,361	7,687	493,950	493,950
ADWF	1.17	-6,535		354,428	347,892		577,100	570,564
MMDWF ₁₀	1.29	273,728		389,833	663,561		634,749	908,476
Wet Weather Flows								
AWWF	1.28	335,709	4,721	389,596	725,305	7,687	634,362	970,071
MMWWF ₅	1.45	697,263		438,481	1,135,744		713,960	1,411,223
Peak Week	1.49	996,997		453,003	1,450,000		737,605	1,734,602
Peak Day (PDAF)	1.64	1,481,576		498,424	1,980,000		811,562	2,293,138
Peak Hourly (PIF)	2.50	2,341,596		758,404	3,100,000		1,234,876	3,576,472
* Base Sewerage peaking factors and I/I is assumed to remain constant during the planning period.								
Base Sewerage based on average daily flow of 64 gallons per capita per day, based on the 2010-2015 avg per capita base flow								

4.2 Wastewater Composition

4.2.1 Introduction

Wastewater composition refers to the solids, chemicals, organics, and other materials that make up municipal wastewater. Because wastewater is generated by residential, commercial and industrial sources, the constituents within the wastewater can vary greatly. However, the wastewater treatment requirements and treated water quality requirements remains consistent, based upon NPDES Permit requirements.

4.2.2 Analysis of Plant Records

Analysis of the last six years of Discharge Monitoring Reports (DMRs) from the Wastewater Treatment Plant has identified a number of parameters that characterize the City’s wastewater. Plant records include influent measurement of BOD and TSS a minimum of once per week. Figure 4.2.2A, Figure 4.2.2B, Figure 4.2.2C, and Figure 4.2.2D below summarize the composition and loading of these primary constituents.

Figure 4.2.2A: Wastewater Treatment Plant Influent BOD Composition

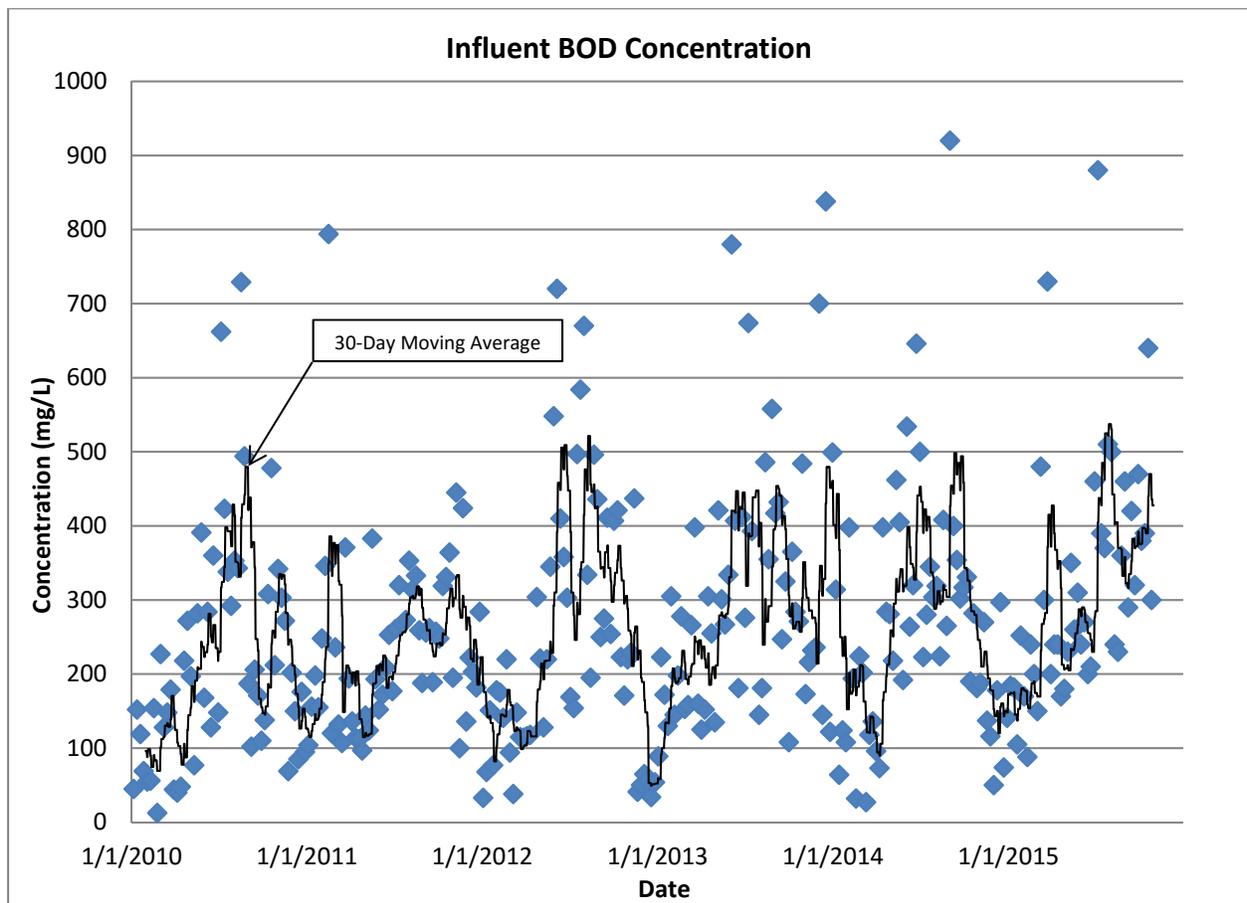


Figure 4.2.2B: Wastewater Treatment Plant Influent BOD Influent Loading

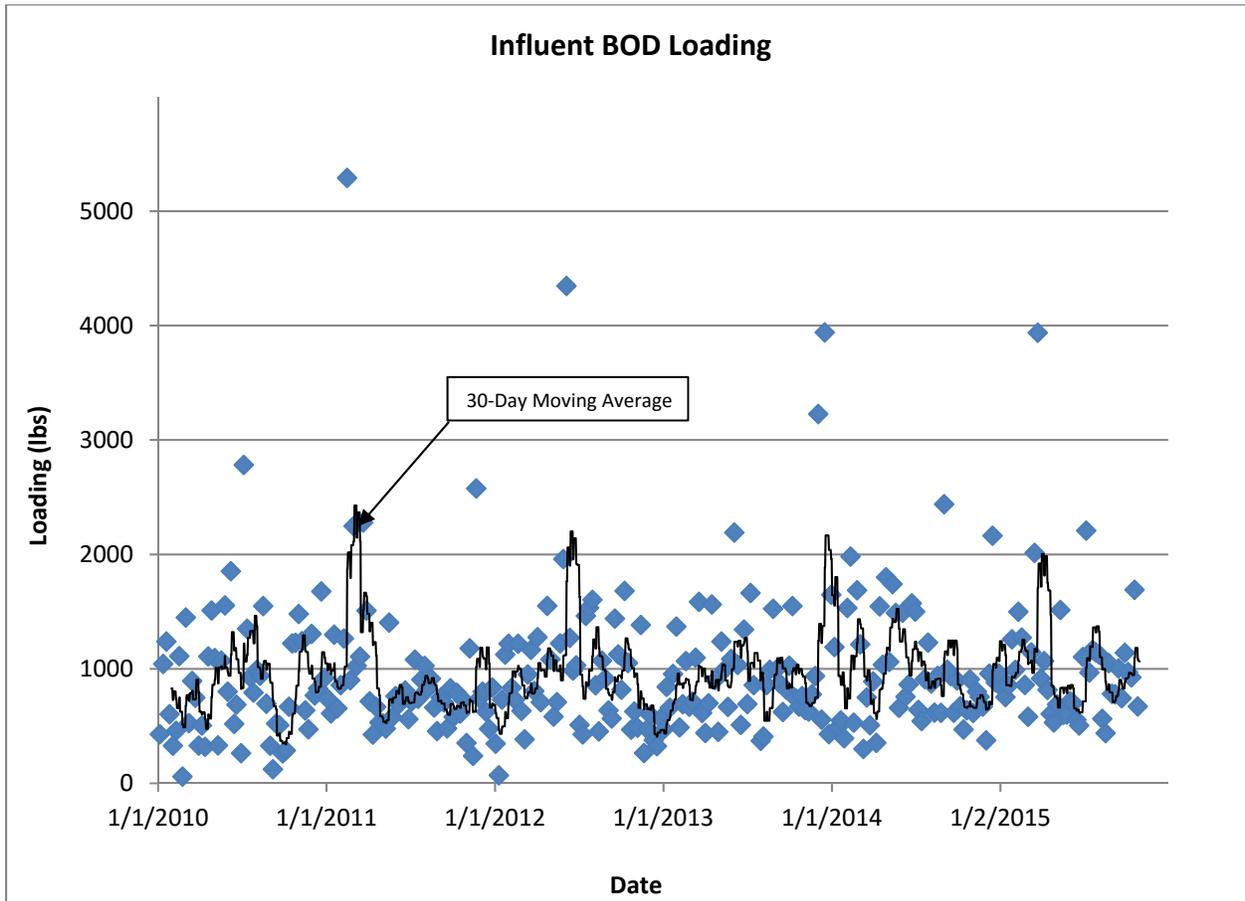


Figure 4.2.2C: Wastewater Treatment Plant Influent TSS Composition

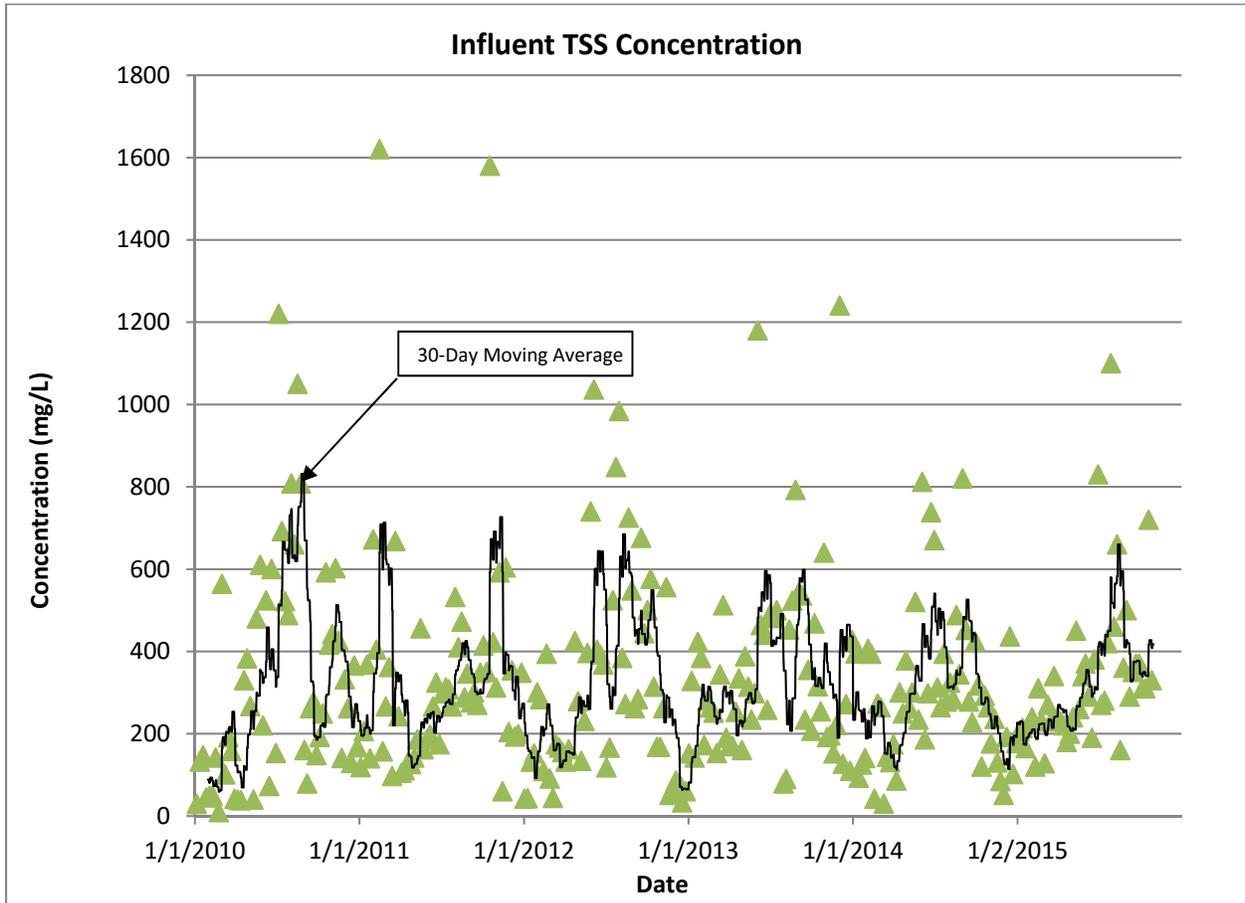
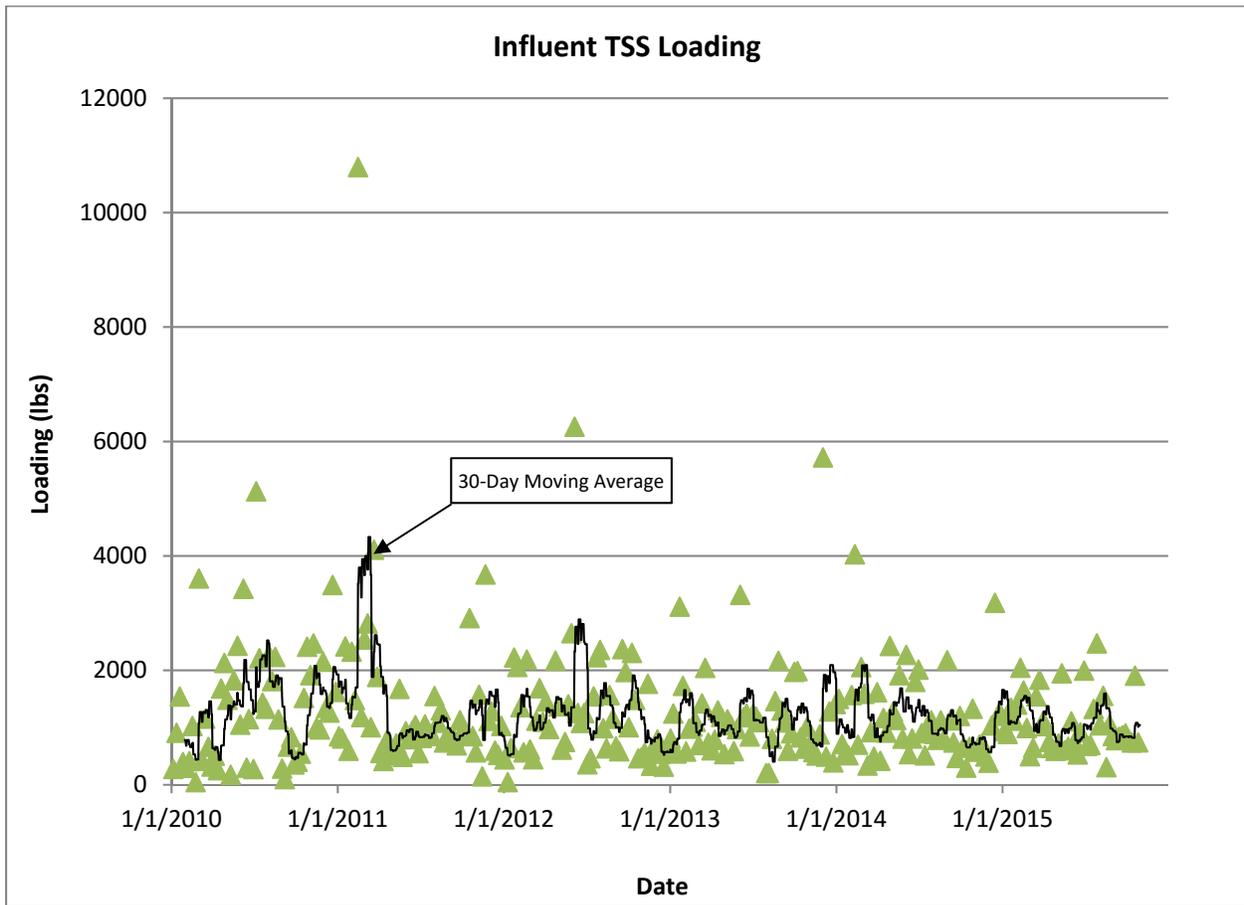


Figure 4.2.2D: TSS Influent Loading



4.2.3 Municipal Wastewater Composition Summary

Table 4.2.3A below, summarizes the municipal wastewater composition and loading of the influent in terms of BOD, TSS and pH.

Table 4.2.3A: Existing Municipal Wastewater Composition

Current Wastewater Composition Summary						
Flow Parameter	BOD		TSS		pH	
	Concentration (mg/L)	Loading (lbs.)	Concentration (mg/L)	Loading (lbs.)		
Annual Average	263	965	326	1226	6.96	
	Average		Average		Minimum	Maximum
Winter (Nov-Apr)	192	981	237	1264	5.16	8.11
Summer (May-Oct)	331	950	409	1191	5.85	8.01
Maximum Month	415	2080	832	3945	7.78	
Maximum Day	920	5291	1620	10795	8.11	
	Minimum Month				6.26	
	Minimum Day				5.16	

As seen above, the summer and winter flows in recent years have had significantly different concentrations of BOD and TSS, while the loading of these constituents was relatively independent of the seasonal flow fluctuation as would be expected due to the influx of I/I.

Typical concentrations of contaminants within untreated domestic wastewater are identified in the text *Wastewater Engineering, Treatment and Reuse*, Metcalf & Eddy, 5th Edition, 2014. Data given in the referenced text is summarized in Table 4.2.3B below for comparison to the average load concentration shown in the table above, as measured at the Veneta WWTP.

Table 4.2.3B: Typical Composition of Untreated Domestic Wastewater

Typical Wastewater Composition				
Contaminant	Unit	Concentration		
		Low Strength	Medium Strength	High Strength
Biochemical Oxygen Demand, 5-d, 20° C (BOD)	mg/L	133	200	400
Total Suspended Solids (TSS)	mg/L	130	195	389
Fecal Coliform	No./100mL	10 ³ - 10 ⁵	10 ⁴ - 10 ⁶	10 ⁵ - 10 ⁸
Free Ammonia Nitrogen (NH ₃ -N)	mg/L	12	20	41

Source: Table 3-18, *Wastewater Engineering, Treatment and Reuse*, Metcalf & Eddy, 5th Edition, 2014.

By comparing the typical values in the above table to the overall average constituent concentrations presented in Table 4.2.3A, average influent BOD and TSS values for Veneta are considered medium to high strength.

4.2.4 Projected Municipal Wastewater Characteristics

The current population served by the City of Veneta, is 4839 persons. Based on growth projection data discussed in section 2.3, the population served at the end of the design period in 2036, is anticipated to be approximately 7795 persons.

At this time, no significant change to the current ratio of residential to commercial to industrial sources is expected within the collection system. Therefore, for the purposes of projecting municipal wastewater characteristics, it is assumed that flows and loading would increase over time based on the increase in population and that the composition, per unit volume, of the municipal wastewater would remain the same.

Projected BOD and TSS loadings for Veneta in the year 2036 are summarized in Table 4.2.4 below, including the unit loading presented in units of pounds per person per day. The values presented for BOD and TSS have been determined by dividing the average and peak loads determined from the DMRs by the existing population to obtain unit loads (design factors) in terms of pounds per capita day. The unit design factors were then multiplied by the projected population to determine projected loading. For ammonia, textbook values for average per capita loadings were used for average conditions; maximum month and maximum day loadings were estimated using conservative multipliers keeping with the trend seen for other parameters.

Table 4.2.4: Summary of Current and Projected Wastewater Influent Loads

Current and Projected Wastewater Influent Loads								
Parameter	2014 Loading		2014 Population	Unit Loading		2036 Population	2036 Loading	
	(lbs./day)			(lbs./capita-day)			(lbs./capita-day)	
	BOD	TSS		BOD	TSS		BOD	TSS
Annual Average	982	1141	4689	0.20943	0.24334	7,795	1632	1897
Winter Average	960	1192		0.20473	0.25421		1596	1982
Summer Average	1004	1090		0.21412	0.23246		1669	1812
Maximum Month	1238	2086		0.26402	0.44487		2058	3468
Maximum Day	2440	4025		0.52037	0.85839		4056	6691

Based on the current treatment system, projected 2036 effluent loading values for BOD/TSS are likely to exceed current permit values. See Table 4.2.4a below.

Table 4.2.4a: Summary of Current and Projected Wastewater Effluent Loads

Current and Projected Wastewater Effluent Loads								
Parameter	2014 Loading		2014 Population	Unit Loading		2036 Population	2036 Loading	
	(lbs./day)			(lbs./capita-day)			(lbs./capita-day)	
	BOD	TSS		BOD	TSS		BOD	TSS
Annual Average	16	29	4689	0.00341	0.00616	7,795	27	48
Winter Average	21	42		0.00448	0.00904		35	70
Summer Average	10	13		0.00213	0.00275		17	21
Maximum Month	63	100		0.01344	0.02139		105	167
Maximum Day	122	199		0.02602	0.04244		203	331

5 Basis for Planning

5.1 Regulatory Requirements

Many federal and state regulations are put in place to ensure health, sanitation, and security of the public. This section will report on relevant regulations governing the City's wastewater treatment facilities

The Clean Water Act (CWA) as delegated by the US-EPA to the State of Oregon and enforced through Oregon Revised Statutes (ORS 468B.050), requires permits for all discharges of wastewater to waters of the state. The City of Veneta operates its wastewater system under the jurisdiction of the Oregon Department of Environmental Quality (DEQ), with a National Pollutant Discharge Elimination System (NPDES) Waste Discharge Permit (Permit No. 102480) which was issued on December 13, 2013 (See Appendix A). This NPDES permit is in effect until June 30, 2017. Permits are issued for periods of 5-years. If the permittee applies for permit renewal in a timely manner (180 days prior to expiration) the permit would remain active until such time as the DEQ takes action on the permit renewal application.

The 2013 NPDES permit allows the City to discharge treated wastewater to the Long Tom River at river mile 33 from November 1 to April 30 under the prescribed effluent limitations and other requirements. These effluent limits are developed to protect the beneficial uses for the Willamette Basin (Oregon Administrative Rules 340-45-0080).

Oregon Administrative Rules (OAR) also contain both statewide and basin specific minimum design criteria and rules regarding sanitary sewage overflows. These rules are discussed below:

5.1.1 Minimum Design Criteria for Wastewater Treatment and Control of Wastes

OAR 340-041-0007 (Statewide Narrative Criteria) includes minimum design criteria for wastewater treatment and control of wastes. Generally, wastewater from a municipal wastewater treatment system must be treated and controlled in facilities designed in accordance with the following minimum criteria:

- In designing wastewater treatment facilities, average conditions and a normal range of variability are generally used in establishing design criteria. A facility once completed and placed in operation should operate at or near the design limit most of the time but may operate below the design criteria limit at times due to variables which are unpredictable or uncontrollable. This is particularly true for biological wastewater treatment facilities. The actual operating limits are intended to be established by permit pursuant to ORS 468B.050 and recognize that the actual performance level may at times be less than the design criteria.
- Effluent BOD concentrations in mg/l, divided by the dilution factor (ratio of receiving stream flow to effluent flow) may not exceed one unless otherwise approved by the Environmental Quality Commission;
- Sewage wastes must be disinfected, after wastewater treatment, equivalent to thorough mixing with sufficient chlorine to provide a residual of at least 1 part per million after 60 minutes of contact time unless otherwise specifically authorized by permit;
- Positive protection must be provided to prevent bypassing raw or inadequately treated sewage to public waters unless otherwise approved by the Department where elimination of inflow and infiltration would be necessary but not presently practicable; and

- More stringent waste treatment and control requirements may be imposed where special conditions make such action appropriate.

OAR 340-041-0345 (Water Quality Standards and Policies for the Willamette Basin) includes minimum design criteria for treatment and control of wastes. These are as follows:

- pH values may not fall outside the range of 6.5 to 8.5.
- During periods of low stream flows (approximately May 1 to October 31): Treatment resulting in monthly average effluent concentrations not to exceed 10 mg/l of BOD and 10 mg/l of SS or equivalent control;
- During the period of high stream flows (approximately November 1 to April 30): A minimum of secondary treatment or equivalent control and unless otherwise specifically authorized by the Department, operation of all waste treatment and control facilities at maximum practical efficiency and effectiveness so as to minimize waste discharges to public waters.

New or expanded wastewater treatment systems must meet the requirements described above.

5.1.2 Sanitary Sewage Overflows (SSOs)

OAR 340-041-0009 (6) and (7) prohibit discharging of raw sewage to waters of the state in the winter and summer, respectively. During the winter (November 1 through May 21), raw sewage discharges are prohibited, except during a storm event greater than the one-in-five year 24-hour duration storm. During the summer (June 1 through October 31), raw sewage discharges are prohibited, except during a storm event greater than the one-in-ten year 24-hour duration storm. Exceptions apply however for both summer and winter raw sewage discharges which are described in OAR 340-041-0009.

Currently however, all DEQ water quality permits prohibit all SSOs to surface water.

5.1.2 Water Quality Status of Receiving Waterbody

Per OAR 340-041-0004, the Antidegradation Policy guides decisions that affect water quality such that unnecessary further degradation from new or increased point and nonpoint sources of pollution is prevented, and enhances existing surface water quality to ensure the full protection of all existing beneficial uses.

5.1.2.1 Clean Water Act, Section 303(d)

Section 305(b) of the Clean Water Act (CWA) requires DEQ to assess water quality in Oregon and report on the overall condition of waters. DEQ assigns an assessment status category to each water body where data are available to evaluate. Water bodies that do not meet water quality standards are Water Quality Limited and are assigned Category 4 or Category 5. Water bodies in Category 5 need pollutant Total Maximum Daily Loads (TMDLs) developed. The Category 5 water bodies comprise the Section 303(d) list.

During the winter discharge period of November 1- April 30, outfall 001, the Long Tom River receiving water body is water quality limited for dissolved oxygen, iron, manganese and pH. Table 5.1.2.1 summarizes the water quality status of the Long Tom River near the City of Veneta.

Table 5.1.2.1: Willamette Basin Water Quality Status

Parameter	Season	Status	Assessment Year	Assessment Action
Dissolved Oxygen	Jan 1 – Mar 15	Cat 5: Water quality limited, 303(d) list, TMDL needed	2012	Segment Modification
E. Coli	Fall/Winter/Spring	Cat 4A: Water quality limited, TMDL approved	2012	New Cat 4A: Water quality limited, TMDL approved
E. Coli	Summer	Cat 4A: Water quality limited, TMDL approved	2012	New Cat 4A: Water quality limited, TMDL approved
Iron	All Year	Cat 5: Water quality limited, 303(d) list, TMDL needed	2012	No Status Change
pH	Fall/Winter/Spring	Cat 5: Water quality limited, 303(d) list, TMDL needed	2012	No Action

5.1.2.2 Temperature

Water temperatures affect the biological cycles of aquatic species and are a critical factor in maintaining and restoring healthy salmonid populations throughout the state. It is the policy of the Environmental Quality Commission (EQC) to protect aquatic ecosystems from adverse warming caused by anthropogenic activities. The purpose of the temperature criteria listed in OAR 340-041-0028 is to protect designated temperature sensitive beneficial uses, including salmonid life cycle stages in waters of the State.

The DEQ list of Water Quality Limited Water Bodies for 2012 indicates that River Mile 33 of the Long Tom River is not water quality limited for temperature.

5.2 Aging Infrastructure

5.2.1 Wastewater System Deficiencies

Much of the older portions of the wastewater collection system in Veneta are constructed from aged concrete sewer pipe. After time, these pipe sections are known for having leaky joints due to the degradation of grout or gasket material in the joint. If groundwater levels rise above the level of the sewer mains, due to prolonged rainfall, each joint may begin to leak a small amount. When combined, all of the small leaks can form a significant amount of infiltration flows. The City has made a continued effort to replace older sections of pipe in an effort to reduce I/I, it is recommended that the City continues to be proactive in replacing the older sections of pipe.

Deficiencies in the collection system are many of the same deficiencies that existed when the 2009 City of Veneta Wastewater Master Plan was written. Flow mapping and smoke testing may be beneficial in isolating current I/I sources. As such, we recommend that the City authorize a new flow mapping/smoke test study to identify current I/I sources.

Wastewater Treatment Plant

The current Wastewater Treatment Plant has a Class 1 rated design capacity of 1.25 MGD. Over the 5-year study period the 1.25 MGD capacity has been exceeded 72 times, many of the flows were close to double the 1.25 MGD capacity. Projected peak hourly flows for the year 2036 will exceed 3.5 MGD.

The wastewater treatment plant has been able to operate within allotted permit levels by the use of a 4-million-gallon surge pond connected to the influent lift station. When flows exceed the 1.25 MGD capacity of the influent lift station, the influent level in the wetwell rises and flow is diverted to the surge pond. After the flow has diminished, the surge pond effluent valve can be opened to allow untreated sewage from the surge pond to flow into the influent lift station to be pumped to the plant for treatment.

Current calculated flows for worst case scenario when a peak day flow occurs at the end of a peak week flow occurring at the end of a maximum month have shown that the above surge pond bypass method would work without overflowing the surge pond or exceeding DEQ permit limits. This method for handling higher flows into the wastewater treatment plant will not be viable long term. Based on population growth projections, the surge pond would reach the 4-million-gallon capacity in 2026 at a population of 6200. This estimate is population driven and therefore upgrades may be required sooner or later than 2026 due to development or lack thereof.

Prior to the population increasing to 6200, it is recommended that both the influent pumping station and the Biolac basins be upgraded to handle the projected flows. The current double screw influent pump could still be employed if flows from newly developed areas are pumped straight to the headworks. The existing two Biolac aeration basins would need to be expanded to a four basin system. The headworks would also need to either be replaced or modified to handle the increased flows and in particular, the flow splitting to accommodate the new four basin Biolac.

Collection System

Current deficiencies in the collection system may still exist from those identified in the 2009 WWMP/CIP. Flow mapping and smoke testing may help to confirm the effectiveness of the recent repairs, and can also help to identify smaller sources of I/I that were masked during prior studies by larger I/I sources.

5.2.2 Violation History

The wastewater treatment plant submits monthly DMRs to document compliance with permit limits. The City received a single enforcement action in 2011 for “*failure to collect all required monitoring data and violating a technology-based effluent limit*”. The City was assessed a single civil penalty for both violations. The penalty has been paid and the City is considered to be in substantial compliance with the current permit.

5.2.3 Reasonable Growth

The planning period for this document is 20 years starting in 2016. The projected growth for the City of Veneta for the year 2036 is 7795, per the Lane County coordinated growth rate. This is an over 62% increase of the current population serviced by the current wastewater treatment facility.

5.3 Design Capacity of Conveyance System and Wastewater Treatment Plant

5.3.1 Conveyance System

It is a priority to ensure that the conveyance system is designed to convey the Peak Instantaneous Flow (PIF). Current and future flows were calculated based on the available information from DMR data from the wastewater treatment plant from January 2010 to October 2015, and Lane County Coordinated Population Forecast. Flows for individual basins were calculated as the ratio of connections in the basin divided by the total number of connections for the entire town multiplied by total flows measured at the wastewater treatment plant.

For future flows, it was assumed that future growth would occur equally throughout the City. This is not how growth would occur, but without any planning documents showing projected growth, it is the best available assumption. Based on city limits, topography and population density, the areas of the town most likely to see larger flow rates would be the area north of Highway 126, and the eastern end of town. Typically, when isolated development occurs, the entire sewer main connecting the proposed development would have to be analyzed to ensure it has sufficient capacity to carry the increased flows.

Conveyance capacity of the existing gravity collection system was calculated in the 2009 Wastewater Master Plan. Deficiencies were identified and included in the 2009 Capital Improvement Plan.

5.3.2 Lift Stations

Lift stations must have a firm capacity (capacity with largest pump out of service) to convey the Peak Instantaneous Flow (PIF). Based on limited data available, the PIF in previous studies was close to the current PIF.

The firm design capacity for the Jeans Road lift station is 130 gpm which is inadequate for the calculated PIF of 215 gpm for the service area. This lift station should either be upgraded to pump the calculated peak flow in the near future, or it should be rebuilt.

The Pine Street lift station has a firm design capacity of 350 gpm, which is inadequate for the calculated PIF of 795 gpm for the service area. This lift station should be upgraded.

5.3.3 Wastewater Treatment Plant Facilities

With the 2009 improvements, and surge pond method, the wastewater treatment plant appears to be adequate to treat current flows. Projected peak flows however, would take the surge pond, influent lift station, and the Biolac basins beyond their design capacities.

The surge pond is projected to exceed its 4-million-gallon capacity when the population reaches 6200, or by current projections, the year 2026. If the treatment plant is to continue to use this method for handling peak flows, it is recommended that the surge pond be increased in capacity, or the wastewater treatment plant itself be increased in capacity, or perhaps both the surge pond and the wastewater treatment plant should be increased in capacity.

The influent lift station has a firm design capacity of 1.25 MGD, this is far below current peak flows. The wastewater treatment plant has been able to operate with this smaller capacity by the use of the surge

pond. However, when the surge pond is at capacity, flows greater than 1.25 MGD would have to flow through the wastewater treatment plant.

In the 2009 WWMP/CIP, the Biolac basins were considered to be running at 85% of the 1.25 MDG firm design capacity. Current loading is somewhat larger than the 2009 loading, putting the Biolac aeration basins close to design capacity. Increased development/flow would further compound the need to upgrade capacity of the Biolac system.

6 Development Options

6.1 2009 WWMP/CIP Summary

6.1.1 2009 Introduction Summary

In the years prior to the 2009 Wastewater Master Plan and Capital Improvement Plan, population data indicated that Veneta was in the midst of an unprecedented population growth spurt. In 2008, the United States experienced an economic crisis of magnitude not seen since the Great Depression. The extent and impact of this “Great Recession” could not have been forecasted when the 2009 WWMP/CIP was done. Consequently, in light of the actual population growth since 2009, the population projections and timelines used in the 2009 WWMP/CIP are substantially overstated. Much of the 2009 assessment and modeling of the wastewater system is valid regardless of population trends, and is useful information. Adjusting the 2009 CIP dates to match current population and development trends would give a more accurate projection for project planning.

The 2009 WWMP/CIP focused on four major tasks; System Information Review, Hydraulic Model Development, Systems Alternative Analysis, and the Final Report. The information review used data from City planners and the 1997 mapping and facility plan. Hydraulic modeling was done using a commercially available computer program, and actual flow testing in three of the sewer sheds to calibrate the hydraulic model. The Systems Alternative Analysis details possible upgrades to the collection system, plans for future collection systems, effluent reuse, and level IV treatment. The Final Report consists of both the WWFP and the CIP.

6.1.2 2009 Study Area Summary

The 2009 Study Area section focuses on the physical and socio-economic setting of the City. The 2009 study area is limited to the Urban Growth Boundary of the City of Veneta, this coincides with the City limits and has remained unchanged since the 2009 report. The 1997 WWMP also used the same study area.

The 1997 WWMP reviews at length the following elements of the physical environment:

- Climate
- Soils
- Geologic Hazards
- Public Health Hazards
- Energy Production and Consumption
- Water Resources
- Flora and Fauna
- Air Quality and Noise
- Environmentally Sensitive Areas

The 2009 WWMP/CIP states that little has changed in regards to the physical environment with exception to the installation of considerable wastewater treatment upgrades and the addition of water supply wells. It is assumed that other than minor changes, the physical environment of the City of Veneta has remained largely unchanged since the 2009 WWMP/CIP.

The 1997 WWFP profiled the City as a fast-growth town aiming to provide housing to accommodate a growing commercial/industrial section in the adjacent Eugene/Springfield area. The 2009 WWMP/CIP echoed the potential for growth outlined in the 1997 WWFP. The City's growth, however, has been largely flat (averaging 1.2% per year) since 2009, experiencing an increase in population from 4,400 to 4,721 in 2015. Again, the population projections and timelines used in the 2009 WWMP/CIP appear substantially overstated due to this lack of growth. In the case of a smaller town like Veneta, with ample room for development, population may be a better indicator of when upgrades to the wastewater system would be necessary. Rapid population expansion would typically come as new areas are developed.

6.1.3 2009 Collection System Summary

The 2009 WWMP/CIP used computer based hydraulic modeling to find how the collection system would respond to both 2009 and future flows. The modeling was based on a sewer population of 4,300 with a dry weather base flow of 70 gallons per capita per day (gpcpd). The 2009 report also has a peak hourly flow of 9.7 times the amount of the base flow at 680 gpcpd.

The modeling found several areas where the collection system would currently (2009) or in the near future experience overflowing manholes or other flow related problems. Many of the deficiencies listed in the 2009 WWMP/CIP have since been addressed and corrected by the City. The 2009 CIP was generated chiefly from this modeling to address deficiencies in the system. Many of the items on the CIP from 2009 are still valid, and can be adjusted to reflect population numbers rather than specific years to give a better estimation for project planning.

6.1.4 2009 Regulatory Criteria Summary

The 2009 WWMP/CIP gives an overview of current and anticipated DEQ regulatory criteria to establish design guidelines for future plant upgrades or expansions. The DEQ regulatory criteria is currently the same as it was for the Veneta Water Quality Permit in effect in 2009. It is assumed that the regulatory criteria would remain the same for Veneta in the future.

6.1.5 2009 Treatment Process Summary

The wastewater treatment plant has a design maximum BOD loading of 1243 lbs. per day. The plant influent BOD averages 965 lbs. per day, or about 78% of the design value. As shown in the DMR data from 2010 – 2015, BOD loading quite often exceeds the design value, many times by greater than twice the design value. Using the surge pond as a buffer, however, the plant has been able to consistently maintain effluent BOD well below DEQ permitted levels.

The 2009 WWMP/CIP analysis gave a date for expansion of the Biolac basins of 2014, correlating to a population approaching 6,000 by their estimation. This amendment calculates a similar population trigger number of 6,200 for the required upgrade to the wastewater treatment plant. Based on flow data, current population growth statistics, and the current layout/operation of the wastewater treatment plant; the influent pumping station, the headworks, surge basin, and the Biolac basins would be running at or over capacity during peak flows once the population reaches 6,200, which by current estimates, would occur in the year 2026.

Required wastewater treatment plant improvements noted in the 2009 WWMP/CIP were identified as; replacing the headworks screen, the addition of two Biolac basins, UV system expansion, and leaking aeration piping. With the exception of the Biolac basins, all of the wastewater treatment plant deficiencies have been addressed. With the expansion of the Biolac basins, modification to the headworks would also need to be done to incorporate a four-way flow splitter.

6.1.6 2009 Water Reuse Summary

The 2009 WWMP/CIP explores two alternatives for water reuse.

The first alternative was in use as secondary effluent spray applied irrigation for grass and poplar fields north of the wastewater treatment plant. At the time of the 2009 report, the City had expressed a desire to cease cultivation of poplar due to the plantation management costs. Since the 2009 report, the poplar plantation has been removed and replaced with grass.

The second alternative was to upgrade the quality of the effluent to a Class “A” reuse standard to qualify for application to agriculture, landscape, parks, playgrounds, school yards, or other areas that are accessible by the public. Since the 2009 report, the City has not needed to move forward with the Class “A” alternative.

6.1.7 2009 Capital Improvement Plan Summary

Many of the projects on the 2009 CIP have already been completed. With exception of the Class “A” water reuse projects, we feel that the remainder of the outstanding 2009 CIP projects that are in line with the current recommended Option 3 are still valid and should be budgeted for.

C7 from the 2009 CIP was for the addition of an east side lift station. Option 3 also calls for an east side lift station (Huston Road) to be built to accommodate development on the east side of town.

T2, T3, T4, T5, and T6 all relate to increasing the capacity of the wastewater treatment plant, and should also be complete prior to the population reaching 6200, or the year 2026.

T7, R3, R4, and R5 are based on the City expanding their water reuse program to include application of Class “A” water in town. The original intent of expanding the reuse program was to help the wastewater treatment plant in staying within permit compliance. Based on the most recent DMR data, the permit levels have been exceeded twice in six years, both times during the winter when the plant is experiencing high flows due to rainfall events. Therefore, reuse of water during the wintertime is really not feasible, as the intended application areas would be saturated with rainwater. Currently irrigation of the grass fields north of the wastewater treatment plant has been more than adequate to distribute the summertime effluent. We do not recommend expansion of the reuse system at this time.

The time frame for completing the remaining projects is highly dependent on the development of the town and again, is suggested to take place once the population hits 6200, or by the year 2026 if the city follows the projected trends without aggressive development.

6.2 Conveyance System Options

The alternatives in the 2009 study were generated to accommodate a projected doubling in population due to the economic climate in which the report was developed. Consequently, the 2009 alternatives are considered to err highly on the conservative side when compared with current Options.

Many components of the 2009 alternatives include upgrades to the existing gravity lines, which were designed to handle higher flows generated from new development. Routing flows generated from new development around the existing gravity system diminishes the need for the existing gravity system to be upsized. Alternatives in both 2009 and this report focus on extending service to the east side of town,

where the City has future plans for development. In discussion with the City, there are two other areas besides the east side for potential growth, one being the commercial area on the northeast side of town and another area south of Bolton Hill Road and west of Territorial Highway.

Conveying wastewater from the east side of town would require at a minimum a new east lift station to be installed. The new east lift station can either pump straight to the wastewater treatment plant, or it can tie into the existing system. If the new east side lift station is to pump into the existing gravity system, presumably at Hunter Road, the existing gravity system would need to be upsized to handle the projected peak flows.

At a minimum, the Jeans Road lift station would need to be upgraded to overcome existing deficiencies in capacity prior to any new development in the Basin 6 service area.

6.2.1 Option 1 – Long Force Main and Two Lift Stations

This Option involves the installation of a new eastside lift station near Hunter Road and Huston Road and associated 13,400’ force main that leads directly to the wastewater treatment plant. The force main would run north up Huston Road and head west along Highway 126. A rebuilt Jeans Road lift station force main would tee into this new force main at the southwest corner of Highway 126 and Territorial Highway. This option is very similar to the recommended alternative in the 2009 CIP, with the key difference being that the Pine Street lift station would not be attached to the new force main. See Table 6.2.

Option 1 - New Huston Road LS - New Jeans Road LS - 13,400' Force Main					
Item	Description	Units	Quantity	Unit Cost	Total Cost
1	Mobilization, Insurance, Overhead, Bonds (10%)	LS	1	\$314,670	\$314,670
2	Construction Facilities, Temporary Systems and Bypass Provisions	LS	2	\$15,000	\$30,000
3	New Wetwell and dewatering	EA	2	\$95,000	\$190,000
4	25 HP Pump, VFDs, Accessories and Installation (High Head)	EA	3	\$50,000	\$150,000
5	40 HP Pump, VFDs, Accessories and Installation (High Head)	EA	3	\$75,000	\$225,000
6	Electrical Controls and Instruments	LS	2	\$60,000	\$120,000
7	New 200A Electrical Service, Transformers, Switchgear	LS	2	\$85,000	\$170,000
8	New 100KW Generator & Transfer Switch	LS	1	\$65,000	\$65,000
9	New 60KW Generator & Transfer Switch	LS	1	\$40,000	\$40,000
10	Electrical & Generator Building, 252 sq ft, w/Dividing Wall & Rollup Door	LS	2	\$90,000	\$180,000
11	New Inlet Outlet Piping Tie Ins	LS	2	\$30,000	\$60,000
12	Site Piping, Valves, Fittings and Vault	LS	2	\$45,000	\$90,000
13	10" HDPE Force Main	LF	10600	\$70	\$742,000
14	10" HDPE Force Main - HDD	LF	2800	\$250	\$700,000
15	Site Work	LS	2	\$10,000	\$20,000
16	Demo Old Site	LS	2	\$10,000	\$20,000
17	Misc. Restoration and Clean Up	LS	2	\$15,000	\$30,000
Construction Total					\$3,146,670
Contingency (20%)					\$629,334
Subtotal					\$3,776,004
Engineering (20%)					\$755,201
Land Acquisition					\$225,000
Environmental Report					\$20,000
Environmental Engineering*					\$40,000
Administrative Costs (3%)					\$113,280
Total Project Cost					\$4,929,485

6.2.2 Option 2 – Two Force Mains and Two Lift Stations

Option 2 involves the installation of a new eastside lift station near Hunter Road and Huston Road and the rebuilding of the Jeans Road lift station. The Huston Road lift station force main would run north up Huston Road and then turn west to run along the north side of Highway 126 and then north again to Jeans Road where it would turn west again to tie into the existing gravity system at Jeans Road east of Hope Lane. This existing gravity system would need to be upgraded to 15” to handle total projected development in both Basin 6 and Basin 7. The Jeans Road lift station would be upgraded in capacity and redirected to run along the north side of Highway 126 towards the wastewater treatment plant. This option also relieves the existing gravity systems in both Basin 1 and Basin 2 of the Jeans Road force main input by redirecting the Jeans Road lift station output directly to the wastewater treatment plant by means of a 6,200’ force main running west along the north side of Highway 126 and turning south just east of the wastewater treatment plant. The new lift station would require significant upgrades based on projected future loads in both Basin 6 and Basin 7. See Table 6.2.

Option 2 - New Huston Road LS - New Jeans Road LS - 11,700' of Force Mains - 3,200' Gravity					
Item	Description	Units	Quantity	Unit Cost	Total Cost
1	Mobilization, Insurance, Overhead, Bonds (10%)	LS	1	\$305,390	\$305,390
2	Construction Facilities, Temporary Systems and Bypass Provisions	LS	2	\$15,000	\$30,000
3	New Wetwell and dewatering	EA	2	\$80,000	\$160,000
4	15 HP Pump, VFDs, Accessories and Installation	EA	3	\$25,000	\$75,000
5	25 HP Pump, VFDs, Accessories and Installation	EA	3	\$35,000	\$105,000
6	Electrical Controls and Instruments	LS	2	\$40,000	\$80,000
7	New 200A Electrical Service, Transformers, Switchgear	LS	2	\$35,000	\$70,000
8	New 80KW Generator & Transfer Switch	LS	1	\$45,000	\$45,000
9	New 50KW Generator & Transfer Switch	LS	1	\$35,000	\$35,000
10	Electrical & Generator Building, 252 sq ft, w/Dividing Wall & Rollup Door	LS	2	\$90,000	\$180,000
11	New Inlet Outlet Piping Tie Ins	LS	2	\$30,000	\$60,000
12	Wetwell Retrofitting	LS	1	\$45,000	\$45,000
13	Site Piping, Valves, Fittings and Vault	LS	1	\$45,000	\$45,000
14	10" HDPE Force Main	LF	4,000	\$70	\$280,000
15	10" HDPE Force Main - HDD	LF	1,500	\$250	\$375,000
16	12" HDPE Force Main	LF	4,850	\$80	\$388,000
17	12" HDPE Force Main - HDD	LF	1,350	\$250	\$337,500
18	15" PVC Gravity Sewer Piping	LF	3,200	\$115	\$368,000
19	Site Work	LS	2	\$10,000	\$20,000
20	Demolish site	LS	2	\$10,000	\$20,000
21	Misc. Restoration and Clean Up	LS	2	\$15,000	\$30,000
Construction Total					\$3,053,890
Contingency (20%)					\$610,778
Subtotal					\$3,664,668
Engineering (20%)					\$732,934
Land Acquisition					\$225,000
Environmental Report					\$20,000
Environmental Engineering*					\$40,000
Administrative Costs (3%)					\$109,940
Total Project Cost					\$4,792,542

6.2.3 Option 3 – Two Force Mains, Short Gravity Line and Two Lift Stations

Option 3 is the recommended option and is similar in design to Option 2, with the exception that the Jeans Road lift station is deleted and a new lift station is installed closer to the wastewater treatment plant near the intersection of 8th Street and Jack Kelly Drive. This new lift station is connected via gravity to the old Jeans Road lift station location by means of a new gravity line running between Jack Kelly drive and Highway 126 and making the connection by crossing under Highway 126 just west of Territorial Highway. The new lift station would feed a 3,900’ force main leading to the headworks. The location of the western force main would require a horizontal directional dig installation for a portion of the length which would be done on city land and could possibly avoid potential conflicts with the railroad. This option also relieves existing gravity systems in both Basin 1 and Basin 2 by rerouting the Jeans Road force main directly to the wastewater treatment plant. This option has the advantage of providing sewer service to the Jack Kelly Drive area for future development. See Table 6.2.

Option 3 - New Huston Road LS - New Jack Kelly Drive LS - 9,400' of Force Mains - 5300' of Gravity					
Item	Description	Units	Quantity	Unit Cost	Total Cost
1	Mobilization, Insurance, Overhead, Bonds (10%)	LS	1	\$328,780	\$328,780
2	Construction Facilities, Temporary Systems and Bypass Provisions	LS	2	\$15,000	\$30,000
3	New Wetwell and dewatering	EA	2	\$80,000	\$160,000
4	15 HP Pump, VFDs, Accessories and Installation	EA	3	\$25,000	\$75,000
5	25 HP Pump, VFDs, Accessories and Installation	EA	3	\$35,000	\$105,000
6	Electrical Controls and Instruments	LS	2	\$40,000	\$80,000
7	New 200A Electrical Service, Transformers, Switchgear	LS	2	\$35,000	\$70,000
8	New 80KW Generator & Transfer Switch	LS	1	\$45,000	\$45,000
9	New 50KW Generator & Transfer Switch	LS	1	\$35,000	\$35,000
10	Electrical & Generator Building, 252 sq ft, w/Dividing Wall & Rollup Door	LS	2	\$90,000	\$180,000
11	New Inlet Outlet Piping Tie Ins	LS	2	\$30,000	\$60,000
12	Site Piping, Valves, Fittings and Vault	LS	2	\$45,000	\$90,000
13	10" HDPE Force Main	LF	4,000	\$70	\$280,000
14	10" HDPE Force Main - HDD	LF	1,500	\$250	\$375,000
15	12" HPDE Force Main	LF	2,700	\$80	\$216,000
16	12" HPDE Force Main - HDD	LF	1,200	\$250	\$300,000
17	15" PVC Gravity Sewer Piping	LF	3,200	\$115	\$368,000
18	15" PVC Gravity Sewer Piping - Deep	LF	2,100	\$200	\$420,000
19	Site Work	LS	2	\$10,000	\$20,000
20	Demo old site	LS	2	\$10,000	\$20,000
21	Misc. Restoration and Clean Up	LS	2	\$15,000	\$30,000
Construction Total					\$3,287,780
Contingency (20%)					\$657,556
Subtotal					\$3,945,336
Engineering (20%)					\$789,067
Land Acquisition					\$75,000
Environmental Report					\$20,000
Environmental Engineering*					\$40,000
Administrative Costs (3%)					\$118,360
Total Project Cost					\$4,987,763

6.2.4 Option 4 – Two Force Mains, Long Gravity Line and Two Lift Stations

This Option is essentially the same as Option 3, with the exception of the locations of both the added gravity line and the added lift station. The new gravity line will run along the north side of Highway 126 from the location of the deleted Jeans Road lift station to the new lift station location approximately 3,800’ to the west, between the poplar grove and Highway 126. The gravity line would tie in under Highway 126 to service the Jack Kelly Drive area. The lift station would then connect to the wastewater treatment plant via a 2,700’ force main. The location of the western force main would require a horizontal directional dig installation which would be done on city land and could possibly avoid potential conflicts with either the railroad or the highway. This option also relieves existing gravity systems in both Basin 1 and Basin 2 by rerouting the Jeans Road force main directly to the wastewater treatment plant. See Table 6.2.

Option 4 - New Huston Road LS - New Hwy 126 LS - 8,100' Force mains - 6,700' Gravity					
Item	Description	Units	Quantity	Unit Cost	Total Cost
1	Mobilization, Insurance, Overhead, Bonds (10%)	LS	1	\$351,170	\$351,170
2	Construction Facilities, Temporary Systems and Bypass Provisions	LS	2	\$15,000	\$30,000
3	New Wetwell and dewatering	EA	2	\$80,000	\$160,000
4	15 HP Pump, VFDs, Accessories and Installation	EA	3	\$25,000	\$75,000
5	25 HP Pump, VFDs, Accessories and Installation	EA	3	\$35,000	\$105,000
6	Electrical Controls and Instruments	LS	2	\$40,000	\$80,000
7	New 200A Electrical Service, Transformers, Switchgear	LS	2	\$35,000	\$70,000
8	New 80KW Generator & Transfer Switch	LS	1	\$45,000	\$45,000
9	New 50KW Generator & Transfer Switch	LS	1	\$35,000	\$35,000
10	Electrical & Generator Building, 252 sq ft, w/Dividing Wall & Rollup Door	LS	2	\$90,000	\$180,000
11	New Inlet outlet piping tie ins	LS	2	\$30,000	\$60,000
12	Wetwell Retrofitting	LS	1	\$45,000	\$45,000
13	Site Piping, Valves, Fittings and Vault	LS	1	\$45,000	\$45,000
14	10" HDPE Force Main	LF	4,000	\$70	\$280,000
15	10" HDPE Force Main - HDD	LF	1,500	\$250	\$375,000
16	12" HPDE Force Main	LF	1,250	\$80	\$100,000
17	12" HPDE Force Main - HDD	LF	1,350	\$250	\$337,500
18	15" PVC Gravity Sewer Piping	LF	3,200	\$115	\$368,000
19	15" PVC Gravity Sewer Piping - Deep	LF	3,500	\$200	\$700,000
20	Site Work	LS	2	\$10,000	\$20,000
21	Demo Old Site	LS	2	\$10,000	\$20,000
22	Misc. Restoration and Clean Up	LS	2	\$15,000	\$30,000
				Construction Total	\$3,511,670
				Contingency (20%)	\$702,334
				Subtotal	\$4,214,004
				Engineering (20%)	\$842,801
				Land Acquisition	\$75,000
				Environmental Report	\$20,000
				Environmental Engineering*	\$40,000
				Administrative Costs (3%)	\$126,420
				Total Project Cost	\$5,318,225

6.2.5 Option 5 – Do Nothing

This Option would not rebuild any new lift stations nor install any new pipes. This Option has the advantage of having the least construction cost. The disadvantages to this Option is that it would not provide sewer service to newly developed areas, nor would it provide possible service to properties currently using septic systems in the city, nor would it keep the current lift stations compliant with DEQ's redundancy requirements.

This Option would not relieve existing gravity systems in both Basin 1 and Basin 2 of the loads coming from the Jeans Road lift station.

This Option would likely result in increasing violations of the NPDES permit.

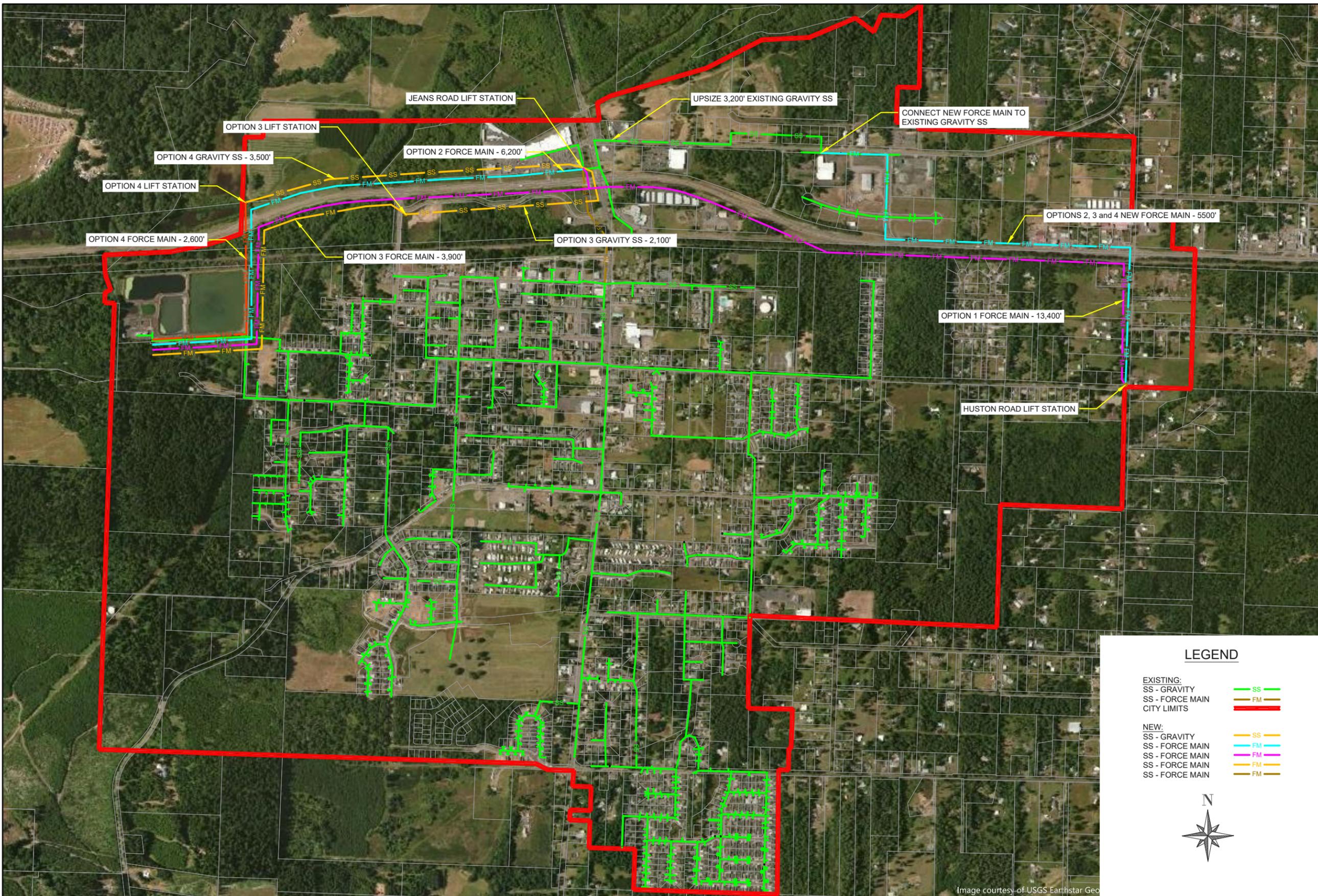


Image courtesy of USGS Earthstar Geo



Option	Comparison to 2009	Cost	Advantages	Disadvantages
1 - 13,400' force main and eastside lift station	Option 1 is closest to the 2009 Alternative in that it uses a force main to channel most of the potential new development flows directly to the treatment plant, rather than through the existing gravity system. Option 1 also redirects the Jeans Road lift station effluent to the force main, relieving Basins 1 and 2 of the loads from the north side of the highway. The 2009 Alternative goes a step further and adds another lift station to the northeast corner of town and tees into the east lift station's force main.	- \$4.9M	<ul style="list-style-type: none"> - Shallow excavation for force main yields a reduced cost vs options that employ gravity sewer lines - Single force main, lowest capital cost of installation - Wastewater is only pumped once - Relieves Basin 1 and Basin 2 of Jeans Road lift station load - Uses smaller force main than the other options 	<ul style="list-style-type: none"> - Does not add sewer service to potential development in extreme north corner of town - Multiple pumps into a single force main is overly complex and requires significant additional control logic and wet well sizing - Jeans Road lift station will be difficult/expensive to rebuild in current location
2 - Two force mains (11,700' total), 3,200' of gravity, lift station upgrade and new eastside lift station	Option 2 employs a force main from the new east side lift station and upgrades the Jeans Road lift station to feed a 6,200' force main straight to the treatment plant. It is similar to the 2009 Alternative, but upgrades the gravity system in Jeans Road to both; use a shorter length of force main, and to provide for easier future connection to development in the Jeans Road area (East Basin 6).	- \$4.8M	<ul style="list-style-type: none"> - Shallow excavation for force main yields a reduced cost vs options that employ gravity sewer lines - Significant upgrade to Jeans Road lift station - Easier to tie into for future development - Shorter force main - Relieves Basin 1 and Basin 2 of Jeans Road lift station load - Cheapest option other than "Do nothing" 	<ul style="list-style-type: none"> - Does not allow for future growth in the Jack Kelly Drive area without adding a small local lift station - Jeans Road lift station will be difficult/expensive to rebuild in current location - Pumps wastewater twice - Possible property acquisition issue for Lift Station - Need to upsize existing Jeans Road gravity main
3 - Two force mains (9,400' total), two new lift stations and 5,300' of gravity line	Option 3 is similar to Option 2 with the east lift station force main tie in to the Jeans Road gravity system, but also adds a new gravity system from the deleted Jeans Road lift station to the new lift station near 8 th and Jack Kelly Drive. The new lift station is connected to the treatment plant by a 2,900' force main. Option 3 has the advantage of providing service to the Jack Kelly Drive area.	- \$5.0M	<ul style="list-style-type: none"> - Short force main - Allows for future growth on the east side, the northeast side and the Jack Kelly Drive area - Possible increase in revenue if commercial development is built in JKD area - Relieves Basin 1 and Basin 2 of Jeans Road lift station load 	<ul style="list-style-type: none"> - Potentially 2nd highest initial cost - West side force main runs along RR, possible conflict with RR - Pumps wastewater twice - Need to upsize existing Jeans Road gravity main - ~13' deep excavation required on west end of run for new gravity main
4 - Two force mains (5,600' total), two new lift stations and 6,700' of gravity line	Option 4 takes the gravity line at the Jeans Road lift station and runs it 3,500' down the north side of Highway 126 to the south side to the old poplar fields, there a lift station is built the feeds a short force main running south under Highway 126 directly to the treatment plant. Future development at Jack Kelly Drive would require installation of a gravity line under Highway 126 to tie into the 3,500' gravity line.	- \$5.3M	<ul style="list-style-type: none"> - Shortest force main - Allows for future growth on the east side, the northeast side and the Jack Kelly Drive area - Possible increase in revenue if commercial development is built in JKD area - Relieves Basin 1 and Basin 2 of Jeans Road lift station load - Most construction is on City land, avoiding conflicts with ODOT/RR 	<ul style="list-style-type: none"> - Potentially highest initial cost - Pumps wastewater twice - Need to upsize Jeans Road gravity main - May require HDD - ~15' deep excavation required on west end of run for new gravity main
5 - Do nothing	Option 5 is the option of doing nothing.	- \$0.0M	<ul style="list-style-type: none"> - Cheapest option 	<ul style="list-style-type: none"> - Flow capacity is not increased - Does not allow for any future growth

6.3 Extension of Conveyance System to Areas Currently Not Serviced with Sewer

All of the above Options are focused on extension of sewer service to under developed areas in the town that are primed for growth. These areas are, the area north of the railroad tracks (Basin 6) and the area on the east side of town (Basin 7). If the central existing gravity system is to be used for conveyance from the new areas, capacity upgrades to the main existing gravity “trunk lines” would be required. The major trunks of the existing gravity system are in many of the more heavily trafficked areas in the town, which would cause significant impact to the public if a traditional open trench method of pipe replacement were used. If possible, the technology known as “pipe bursting” maybe be employed in these areas to diminish construction activity impacts to the public.

The Basin 6 area is serviced by the Jeans Road lift station and feeds into the existing gravity system. Development in Basin 6 would require upgrading the Jeans Road lift station and also has the potential for overloading the central gravity system. Routing the Basin 6 sewer shed via force main and/or gravity directly to the wastewater treatment plant would both alleviate overloading the central gravity system, and allow for more development in the Basin 6 area.

As soon as development in the Basin 7 area (east side of town) begins, so would the need to extend sewer service to this area. Topography requires a pumping station to extend service to the east side of town. Based on our recommendations, the extension of service to Basin 7 is separate from the existing gravity system to avoid further taxing it with new loads.

6.4 Lift Station Options

As described in section 3.3.8, there are two lift stations within the collection area of the City (a third being the influent lift station at the treatment plant). The designed firm capacity of the Jeans Road lift station is 130 gpm, and the Pine Street lift station has a designed firm capacity of 350 gpm. Neither the Jeans Road nor the Pine Street lift station are adequate for handling the projected PIF.

The Jeans Road lift station services Basin 6, the large commercial/mixed area north of the railroad tracks. We foresee that this area would develop at a density of approximately one-third that of the other basins. Based on this analysis, the area serviced by Jeans Road would have a projected PIF of 290 gpm, over twice its current designed firm capacity. Based on this analysis, the lift station would need to be upgraded to handle projected peak flows.

The area that the Pine Street lift station services an approximate 570 connections out of 1730 estimated total connections for the City. This gives the Pine Street lift station approximately 1/3 of the City’s wastewater flow. At the current peak instantaneous flow, the Pine Street lift station has a current peak flow of 685 gpm, almost twice its current designed firm capacity of 350 gpm. End of design period peak flow for this lift station would be 795 gpm. Based on this analysis, the lift station would need to be upgraded to handle both current and projected peak flows.

The above scenarios are based on current sewer sheds, and do not reflect any potential future connections to any new development outside of the current service basin.

6.4.1 Upgrade Lift Stations

Upgrading the Jeans Road lift station would reuse and retrofit the existing infrastructure, with replacement of the existing pumps, connection modifications and associated electrical. Total cost for this upgrade should be \$107,000. This option should only be used in the case the Jeans Road lift station is not rebuilt in the near future as part of project CWC1.

CWC3 - Jeans Road Pump Upgrades					
Item	Description	Units	Quantity	Unit Cost	Total Cost
1	Mobilization, Insurance, Overhead, Bonds (10%)	LS	1	\$7,220	\$7,220
2	15HP Pumps	EA	2	\$8,000	\$16,000
3	VFD/Controls	EA	2	\$2,000	\$4,000
4	Electrical	LS	1	\$30,000	\$30,000
5	Labor	LS	1	\$15,000	\$15,000
Construction Total					\$72,220
Contingency (20%)					\$14,444
Subtotal					\$86,664
Engineering (20%)					\$17,333
Administrative Costs (3%)					\$2,600
Total Project Cost					\$106,597

Upgrading Pine Street lift station would reuse and retrofit the existing infrastructure, with replacement of the existing pumps, connection modifications and associated electrical. Total cost for this upgrade should be \$54,000. This is the recommended option for the Pine Street lift station as a simple upgrade in pumping capacity is all that is required at this location.

CWC2 - Pine Street Pump Upgrades					
Item	Description	Units	Quantity	Unit Cost	Total Cost
1	Mobilization, Insurance, Overhead, Bonds (10%)	LS	1	\$3,670	\$3,670
2	12HP Pumps	EA	2	\$5,000	\$10,000
3	VFD/Controls	EA	2	\$1,500	\$3,000
4	Electrical	LS	1	\$20,000	\$20,000
Construction Total					\$36,670
Contingency (20%)					\$7,334
Subtotal					\$44,004
Engineering (20%)					\$8,801
Administrative Costs (3%)					\$1,320
Total Project Cost					\$54,125

6.4.2 Replace Lift Stations

The recommended conveyance option, Option 3, would replace and relocate the Jeans Road lift station. Replacement of the Pine Street lift station was not considered, as it is fairly new, and already located in an advantageous location. The new Jack Kelly Drive lift station, force main, and gravity line is estimated to cost \$3,051,365. The new Huston Road lift station and force main is estimated to cost \$1,996,398.

Replace/Relocate Jeans Road LS to Jack Kelly Drive - Conveyance Option 3					
Item	Description	Units	Quantity	Unit Cost	Total Cost
1	Mobilization, Insurance, Overhead, Bonds (10%)	LS	1	\$202,670	\$202,670
2	Construction Facilities, Temporary Systems and Bypass Provisions	LS	1	\$15,000	\$15,000
3	New Wet well and dewatering	EA	1	\$80,000	\$80,000
4	25 HP Pump, VFDs, Accessories and Installation	EA	3	\$35,000	\$105,000
5	Electrical Controls and Instruments	LS	1	\$40,000	\$40,000
6	New 200A Electrical Service, Transformers, Switchgear	LS	1	\$35,000	\$35,000
7	New 80KW Generator & Transfer Switch	LS	1	\$45,000	\$45,000
8	Electrical & Generator Building, 252 sq ft, w/Dividing Wall & Rollup Door	LS	1	\$90,000	\$90,000
9	New Inlet Outlet Piping Tie Ins	LS	1	\$30,000	\$30,000
10	Site Piping, Valves, Fittings and Vault	LS	1	\$45,000	\$45,000
11	12" HPDE Force Main	LF	2,700	\$80	\$216,000
12	12" HPDE Force Main - HDD	LF	1,200	\$250	\$300,000
13	15" PVC Gravity Sewer Piping	LF	3,200	\$115	\$368,000
14	15" PVC Gravity Sewer Piping - Deep	LF	2,100	\$200	\$420,000
15	Site Work	LS	1	\$10,000	\$10,000
16	Demo old site	LS	1	\$10,000	\$10,000
17	Misc. Restoration and Clean Up	LS	1	\$15,000	\$15,000
Construction Total					\$2,026,670
Contingency (20%)					\$405,334
Subtotal					\$2,432,004
Engineering (20%)					\$486,401
Environmental Report					\$20,000
Environmental Engineering*					\$40,000
Administrative Costs (3%)					\$72,960
Total Project Cost					\$3,051,365

New Huston Road LS - 5,500' of 10" Force Main - Conveyance Options 2,3, and 4					
Item	Description	Units	Quantity	Unit Cost	Total Cost
1	Mobilization, Insurance, Overhead, Bonds (10%)	LS	1	\$126,110	\$126,110
2	Construction Facilities, Temporary Systems and Bypass Provisions	LS	1	\$15,000	\$15,000
3	New Wetwell and dewatering	EA	1	\$80,000	\$80,000
4	15 HP Pump, VFDs, Accessories and Installation	EA	3	\$25,000	\$75,000
5	Electrical Controls and Instruments	LS	1	\$40,000	\$40,000
6	New 200A Electrical Service, Transformers, Switchgear	LS	1	\$35,000	\$35,000
7	New 50KW Generator & Transfer Switch	LS	1	\$35,000	\$35,000
8	Electrical & Generator Building, 252 sq ft, w/Dividing Wall & Rollup Door	LS	1	\$90,000	\$90,000
9	New Inlet Outlet Piping Tie Ins	LS	1	\$30,000	\$30,000
10	Site Piping, Valves, Fittings and Vault	LS	1	\$45,000	\$45,000
11	10" HDPE Force Main	LF	4,000	\$70	\$280,000
12	10" HDPE Force Main - HDD	LF	1,500	\$250	\$375,000
13	Site Work	LS	1	\$10,000	\$10,000
14	Demo old site	LS	1	\$10,000	\$10,000
15	Misc. Restoration and Clean Up	LS	1	\$15,000	\$15,000
				Construction Total	\$1,261,110
				Contingency (20%)	\$252,222
				Subtotal	\$1,513,332
				Engineering (20%)	\$302,666
				Land Acquisition	\$75,000
				Environmental Report	\$20,000
				Environmental Engineering*	\$40,000
				Administrative Costs (3%)	\$45,400
				Total Project Cost	\$1,996,398

6.4.3 Lift Station Summation and Recommendations

The 2009 WWMP/CIP Alternative 1 calls for extensive modifications to the collection system, namely, upgrades to current lift stations, the addition of two new lift stations and a considerable amount of force main conveyance, much of which is connected hydraulically to other force main systems. This WWMP Update differs from the recommended option in the 2009 WWMP in that a total of 3 lift stations instead of 4 are recommended, and there is no shared force main. Keeping the force mains hydraulically isolated has the advantage of running smaller pumps and makes for easier equipment maintenance.

Option 3 of the 2016 Amendment would:

- Add a new (Jack Kelly Drive) lift station to serve Basins 6 and 7
- Add a new (Huston Road) lift station to service Basin 7
- Relieve the central gravity system of Basin 6 and 7 flows

6.5 Wastewater Treatment Plant Options

The wastewater treatment plant would need to have the capacity to handle peak flows of 3.6 MGD projected to occur in 2035. In the current configuration, peak flows in 2026 would exceed the capacity of the wastewater treatment plant and current surge basin. Upgrading to a larger headworks, a second pair of Biolac basins, and possibly a larger surge basin would allow the wastewater treatment plant to perform at projected peak flows in 2035.

During the study period it has been noted that the effluent values for TSS loading have exceeded the permit levels on two occasions. Although this is a rare occurrence, we feel that some effort must be made to plan to keep effluent levels within the permitted values.

6.5.1 Influent Lift Station

The current Wastewater Treatment Plant has a Class 1 rated design capacity of 1.25 MGD. Over the 5-year study period the 1.25 MGD design capacity has been exceeded 72 times, many of the flows were close to double the 1.25 MGD capacity. To alleviate demand on the existing influent lift station, the headworks would be modified to accept direct flows from the two new force mains, one from the new Jeans Road lift station, and one from the new Huston Road lift station. Projected peak hourly flows for the year 2036 would exceed 3.5 MGD.

6.5.2 Surge Basin

The wastewater treatment plant has been able to operate within allotted permit levels by the use of a 4-million-gallon surge pond. The surge pond is connected to the influent pumping station, when flows exceed the 1.25 MGD capacity of the influent lift station, the influent level in the wetwell rises and is diverted to the surge pond. Later, flows diverted to the surge pond would then flow back into the wetwell once the levels in the wetwell drop below the capacity of the influent pump.

6.5.3 Headworks

The headworks would need to either be replaced or modified to handle the increased flows. The headworks would also need to be modified to accept direct flows from the proposed new Jeans Road lift station. The flow splitter box would also need to be changed out to accommodate a four-way splitter to feed the new (4) basin Biolac system.

6.5.4 Biolac Basin Expansion

Prior to the population increasing to 6200, it is recommended that both the influent pumping station and the Biolac basins be upgraded to handle the projected flows. The existing (2) Biolac aeration basins would need to be expanded to a (4) basin system. The two new Biolac basins would be located where the current FSL is located. The headworks would also need to either be replaced or modified to handle the increased flows and in particular, the flow splitting to accommodate the new (4) basin Biolac. Below is the cost estimate for the Biolac expansion project.

BIOLAC Expansion					
Item	Description	Units	Quantity	Unit Cost	Total Cost
1	Mobilization, Insurance, Overhead, Bonds (10%)	LS	1	\$163,400	\$163,400
2	Construction Facilities, Temporary Systems and Bypass Provisions	LS	1	\$7,500	\$7,500
3	Concrete Work	EA	1	\$250,000	\$250,000
4	BIOLAC and Related Parts, Shipping	LS	1	\$975,000	\$975,000
5	Pavement	TON	80	\$110	\$8,800
6	Site Work	LS	1	\$5,000	\$5,000
7	Demo and Import Fill	LS	1	\$223,000	\$223,000
8	Misc. Restoration and Clean Up	LS	1	\$7,500	\$7,500
Construction Total					\$1,640,200
Contingency (20%)					\$328,040
Subtotal					\$1,968,240
Engineering (20%)					\$393,648
Environmental Report					\$10,000
Environmental Engineering*					\$20,000
Administrative Costs (3%)					\$59,047
Total Project Cost					\$2,450,935

6.5.5 Effluent Flow Splitter – Disk Filter

Two instances were found in six years of DMRs, where the effluent TSS loading values were exceeding permitted values. These outlier values are presently not cause for great concern, but should be addressed in the future if they become more frequent. In order to address high values of TSS loading, an effluent splitter box and disk filter are recommended. Typically, high flows due to large rain events or heavy influent flows (when both influent screws are running) have shown the potential to exceed permit levels for TSS loading. The splitter box would be of an overflow weir type and route flows exceeding 1.0 MGD to an integrated disk filter that would significantly reduce both TSS and BOD loading during high flow events.

The effluent sampling location would need to be moved and approved by DEQ from just after the UV disinfection system to after the effluent splitter/disk filter.

Wastewater Treatment Plant - Splitter and Disk Filter System					
Item	Description	Units	Quantity	Unit Cost	Total Cost
1	Mobilization, Insurance, Overhead, Bonds (10%)	LS	1	\$26,040	\$26,040
2	Construction Facilities, Temporary Systems and Bypass Provisions	LS	1	\$2,500	\$2,500
3	Concrete Work	EA	1	\$33,000	\$33,000
4	Disk Filter and Related Parts, Shipping	LS	1	\$135,000	\$135,000
5	SCADA and Electrical	LS	1	\$60,000	\$60,000
6	Site Work	LS	1	\$1,400	\$1,400
7	Misc. Restoration and Clean Up	LS	1	\$2,500	\$2,500
Construction Total					\$260,440
Contingency (20%)					\$52,088
Subtotal					\$312,528
Engineering (20%)					\$62,506
Administrative Costs (3%)					\$9,376
Total Project Cost					\$384,409

6.5.6 Wastewater Treatment Summation and Recommendations

Chronologically, the upgrades to the wastewater treatment plant should be done in support of the Biolac basin expansion.

- First, the headworks should be upgraded to: handle greater flows, accept flows from the new Jack Kelly Drive lift station force main, and be able to split the influent for the future four Biolac basin system.
- Second, the facultative sludge lagoons should be relocated.
- Third, the new Biolac basins should be constructed and then brought online.

Table 6.5.1 below shows the cost estimate for the proposed wastewater treatment plant upgrades.

Table 6.5.1: Wastewater Treatment Upgrades Cost Estimate

Wastewater Treatment Plant - Biolacs -FSLs - Headworks - Outfall					
Item	Description	Units	Quantity	Unit Cost	Total Cost
1	Mobilization, Insurance, Overhead, Bonds (10%)	LS	1	\$234,870	\$234,870
2	Construction Facilities, Temporary Systems and Bypass Provisions	LS	4	\$7,500	\$30,000
3	Concrete Work	EA	1	\$330,000	\$330,000
4	BIOLAC and Related Parts, Shipping	LS	1	\$975,000	\$975,000
5	Pavement	TON	80	\$110	\$8,800
6	Site Work	LS	4	\$5,000	\$20,000
7	Demo and Import Fill	LS	1	\$720,000	\$720,000
8	Misc. Restoration and Clean Up	LS	4	\$7,500	\$30,000
Construction Total					\$2,348,670
Contingency (20%)					\$469,734
Subtotal					\$2,818,404
Engineering (20%)					\$563,681
Environmental Report					\$20,000
Environmental Engineering*					\$40,000
Administrative Costs (3%)					\$84,552
Total Project Cost					\$3,526,637

6.6 Basis for Cost Estimates

6.6.1 Cost Estimate Components

The cost estimates presented in this report will typically include four components: construction cost, engineering cost, contingency, and legal and administrative costs. Each of the cost components is discussed in this section. The estimates presented herein are preliminary and are based on the level and detail of planning presented in this Study. The goal of these planning level cost estimates is to establish a reasonably conservative budget and to allow fair cost-comparisons of options. As projects proceed and more detailed, site-specific information becomes available, the estimates will require updating.

6.6.2 Construction Costs

Construction costs are based on competitive bidding as public works projects with Davis-Bacon prevailing wage rates. The estimated construction costs in this report are based on actual construction bidding results from similar work, published cost guides, budget quotes obtained from equipment suppliers, and other construction cost experience. Construction costs are preliminary budget level estimates prepared without design plans and details.

Future changes in the cost of labor, equipment, and materials may justify comparable changes in the cost estimates presented herein. For this reason, common engineering practices usually tie the cost estimates to

a particular index that varies in proportion to long-term changes in the national economy. The Engineering News Record (ENR) construction cost index (CCI) is most commonly used. This index is based on the value of 100 for the year 1913. Average yearly values for the past 14 years are summarized in Table 6.6.2 below.

Table 6.6.2: ENR Construction Cost Index History

Year	Index	% Change/Year
2000	6221	2.67
2001	6343	1.96
2002	6538	3.07
2003	6694	2.39
2004	7115	6.29
2005	7446	4.65
2006	7751	4.10
2007	7967	2.78
2008	8310	4.31
2009	8570	3.13
2010	8801	2.69
2011	9070	3.06
2012	9309	2.64
2013	9547	2.51
2014	9806	2.64
Average		3.30%

Cost estimates presented in this report are based on average 2016 dollars with an ENR CCI of 10280. For construction performed in later years, estimated costs should be projected based on the then current year ENR Index using the following method:

$$\text{Updated Cost} = \text{Report Cost Estimate} \times (\text{current ENR CCI} / 10280)$$

6.6.3 Contingencies

A contingency factor equal to approximately twenty percent (20%) of the estimated construction cost has been added to the budgetary costs estimated in this report. In recognition that the cost estimates presented are based on conceptual planning, allowances must be made for variations in final quantities, bidding market conditions, adverse construction conditions, unanticipated specialized investigation and studies, and other difficulties which cannot be foreseen at this time but may tend to increase final costs. Upon final design completion of any project, the contingency can be reduced to 10%. A contingency of at least 10% should always be maintained going into a construction project to allow for variances in quantities of materials and unforeseen conditions.

6.6.4 Engineering

Engineering services for major projects typically include surveying, preliminary and final design, preparation of contract/construction drawings and specifications, bidding services, construction management, inspection, construction staking, start-up services, and the preparation of operation and maintenance manuals. Depending on the size and type of project, engineering costs may range from 18 to 25% of the contract cost when all of the above services are provided. The lower percentage applies to large projects without complicated mechanical systems. The higher percentage applies to small or complicated projects.

Engineering costs for basic design and construction services presented in this report are estimated at 20% of the estimated total construction cost. Other engineering costs such as specialized geotechnical explorations, hydro-geologic studies, easement research and preparation, pre-design reports, and other services outside the normal basic services would typically be in addition to the basic engineering fees charged by firms. When it was suspected that a specific project in this report may need any special engineering services, an effort has been made to include additional budget costs for such needs. Specific efforts required for individual basic engineering tasks such as surveying, design, construction management, etc. vary widely depending on the type of project, scheduling and timeframes, level of service desired during construction, and other project/site-specific conditions however an approximate breakdown of the 20% engineering budget is as follows:

- Surveying and Data Collection – 0.5%
- Civil/Mechanical Design – 8%
- Electrical/Controls Design – 1.5%
- Bid Phase Services – 1%
- Construction Management – 4%
- Construction Observation (Inspection) – 5%

6.6.5 Legal and Management

An allowance of five percent (5%) of construction cost has been added for legal and other project management services. This allowance is intended to include internal project planning and budgeting, funding program management, interest on interim loan financing, legal review fees, advertising costs, wage rate monitoring, and other related expenses associated with the project that could be incurred.

6.6.6 Land Acquisition

Construction of new lift stations may incur land acquisition costs dependent upon their location. Based on current property lot values in Lane County, and specifically the Veneta area, we are estimating land acquisition costs in two areas. The area near the current Jeans Road lift station has an estimated cost of \$150,000 for a 0.3-acre lot. The area near Hunter and Huston road is estimated to be approximately \$75,000 for a 0.3-acre lot.

7 Recommended CIP

This section is intended as an update to the 2009 CIP, updating the existing CIP and integrating new projects using current population and wastewater data to build a more accurate CIP for 2016. Many of the 2009 CIP projects have been completed, and several are still viable and are included in the 2016 update. Each capital project is provided with a number, the 2009 projects would keep the same number and lettering scheme where “C” designates a collection project, “T” is a treatment plant project, and “R” is referring to a water reuse project. New projects added to the CIP by this update would follow the same naming convention with a “CW” prefix.

7.1 Capital Improvement Plan

The recommended capital improvements are described in chapter 6. The costs shown in the table represent total estimates of costs and include construction, engineering, contingency and administrative costs. In general, each project is spread over two years with the recommendation that the engineering be authorized in the first year with the construction authorization in the second year. See the Capital Improvement Plan comparison in table 7.1 at the end of this section.

7.1.1 Collection System Projects

The recommended Collection System Option 3 would allow for development to take place in the Jack Kelly Drive area. The City has expressed the desire for sewer service in this area for possible future commercial development. Option 3 is not the least expensive option up front, but revenue from the development opportunities may make it the most fiscally sound option long term.

Several items from the 2009 CIP have been completed, and some are not viable for the new CIP and will not be discussed. This section reviews conveyance system elements discussed in Section 6.1.

Project CWC1 - 2017:

This project builds the new Jack Kelly Drive lift station to handle future peak flows and service to the Jack Kelly Drive area. This project provides for a new lift station, 2,900’ of 12” force main, 2,100’ of new 15” gravity line, and the upgrading of 3,200’ of existing gravity sewer to 15”. The Jeans Road lift station is near capacity with the current pumps. Should any sizable development occur in Basin 6 prior to the construction of the Jack Kelly Drive lift station, at a bare minimum, the lift station pumps at Jeans Road would need to be upgraded to handle peak flows. The new Jack Kelly Drive lift station is sized to accommodate the projected peak flows from Basins 6 and 7.

Project CWC2 - 2017:

This project provides for the upgrading of the pumping system at the Pine Street lift station to meet current DEQ requirements, and to handle future flows. At the current peak instantaneous flow, the Pine Street lift station has a current peak flow of 685 gpm, almost twice its current designed firm capacity of 350 gpm. End of design period peak flow for this lift station would be 795 gpm. Based on this analysis, the lift station would need to be upgraded to handle both current and projected peak flows. The Pine Street lift station is near capacity with the current pumps. New development would accelerate the need for

capacity upgrades, and possibly necessitate the need for gravity infrastructure upgrades downstream from the lift station should the development be of sufficient magnitude.

Project CWC3 - 2017:

This project provides for the upgrading of the pumping system at the Jeans Road lift station to meet DEQ requirements. The Jeans Road lift station services Basin 6, the large commercial/mixed area north of the railroad tracks. We foresee that this area would develop at a density of approximately one-third that of the other basins. The firm design capacity for the Jeans Road lift station is 130 gpm which is inadequate for the current calculated PIF of 215 gpm for the service area. Based on this analysis, the area serviced by Jeans Road would have a projected PIF of 290 gpm, over twice its current designed firm capacity of 130 gpm. Jeans Road lift station does not currently meet the redundancy requirements as outlined by the Department of Environmental Quality. New pumps should be installed which would increase the capacity of the lift station to meet the required standards. Note, if CWC1 occurs prior to CWC3, then CWC3 is not necessary.

Project CWC4 – 2019:

This project provides for the construction of the east side lift station and 5,550' of 10" force main. The lift station would be built near the intersection of Huston Road and Hunter Road. The force main would run north up Hunter Road and turn west at Highway 126. The force main would then turn north at Cornerstone Drive, and then ~400' west down Jeans Road to make the connection to the existing gravity system. The existing gravity system in Jeans Road would have to be upgraded in size to 15" as a part of CWC1. This project is scheduled for design to begin in 2019 and construction 2020, and may be accelerated or delayed based on the degree of urgency for development in the east side of the City.

7.1.2 Wastewater Treatment Plant Projects

This section reviews current wastewater treatment plant options discussed in Section 6.5, which shares some elements with the Alternatives from the 2009 CIP, but some have been completed, and some are not viable for the new CIP and will not be discussed.

Project CWT1 - 2017:

The current treatment plant outfall is a simple 18" pipe discharging effluent into the Long Tom River. This method does not produce adequate mixing. It is recommended that the outfall be fitted with a diffusing manifold to enhance mixing of the effluent.

Project CWT2 - 2020:

Two instances were found in six years of DMRs, where the effluent TSS loading values were exceeding permitted values. These outlier values are presently not cause for great concern, but should be addressed in the future if they become more frequent. In order to address high values of TSS loading, an effluent splitter box and disk filter is recommended. Typically, high flows due to large rain events or heavy influent flows (when both influent screws are running) have shown the potential to exceed permit levels for TSS loading. The splitter box would be of an overflow weir type and route flows exceeding 1.0 MGD to an integrated disk filter that would significantly reduce both TSS and BOD loading during high flow events.

Project T3 – 2022:

This project is partially completed in that a new headworks screen has been installed at the wastewater treatment plant. Upgrades to the headworks to accommodate larger flows generated by future upgrades to the collection system have yet to be calculated nor designed for.

Project T4 – 2021:

This project involves the abandonment the existing facultative sludge lagoons and the construction of two new lagoons to the east of the existing plant. This project needs to be completed to make room for the two new aeration basins.

Project T5 – 2022:

This project provides the design and installation of the two new Biolac aeration basins. Both projects T3 and T4 should be completed in preparation for this project.

Table 7.1: 2009/2016 CIP Comparison

2009 CIP Projects	Description/Status	2016 CIP Projects	Description/Status
C1 - 2009	Completed		
C2 - 2010	Completed		
C3 - 2013	Part of CWC1	CWC1 - 2017	New Jack Kelly Drive Lift Station and Force Main*
C4 - 2017	Not viable for recommended Option		
C5 - 2021	Not viable for recommended Option		
C6 - 2017	Not viable for recommended Option		
C7 - 2015	Similar to CWC4	CWC4 - 2019	New Huston Road Lift Station and Force Main
C8 - 2021	Not viable for recommended Option		
C9 - 2021	Not viable for recommended Option		
C10 - 2013	Part of CWC1		
C11 - 2013	Part of CWC1		
C12 - 2012	Completed		
C13 - 2029	Not necessary		
T1 - 2009	Completed		
T2 - 2010	Design included in other projects		
T3 - 2011	Half completed	T3 - 2022	Headworks Capacity Upgrade
T4 - 2011		T4 - 2021	FSL Relocation/Upgrade
T5 - 2012		T5 - 2022	Biolac Expansion
T6 - 2010	Completed		
T7 - 2018	Not needed at this time		
R1 - 2010	Completed		
R2 - 2011	Completed		
R3 - 2015	Not needed at this time		
R4 - 2020	Not needed at this time		
R5 - 2017	Not needed at this time		
		CWC2 - 2017	Pine Street Pump Upgrade
		CWC3 - 2017	Jeans Road Pump Upgrade*
		CWT1 - 2017	Outfall Diffuser
		CWT2 - 2020	Disk Filter
* Note, if CWC1 occurs prior to CWC3, then CWC3 is not necessary.			

7.2 CIP Cost Summary

A summary of the recommended projects, their costs, and recommended design start dates is provided below. Detailed cost estimates are included in Section 6.

APPENDIX A

NPDES Permit

Expiration Date: 6/30/2017
Permit Number: 102480
File Number: 92762
Page 1 of 21 Pages

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
WASTE DISCHARGE PERMIT**

Department of Environmental Quality
Western Region – Salem Office
750 Front Street NE, Suite 120, Salem, OR 97301-1039
Telephone: (503) 378-8240

Issued pursuant to ORS 468B.050 and The Federal Clean Water Act

ISSUED TO:

City of Veneta
P.O. Box 458
Veneta, OR 97487

SOURCES COVERED BY THIS PERMIT:

Type of Waste	Outfall Number	Outfall Location
Treated Wastewater	001	R.M. 33
Recycled Water Reuse	002	Land irrigation

FACILITY TYPE AND LOCATION:

Activated Sludge
Veneta Sewage Treatment Plant
24679 Sertic Road
Treatment System Class: Level II
Collection System Class: Level II

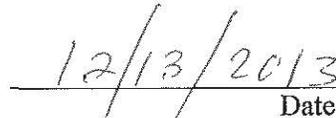
RECEIVING STREAM INFORMATION:

Basin: Willamette
Sub-Basin: Upper Willamette
Receiving Stream: Long Tom River
LLID: 1232400443847 – 35.5 – D
County: Lane

EPA REFERENCE NO: OR-002053-2

Issued in response to Application No. 967991 received December 29th, 2010. This permit is issued based on the land use findings in the permit record.


Ranei Nomura, Water Quality Manager,
Western Region


Date

PERMITTED ACTIVITIES

Until this permit expires or is modified or revoked, the permittee is authorized to: 1) operate a wastewater collection, treatment, control and disposal system; and 2) discharge treated wastewater to waters of the state only from the authorized discharge point or points in Schedule A in conformance with the requirements, limits, and conditions set forth in this permit.

Unless specifically authorized by this permit, by another NPDES permit, or by Oregon statute or administrative rule, any other direct or indirect discharge of pollutants to waters of the state is prohibited.

- SCHEDULE A: WASTE DISCHARGE LIMITATIONS NOT TO BE EXCEEDED 3**
 - 1. Outfall 001 – *Treated Effluent* 3
 - a. BOD₅ and TSS 3
 - b. Other Parameters 3
 - c. Regulatory Mixing Zone 3
 - 2. Outfall 002 – *Recycled Wastewater* 4
 - a. Treatment classification 4
 - b. Recycled water requirements 5
 - 3. Groundwater 5
 - 4. Chlorine Usage 5
 - Schedule A Notes: 5
- SCHEDULE B: MINIMUM MONITORING AND REPORTING REQUIREMENTS 6**
 - 1. Minimum Monitoring Requirements 6
 - a. Influent 6
 - b. Outfall 001 – *Treated Effluent* 6
 - d. Outfall 002 – *Recycled Water* 7
 - e. Biosolids Management 7
 - 2. Monitoring Quality Assurance/Quality Control 8
 - a. Sample Collection 8
 - b. Test Methods 8
 - c. Quality Assurance and Quality Control (QA/QC) 8
 - d. Re-analysis, Re-sampling and Reporting of Data if QA/QC Requirements Not Met 8
 - 3. Reporting Requirements 8
 - a. Significant Figures 8
 - b. Quantitation Limits (QL) 9
 - c. Calculating Mass Loads 9
 - d. Other Reporting Procedures 9
 - 4. Annual Reports 9
 - 5. Mixing Zone Study 9
 - Schedule B Notes: 10
- SCHEDULE D: SPECIAL CONDITIONS 11**
 - 1. Wastewater System Operator Certification 11
 - 2. Biosolids and Sewage Sludge Management 11
 - 3. Recycled Water Management 12
 - 4. Breakdown Notification 12
- SCHEDULE F: NPDES GENERAL CONDITIONS – DOMESTIC FACILITIES 13**
 - SECTION A. STANDARD CONDITIONS 13
 - SECTION B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS 14
 - SECTION C. MONITORING AND RECORDS 17
 - SECTION D. REPORTING REQUIREMENTS 18
 - SECTION E. DEFINITIONS 20

SCEHDULE A: WASTE DISCHARGE LIMITATIONS NOT TO BE EXCEEDED

1. Outfall 001 – Treated Effluent

June 1st – September 30th: No discharge to waters of the State (unless approved in writing by the Department).

a. BOD₅ and TSS

November 1st – April 30th

Parameter	Average Effluent Concentrations		Monthly Average lb/day	Weekly Average lb/day	Daily Maximum lbs
	Monthly	Weekly			
BOD ₅	30 mg/L	45 mg/L	130	200	260
TSS	30 mg/L	45 mg/L	130	200	260

Winter mass load limits based upon design average wet weather flow to the facility equalling 0.524 MDG.

October 1st – October 31st and May 1st – May 31st

Parameter	Average Effluent Concentrations		Monthly Average lb/day	Weekly Average lb/day	Daily Maximum lbs
	Monthly	Weekly			
BOD ₅	10 mg/L	15 mg/L	44	66	88
TSS	10 mg/L	15 mg/L	44	66	88

Discharge only allowed when stream flow in the Long Tom River is at a minimum of 50 cubic feet per second (CFS), the treated effluent storage pond is near its capacity, and the approved land application sites are saturated which would preclude irrigation of treated wastewater. Mass load limits and concentration limits based upon the design average wet weather flow to the facility of 0.524 MGD and the Willamette Basin standard of 10 mg/L BOD and TSS. (See Note A.1).

b. Other Parameters

Parameter	Limitations
<i>E. coli</i> Bacteria	Must not exceed 126 organisms per 100 ml monthly geometric mean. No single sample may exceed 406 organisms per 100 ml. (See Note A.2)
pH	Must be within the range of 6.0 – 9.0
BOD ₅ and TSS Removal Efficiency	Must not be less than 85% monthly average.

c. Regulatory Mixing Zone

The allowable mixing zone is that portion of the Long Tom River contained within a band extending out no more than 1/4 of the width of the stream from the east bank and extending from a point

fifteen feet upstream of the outfall to a point 150 feet downstream from the outfall. The Zone of Immediate Dilution (ZID) is defined as that portion of the allowable mixing zone that is contained within a band one and one-half (1.5) feet upstream, two feet toward midstream and fifteen feet downstream of the point of discharge.

2. Outfall 002 – Recycled Wastewater

a. Treatment classification

No discharge to state waters is permitted. Recycled water must be treated to the appropriate level and re-used for the following beneficial purposes:

Level of Treatment	Level of Treatment (after disinfection, unless otherwise specified)	Beneficial Uses
C	Oxidised and disinfected. Total coliform may not exceed: <ul style="list-style-type: none"> • A median of 23 total coliform organisms per 100 mL, based on results of the last 7 days that analyses have been completed. • 240 total coliform organisms per 100 mL in any two consecutive samples. 	<ul style="list-style-type: none"> • Class D and non-disinfected uses. • Irrigation of processed food crops; Irrigation of orchards or vineyards if an irrigation method is used to apply recycled water directly to the soil. • Landscape irrigation of golf courses, cemeteries, highway medians, or industrial or business campuses. • Industrial, commercial, or construction uses limited to: industrial cooling, rock crushing, aggregate washing, mixing concrete, dust control, non-structural firefighting using aircraft, street sweeping, or sanitary sewer flushing.
D	Oxidised and disinfected. <i>E. coli</i> may not exceed: <ul style="list-style-type: none"> • A 30-day log mean of 126 organisms per 100 mL. • 406 organisms per 100 mL in any single sample. 	<ul style="list-style-type: none"> • Non-disinfected uses. • Irrigation of firewood, ornamental nursery stock, Christmas trees, sod, or pasture for animals.

b. Recycled water requirements

- (i) All recycled water use distributed on land for dissipation by evapotranspiration and controlled seepage must follow sound irrigation practises so as to prevent:
 - (A) Prolonged ponding of treated recycled water on the ground surface;
 - (B) Surface run-off or subsurface drainage through drainage tile;
 - (C) The creation of odours, fly and mosquito breeding or other nuisance conditions;
 - (D) The overloading of land with nutrients, organics, or other pollutant parameters;
 - (E) Impairment of existing or potential beneficial uses of groundwater.
- (ii) All use of recycled water must conform to the Recycled Water Use Plan approved by the Department

3. Groundwater

No activities may be conducted that could cause an adverse impact on existing or potential beneficial uses of groundwater. All wastewater and process related residuals must be managed and disposed in a manner that will prevent a violation of the Groundwater Quality Protection Rules (OAR 340-040).

4. Chlorine Usage

No chlorine or chlorine compounds shall be used for disinfection purposes and no chlorine residual shall be allowed in the effluent due to chlorine used for maintenance purposes

Schedule A Notes:

- A.1 Long Tom stream flow shall be measured daily and reported on monthly discharge monitoring reports for each day of discharge. Long Tom River flow shall be taken at the USGS stream gauge No. 14166500 on the Long Tom River near Noti, Oregon, at R.M. 37.4.
- A.2 If a single sample exceeds 406 organisms per 100 ml then five consecutive re-samples may be taken at four-hour intervals beginning within 28 hours after the original sample was taken. If the log mean of the five re-samples is less than or equal to 126 organisms per 100 ml, a violation will not be triggered.
- A.3 This permit may be re-opened upon approval of a Total Maximum Daily Load (TMDL) for this sub-basin to modify current limits or include new or revised limits or other conditions or requirements.

SCHEDULE B: MINIMUM MONITORING AND REPORTING REQUIREMENTS

REPORTING SUMMARY			
Item	Frequency	Due date	Section(s)
Discharge Monitoring Report	Monthly	By 15 th of following month	1.a, 1.b, 1.c, 1.d
Inflow and Infiltration (I&I) reduction report	Yearly	February 1 st of following year	4.a
Biosolids report	Yearly	February 19 th of following year	1.e, 4.b
Recycled water report	Yearly	January 15 th of following year	4.c

1. Minimum Monitoring Requirements

a. Influent

Influent samples are to be collected at the headworks after the rotating drum screen.

Item or Parameter	Minimum Frequency	Type of Sample
BOD ₅	1 per week	Composite
TSS	1 per week	Composite
pH	2 per week	Grab

b. Outfall 001 – Treated Effluent

The effluent samples are to be collected at the end of the UV disinfection channel.

The following monitoring is required when discharging through Outfall 001:

Item or Parameter	Minimum Frequency	Type of Sample
Total Effluent Flow (MGD)	Daily	Measurement
Flow Meter Calibration	Annual	Verification
BOD ₅	1 per week	Composite
TSS	1 per week	Composite
Pounds Discharged (BOD ₅ and TSS)	1 per week	Calculation
pH	2 per week	Grab
Temperature	2 per week	Grab
<i>E. coli</i> bacteria	1 per week	Grab
UV Radiation Intensity	Daily	Reading (See Note B.1)
Ammonia	2 per month	Grab (See Note B.3)
Average Percent Removed (BOD ₅ and TSS)	Monthly	Calculation

c. Long Tom River

Item or Parameter	Minimum Frequency	Type of Sample
River flow (Upstream of Outfall 001)	Daily, in May and October when discharging through Outfall 001	Measurement (See Note B.2)

d. Outfall 002 – Recycled Water

The following monitoring is required when discharging through Outfall 002:

Item or Parameter	Minimum Frequency	Type of Sample
Total Flow (MGD)	Daily	Measurement
Quantity Irrigated (inches/acre)	Daily	Measurement
Flow Meter Calibration	Annually	Verification
pH	2 per week	Grab
Total Coliform	1 per week	Grab
UV Radiation Intensity	Daily	Reading (See Note B.1)
Nutrients (TKN, NO ₂ +NO ₃ -N, NH ₃ , Total Phosphorus)	Every 90 days (See Note B.4)	Grab

e. Biosolids Management

Item or Parameter	Minimum Frequency	Type of Sample
Sludge Depth in Cell #1	Annually	Representative Measurement
Sludge Depth in Cell #2	Annually	Representative Measurement
Nutrient and conventional parameters (% dry weight unless otherwise specified): Total Kjeldahl Nitrogen (TKN), nitrate-nitrogen (NO ₃ -N), ammonium nitrogen (NH ₄ -N), total phosphorus (P), potassium (K), pH (S.U.), total solids, volatile solids	Once per year	Representative composite of biosolids to be land applied each year
Pollutants: As; Cd; Cu; Hg; Mo; Pb; Ni; Se; Zn; mg/kg dry weight	Once per year	Representative Composite

Item or Parameter	Minimum Frequency	Type of Sample
Pathogen reduction	As described in the DEQ-approved Biosolids Management Plan for Class B biosolids	As described in the DEQ-approved Biosolids Management Plan
Vector attraction reduction	As described in the DEQ-approved Biosolids Management Plan	As described in the DEQ-approved Biosolids Management Plan
Record of biosolids land application: date; quantity; location.	Each event	Record the date, quantity, and location of biosolids land applied on site location map or equivalent electronic system, such as GIS.
Septage received: source; quantity, gallons	Each event	Record the source and quantity of septage received.

2. Monitoring Quality Assurance/Quality Control

a. Sample Collection

The permittee must collect samples using proper sampling techniques (sample container type, preservation, and holding time) required by 40 CFR Part 136.

b. Test Methods

The permittee must ensure its laboratory uses test methods required by 40 CFR Part 136 and for all required analysis meets the quantitation limits specified in this schedule, unless otherwise approved by the Department in writing.

c. Quality Assurance and Quality Control (QA/QC)

For instructions on proper sampling techniques, test methods and the use of laboratories with QA/QC procedures, see Schedule F, Sections B.1 and C.

d. Re-analysis, Re-sampling and Reporting of Data if QA/QC Requirements Not Met

If QA/QC requirements are not met for any analysis, the permittee must have the sample re-analysed. If the sample cannot be re-analysed, the permittee must re-sample at the earliest available opportunity. Permittee must include the results of samples not meeting QA/QC in the report but must not use the data in the calculations required by the permit.

3. Reporting Requirements

a. Significant Figures

Mass load limits all have two significant figures unless otherwise noted. The permittee must report the same number of significant digits as the permit limit for a given parameter. Regardless of the rounding conventions used by the permittee (i.e., rounding 5 up for the calculated results or, in the case of laboratory results, rounding 5 to the nearest even number), the permittee must use the convention consistently, and must ensure that laboratories employed by the permittee use the same convention.

b. Quantitation Limits (QL)

The QL must be reported along with any result reported as “non-detect” or “ND”. The QL is the Method Reporting Limit (MRL) or Limit of Quantitation (LOQ). It is the lowest level at which the entire analytical system can give a recognisable signal and acceptable calibration for the analyte. It is equivalent to the concentration of the lowest calibration standard assuming that all method-specified sample weights, volumes, and cleanup procedures have been employed.

c. Calculating Mass Loads

The permittee must calculate mass loads as follows:

$$\text{Flow (in MGD)} \times \text{Concentration (in mg/L)} \times 8.34 = \text{Pounds per day}$$

d. Other Reporting Procedures

The permittee must meet the following conditions:

- (i) The permittee must report the results of monitoring required under Conditions 1.a, 1.b, 1.c and 1.d on Department-approved Discharge Monitoring Report (DMR) forms. The reporting period is the calendar month. DMRs must be submitted to the appropriate Department office by the 15th day of the following month.
- (ii) DMRs must identify the name, certificate classification and grade level of each principal operator designated by the permittee as responsible for supervising the wastewater collection and treatment systems during the reporting period. DMRs must also identify each system classification as found on page one of this permit.
- (iii) DMRs must also include a record of the quantity and method of use of all sludge removed from the treatment facility and a record of any equipment breakdowns and bypassing.

4. Annual Reports

- a. The permittee must have in place a programme to identify and reduce inflow and infiltration into the sewage collection system. An annual report must be submitted to the Department by February 1st of each year which details sewer collection maintenance activities that reduce inflow and infiltration. The report must state those activities that have been done in the previous year and those activities planned for the following year.
- b. For any year in which biosolids are land applied, a report must be submitted to the Department by February 19th of the following year that describes solids handling activities for the previous year and includes, but is not limited to, the required information outlined in OAR 340-050-0035(6)(a)-(e).
- c. By no later than January 15th of each year, a report must be submitted to the Department describing the effectiveness of the recycled water system. The report must demonstrate compliance with the approved recycled water use plan, Division 55 rules, and the limitations and conditions of this permit applicable to recycled water.

5. Mixing Zone Study

- a. The permittee must prepare and submit an updated Mixing Zone Study. The study is due with the next permit renewal application.

Schedule B Notes:

- B.1 The intensity of UV radiation passing through the water column will affect the system's ability to kill organisms. To track the reduction in intensity, the UV disinfection system must include a UV intensity meter with a sensor located in the water column at a specified distance from the UV bulbs. This meter will measure the intensity of UV radiation in mWatts-seconds/cm². The daily UV radiation intensity must be determined by reading the meter each day. If more than one meter is used, the daily recording will be an average of all meter readings each day.
- B.2 Long Tom River flow must be taken at the USGS stream gauge No. 14166500 on the Long Tom River near Noti, Oregon, at R.M. 37.4.
- B.3 Ammonia monitoring is required for the first two seasons of discharge through Outfall 001. After that time, ammonia monitoring may be discontinued for Outfall 001 unless otherwise notified in writing by the Department. For any month where there is less than two weeks of discharge through Outfall 001, only one ammonia sample is required.
- B.4 The first nutrient sample of the irrigation season must be taken during the first five days of discharge through Outfall 002. Each succeeding nutrient sample must be taken no more than 90 days apart.

SCHEDULE D: SPECIAL CONDITIONS

1. Wastewater System Operator Certification

The permittee must comply with Oregon Administrative Rules (OAR), Chapter 340, Division 49, *Regulations Pertaining To Certification of Wastewater System Operator Personnel* and accordingly:

- a. The permittee must have its wastewater system supervised by one or more operators who are certified in a classification and grade level (equal to or greater) that corresponds with the classification (collection and /or treatment) of the system to be supervised as specified on *Page One* of this permit. The permittee may contract for part-time supervision in accordance with OAR 340-049-0015(3) and 340-049-0070.

Note: A "supervisor" is defined as the person exercising authority for establishing and executing the specific practise and procedures of operating the system in accordance with the policies of the permittee and requirements of the waste discharge permit. "Supervise" means responsible for the technical operation of a system, which may affect its performance or the quality of the effluent produced. Supervisors are not required to be on-site at all times.
- b. The permittee's wastewater system may not be without supervision (as required by Condition D.1.a above) for more than thirty (30) days unless otherwise authorised by the Department of Environmental Quality in writing. During this period, and at any time that the supervisor is not available to respond on-site (i.e. vacation, sick leave or off-call), the permittee must make available another person who is certified in the proper classification and at Grade Level I or higher.
- c. If the wastewater system has more than one daily shift, the permittee must have the shift supervisor, if any, certified at no less than one grade lower than the system classification.
- d. The permittee is responsible for ensuring the wastewater system has a properly certified supervisor available at all times to respond on-site at the request of the permittee and to any other operator.
- e. The permittee must notify the Department of Environmental Quality in writing within thirty (30) days of replacement or re-designation of certified operators responsible for supervising wastewater system operation. The notice must be filed with the Water Quality Division, Operator Certification Program, 2020 SW 4th, Suite 400, Portland, OR 97201. This requirement is in addition to the reporting requirements contained under *Schedule B* of this permit.
- f. Upon written request, the Department may grant the permittee reasonable time, not to exceed 120 days, to obtain the services of a qualified person to supervise the wastewater system. The written request must include justification for the time needed, a schedule for recruiting and hiring, the date the system supervisor availability ceased and the name of the alternate system supervisor(s) as required by 5.b. above.

2. Biosolids and Sewage Sludge Management

- a. All biosolids must be managed in accordance with the DEQ approved biosolids management plan, and the site authorisation letters issued by the DEQ. Any changes in solids management activities that significantly differ from operations specified under the approved plan require the prior written approval of the DEQ.
- b. All new biosolids application sites shall meet the site selection criteria set forth in OAR 340-50-0070. Property owners adjacent to any newly approved application sites shall be notified, in writing or by any method approved by DEQ, of the proposed activity prior to the start of application. For proposed new application sites that are deemed by the DEQ to be sensitive with respect to resi-

dential housing, runoff potential or threat to groundwater, an opportunity for public comment will be provided in accordance with OAR 340-50-0030.

- c. This permit may be modified to incorporate any applicable standard for biosolids use or disposal promulgated under section 405(d) of the Clean Water Act, if the standard for biosolids use or disposal is more stringent than any requirements for bio-solids use or disposal in the permit, or controls a pollutant or practise not limited in this permit.

3. Recycled Water Management

- a. All recycled water used at the treatment plant site (or satellite facility operating under the same permit) for landscape irrigation or in-plant processes is exempt from the Division 55 rules if:
 - i. The recycled water is an oxidised and disinfected wastewater;
 - ii. The recycled water is used at the site where it is generated or at an auxiliary wastewater or sludge treatment facility that is subject to the same NPDES or WPCF permit as the wastewater treatment system. Contiguous property to the parcel of land upon which the treatment system is located is considered the wastewater treatment system site if under the same ownership;
 - iii. Spray or drift or both from the use does not occur off the site;
 - iv. Public access to the site is restricted.

4. Breakdown Notification

The permittee must notify a DEQ-Western Region Office in accordance with the response times noted in the General Conditions of this permit, of any malfunction so that corrective action can be coordinated between the permittee and the Department.

SCHEDULE F: NPDES GENERAL CONDITIONS – DOMESTIC FACILITIES

SECTION A. STANDARD CONDITIONS

A1. Duty to Comply with Permit

The permittee must comply with all conditions of this permit. Failure to comply with any permit condition is a violation of Oregon Revised Statutes (ORS) 468B.025 and the federal Clean Water Act and is grounds for an enforcement action. Failure to comply is also grounds for DEQ to terminate, modify and reissue, revoke, or deny renewal of a permit.

A2. Penalties for Water Pollution and Permit Condition Violations

The permit is enforceable by DEQ or EPA, and in some circumstances also by third-parties under the citizen suit provisions 33 USC § 1365. DEQ enforcement is generally based on provisions of state statutes and Environmental Quality Commission (EQC) rules, and EPA enforcement is generally based on provisions of federal statutes and EPA regulations.

ORS 468.140 allows DEQ to impose civil penalties up to \$10,000 per day for violation of a term, condition, or requirement of a permit. The federal Clean Water Act provides for civil penalties not to exceed \$32,500 and administrative penalties not to exceed \$11,000 per day for each violation of any condition or limitation of this permit.

Under ORS 468.943, unlawful water pollution, if committed by a person with criminal negligence, is punishable by a fine of up to \$25,000, imprisonment for not more than one year, or both. Each day on which a violation occurs or continues is a separately punishable offense. The federal Clean Water Act provides for criminal penalties of not more than \$50,000 per day of violation, or imprisonment of not more than 2 years, or both for second or subsequent negligent violations of this permit.

Under ORS 468.946, a person who knowingly discharges, places, or causes to be placed any waste into the waters of the state or in a location where the waste is likely to escape into the waters of the state is subject to a Class B felony punishable by a fine not to exceed \$250,000 and up to 10 years in prison per ORS chapter 161. The federal Clean Water Act provides for criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment of not more than 3 years, or both for knowing violations of the permit. In the case of a second or subsequent conviction for knowing violation, a person is subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than 6 years, or both.

A3. Duty to Mitigate

The permittee must take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment. In addition, upon request of DEQ, the permittee must correct any adverse impact on the environment or human health resulting from noncompliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

A4. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and have the permit renewed. The application must be submitted at least 180 days before the expiration date of this permit.

DEQ may grant permission to submit an application less than 180 days in advance but no later than the permit expiration date.

A5. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:

- a. Violation of any term, condition, or requirement of this permit, a rule, or a statute.
- b. Obtaining this permit by misrepresentation or failure to disclose fully all material facts.
- c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- d. The permittee is identified as a Designated Management Agency or allocated a wasteload under a total maximum daily load (TMDL).
- e. New information or regulations.
- f. Modification of compliance schedules.
- g. Requirements of permit reopener conditions
- h. Correction of technical mistakes made in determining permit conditions.
- i. Determination that the permitted activity endangers human health or the environment.
- j. Other causes as specified in 40 CFR §§ 122.62, 122.64, and 124.5.
- k. For communities with combined sewer overflows (CSOs):
 - (1) To comply with any state or federal law regulation for CSOs that is adopted or promulgated subsequent to the effective date of this permit.
 - (2) If new information that was not available at the time of permit issuance indicates that CSO controls imposed under this permit have failed to ensure attainment of water quality standards, including protection of designated uses.
 - (3) Resulting from implementation of the permittee's long-term control plan and/or permit conditions related to CSOs.

The filing of a request by the permittee for a permit modification, revocation or reissuance, termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

A6. Toxic Pollutants

The permittee must comply with any applicable effluent standards or prohibitions established under Oregon Administrative Rule (OAR) 340-041-0033 and section 307(a) of the federal Clean Water Act for toxic pollutants, and with standards for sewage sludge use or disposal established under section 405(d) of the federal Clean Water Act, within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

A7. Property Rights and Other Legal Requirements

The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege, or authorize any injury to persons or property or invasion of any other private rights, or any infringement of federal, tribal, state, or local laws or regulations.

A8. Permit References

Except for effluent standards or prohibitions established under section 307(a) of the federal Clean Water Act and OAR 340-041-0033 for toxic pollutants, and standards for sewage sludge use or disposal established under section 405(d) of the federal Clean Water Act, all rules and statutes referred to in this permit are those in effect on the date this permit is issued.

A9. Permit Fees

The permittee must pay the fees required by OAR.

SECTION B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

B1. Proper Operation and Maintenance

The permittee must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary

facilities or similar systems that are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

B2. Need to Halt or Reduce Activity Not a Defense

For industrial or commercial facilities, upon reduction, loss, or failure of the treatment facility, the permittee must, to the extent necessary to maintain compliance with its permit, control production or all discharges or both until the facility is restored or an alternative method of treatment is provided. This requirement applies, for example, when the primary source of power of the treatment facility fails or is reduced or lost. It is not a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

B3. Bypass of Treatment Facilities

a. Definitions

- (1) "Bypass" means intentional diversion of waste streams from any portion of the treatment facility. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, provided the diversion is to allow essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs b and c of this section.
- (2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

b. Prohibition of bypass.

- (1) Bypass is prohibited and DEQ may take enforcement action against a permittee for bypass unless:
 - i. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - ii. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventative maintenance; and
 - iii. The permittee submitted notices and requests as required under General Condition B3.c.
- (2) DEQ may approve an anticipated bypass, after considering its adverse effects and any alternatives to bypassing, if DEQ determines that it will meet the three conditions listed above in General Condition B3.b.(1).

c. Notice and request for bypass.

- (1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, a written notice must be submitted to DEQ at least ten days before the date of the bypass.
- (2) Unanticipated bypass. The permittee must submit notice of an unanticipated bypass as required in General Condition D5.

B4. Upset

- a. Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operation error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.
- b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of General Condition B4.c are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- c. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset must demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - (1) An upset occurred and that the permittee can identify the causes(s) of the upset;

- (2) The permitted facility was at the time being properly operated;
 - (3) The permittee submitted notice of the upset as required in General Condition D5, hereof (24-hour notice); and
 - (4) The permittee complied with any remedial measures required under General Condition A3 hereof.
- d. Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

B5. Treatment of Single Operational Upset

For purposes of this permit, a single operational upset that leads to simultaneous violations of more than one pollutant parameter will be treated as a single violation. A single operational upset is an exceptional incident that causes simultaneous, unintentional, unknowing (not the result of a knowing act or omission), temporary noncompliance with more than one federal Clean Water Act effluent discharge pollutant parameter. A single operational upset does not include federal Clean Water Act violations involving discharge without a NPDES permit or noncompliance to the extent caused by improperly designed or inadequate treatment facilities. Each day of a single operational upset is a violation.

B6. Overflows from Wastewater Conveyance Systems and Associated Pump Stations

- a. Definition. "Overflow" means any spill, release or diversion of sewage including:
- (1) An overflow that results in a discharge to waters of the United States; and
 - (2) An overflow of wastewater, including a wastewater backup into a building (other than a backup caused solely by a blockage or other malfunction in a privately owned sewer or building lateral), even if that overflow does not reach waters of the United States.
- b. Reporting required. All overflows must be reported orally to DEQ within 24 hours from the time the permittee becomes aware of the overflow. Reporting procedures are described in more detail in General Condition D5.

B7. Public Notification of Effluent Violation or Overflow

If effluent limitations specified in this permit are exceeded or an overflow occurs that threatens public health, the permittee must take such steps as are necessary to alert the public, health agencies and other affected entities (for example, public water systems) about the extent and nature of the discharge in accordance with the notification procedures developed under General Condition B8. Such steps may include, but are not limited to, posting of the river at access points and other places, news releases, and paid announcements on radio and television.

B8. Emergency Response and Public Notification Plan

The permittee must develop and implement an emergency response and public notification plan that identifies measures to protect public health from overflows, bypasses, or upsets that may endanger public health. At a minimum the plan must include mechanisms to:

- a. Ensure that the permittee is aware (to the greatest extent possible) of such events;
- b. Ensure notification of appropriate personnel and ensure that they are immediately dispatched for investigation and response;
- c. Ensure immediate notification to the public, health agencies, and other affected public entities (including public water systems). The overflow response plan must identify the public health and other officials who will receive immediate notification;
- d. Ensure that appropriate personnel are aware of and follow the plan and are appropriately trained;
- e. Provide emergency operations; and
- f. Ensure that DEQ is notified of the public notification steps taken.

B9. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters must be disposed of in such a manner as to prevent any pollutant from such materials from entering waters of the state, causing nuisance conditions, or creating a public health hazard.

SECTION C. MONITORING AND RECORDS

C1. Representative Sampling

Sampling and measurements taken as required herein must be representative of the volume and nature of the monitored discharge. All samples must be taken at the monitoring points specified in this permit, and must be taken, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water, or substance. Monitoring points must not be changed without notification to and the approval of DEQ.

C2. Flow Measurements

Appropriate flow measurement devices and methods consistent with accepted scientific practices must be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices must be installed, calibrated and maintained to insure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected must be capable of measuring flows with a maximum deviation of less than ± 10 percent from true discharge rates throughout the range of expected discharge volumes.

C3. Monitoring Procedures

Monitoring must be conducted according to test procedures approved under 40 CFR part 136 or, in the case of sludge use and disposal, approved under 40 CFR part 503 unless other test procedures have been specified in this permit.

C4. Penalties of Tampering

The federal Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit may, upon conviction, be punished by a fine of not more than \$10,000 per violation, imprisonment for not more than two years, or both. If a conviction of a person is for a violation committed after a first conviction of such person, punishment is a fine not more than \$20,000 per day of violation, or by imprisonment of not more than four years, or both.

C5. Reporting of Monitoring Results

Monitoring results must be summarized each month on a discharge monitoring report form approved by DEQ. The reports must be submitted monthly and are to be mailed, delivered or otherwise transmitted by the 15th day of the following month unless specifically approved otherwise in Schedule B of this permit.

C6. Additional Monitoring by the Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR part 136 or, in the case of sludge use and disposal, approved under 40 CFR part 503, or as specified in this permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the discharge monitoring report. Such increased frequency must also be indicated. For a pollutant parameter that may be sampled more than once per day (for example, total residual chlorine), only the average daily value must be recorded unless otherwise specified in this permit.

C7. Averaging of Measurements

Calculations for all limitations that require averaging of measurements must utilize an arithmetic mean, except for bacteria which must be averaged as specified in this permit.

C8. Retention of Records

Records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities must be retained for a period of at least 5 years (or longer as required by 40 CFR part 503). Records of all monitoring information including all calibration and maintenance records, all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit and records of all data used to complete the application for this permit must be retained for a period of at least 3 years from

the date of the sample, measurement, report, or application. This period may be extended by request of DEQ at any time.

C9. Records Contents

Records of monitoring information must include:

- a. The date, exact place, time, and methods of sampling or measurements;
- b. The individual(s) who performed the sampling or measurements;
- c. The date(s) analyses were performed;
- d. The individual(s) who performed the analyses;
- e. The analytical techniques or methods used; and
- f. The results of such analyses.

C10. Inspection and Entry

The permittee must allow DEQ or EPA upon the presentation of credentials to:

- a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- d. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by state law, any substances or parameters at any location.

C11. Confidentiality of Information

Any information relating to this permit that is submitted to or obtained by DEQ is available to the public unless classified as confidential by the Director of DEQ under ORS 468.095. The permittee may request that information be classified as confidential if it is a trade secret as defined by that statute. The name and address of the permittee, permit applications, permits, effluent data, and information required by NPDES application forms under 40 CFR § 122.21 are not classified as confidential [40 CFR § 122.7(b)].

SECTION D. REPORTING REQUIREMENTS

D1. Planned Changes

The permittee must comply with OAR 340-052, "Review of Plans and Specifications" and 40 CFR § 122.41(I)(1). Except where exempted under OAR 340-052, no construction, installation, or modification involving disposal systems, treatment works, sewerage systems, or common sewers may be commenced until the plans and specifications are submitted to and approved by DEQ. The permittee must give notice to DEQ as soon as possible of any planned physical alternations or additions to the permitted facility.

D2. Anticipated Noncompliance

The permittee must give advance notice to DEQ of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements.

D3. Transfers

This permit may be transferred to a new permittee provided the transferee acquires a property interest in the permitted activity and agrees in writing to fully comply with all the terms and conditions of the permit and EQC rules. No permit may be transferred to a third party without prior written approval from DEQ. DEQ may require modification, revocation, and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under 40 CFR § 122.61. The permittee must notify DEQ when a transfer of property interest takes place.

D4. Compliance Schedule

Reports of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any compliance schedule of this permit must be submitted no later than 14 days following each schedule date. Any reports of noncompliance must include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirements.

D5. Twenty-Four Hour Reporting

The permittee must report any noncompliance that may endanger health or the environment. Any information must be provided orally (by telephone) to the DEQ regional office or Oregon Emergency Response System (1-800-452-0311) as specified below within 24 hours from the time the permittee becomes aware of the circumstances.

a. Overflows.**(1) Oral Reporting within 24 hours.**

- i. For overflows other than basement backups, the following information must be reported to the Oregon Emergency Response System (OERS) at 1-800-452-0311. For basement backups, this information should be reported directly to the DEQ regional office.

(a) The location of the overflow;

(b) The receiving water (if there is one);

(c) An estimate of the volume of the overflow;

(d) A description of the sewer system component from which the release occurred (for example, manhole, constructed overflow pipe, crack in pipe); and

(e) The estimated date and time when the overflow began and stopped or will be stopped.

- ii. The following information must be reported to the DEQ regional office within 24 hours, or during normal business hours, whichever is earlier:

(a) The OERS incident number (if applicable); and

(b) A brief description of the event.

(2) Written reporting within 5 days.

- i. The following information must be provided in writing to the DEQ regional office within 5 days of the time the permittee becomes aware of the overflow:

(a) The OERS incident number (if applicable);

(b) The cause or suspected cause of the overflow;

(c) Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the overflow and a schedule of major milestones for those steps;

(d) Steps taken or planned to mitigate the impact(s) of the overflow and a schedule of major milestones for those steps; and

(e) For storm-related overflows, the rainfall intensity (inches/hour) and duration of the storm associated with the overflow.

DEQ may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

b. Other instances of noncompliance.**(1) The following instances of noncompliance must be reported:**

i. Any unanticipated bypass that exceeds any effluent limitation in this permit;

ii. Any upset that exceeds any effluent limitation in this permit;

iii. Violation of maximum daily discharge limitation for any of the pollutants listed by DEQ in this permit; and

iv. Any noncompliance that may endanger human health or the environment.

(2) During normal business hours, the DEQ regional office must be called. Outside of normal business hours, DEQ must be contacted at 1-800-452-0311 (Oregon Emergency Response System).**(3) A written submission must be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission must contain:**

i. A description of the noncompliance and its cause;

ii. The period of noncompliance, including exact dates and times;

iii. The estimated time noncompliance is expected to continue if it has not been corrected;

- iv. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance; and
 - v. Public notification steps taken, pursuant to General Condition B7.
- (4) DEQ may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

D6. Other Noncompliance

The permittee must report all instances of noncompliance not reported under General Condition D4 or D5 at the time monitoring reports are submitted. The reports must contain:

- a. A description of the noncompliance and its cause;
- b. The period of noncompliance, including exact dates and times;
- c. The estimated time noncompliance is expected to continue if it has not been corrected; and
- d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

D7. Duty to Provide Information

The permittee must furnish to DEQ within a reasonable time any information that DEQ may request to determine compliance with the permit or to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit. The permittee must also furnish to DEQ, upon request, copies of records required to be kept by this permit.

Other Information: When the permittee becomes aware that it has failed to submit any relevant facts or has submitted incorrect information in a permit application or any report to DEQ, it must promptly submit such facts or information.

D8. Signatory Requirements

All applications, reports or information submitted to DEQ must be signed and certified in accordance with 40 CFR § 122.22.

D9. Falsification of Information

Under ORS 468.953, any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, is subject to a Class C felony punishable by a fine not to exceed \$125,000 per violation and up to 5 years in prison per ORS chapter 161. Additionally, according to 40 CFR § 122.41(k)(2), any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit including monitoring reports or reports of compliance or non-compliance will, upon conviction, be punished by a federal civil penalty not to exceed \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

D10. Changes to Indirect Dischargers

The permittee must provide adequate notice to DEQ of the following:

- a. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of the federal Clean Water Act if it were directly discharging those pollutants and;
- b. Any substantial change in the volume or character of pollutants being introduced into the POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
- c. For the purposes of this paragraph, adequate notice must include information on (i) the quality and quantity of effluent introduced into the POTW, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

SECTION E. DEFINITIONS

E1. *BOD* or *BOD₅* means five-day biochemical oxygen demand.

E2. *CBOD* or *CBOD₅* means five-day carbonaceous biochemical oxygen demand.

- E3. *TSS* means total suspended solids.
- E4. *Bacteria* means but is not limited to fecal coliform bacteria, total coliform bacteria, *Escherichia coli* (*E. coli*) bacteria, and *Enterococcus* bacteria.
- E5. *FC* means fecal coliform bacteria.
- E6. *Total residual chlorine* means combined chlorine forms plus free residual chlorine
- E7. *Technology based permit effluent limitations* means technology-based treatment requirements as defined in 40 CFR § 125.3, and concentration and mass load effluent limitations that are based on minimum design criteria specified in OAR 340-041.
- E8. *mg/l* means milligrams per liter.
- E9. *µg/l* means microgram per liter.
- E10. *kg* means kilograms.
- E11. *m³/d* means cubic meters per day.
- E12. *MGD* means million gallons per day.
- E13. *Average monthly effluent limitation* as defined at 40 CFR § 122.2 means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
- E14. *Average weekly effluent limitation* as defined at 40 CFR § 122.2 means the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.
- E15. *Daily discharge* as defined at 40 CFR § 122.2 means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the daily discharge must be calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge must be calculated as the average measurement of the pollutant over the day.
- E16. *24-hour composite sample* means a sample formed by collecting and mixing discrete samples taken periodically and based on time or flow. The sample must be collected and stored in accordance with 40 CFR part 136.
- E17. *Grab sample* means an individual discrete sample collected over a period of time not to exceed 15 minutes.
- E18. *Quarter* means January through March, April through June, July through September, or October through December.
- E19. *Month* means calendar month.
- E20. *Week* means a calendar week of Sunday through Saturday.
- E21. *POTW* means a publicly-owned treatment works.

VENETA CITY COUNCIL

AGENDA ITEM SUMMARY

Title/Topic: Cost overrun for 2016 Pavement Preservation Project

Meeting Date: November 14, 2016
Department: Public Works

Staff Contact: Kyle Schauer
Email: kschauer@ci.veneta.or.us
Telephone Number: 541-935-2191 Ext. 313

ISSUE STATEMENT

The 2016 Pavement Preservation Project had a cost overrun of \$10,138.41.

BACKGROUND

At the June 27th City Council Meeting, the City Council authorized staff to award the contract for the 2016 Pavement Preservation Projects (with additional work) to Wildish Construction for an amount not to exceed \$285,000. The final billing for that project was \$295,138.41 for a cost overrun of \$10,138.41.

Part of the additional costs was due to an increase in the actual amount of asphalt that had to be removed and replaced. The project was bid off of quantities that were estimated by the City Engineer. Payment was made on the actual amount of materials used. There was slightly more than 2,200 additional square feet of asphalt that had to be removed and then replaced than was shown in the project manual.

A large portion of the overrun was due to an unforeseen issue regarding the cold plane removal (grinding) of the existing asphalt prior to application of the asphalt overlay. The intent of cold plane removal is to remove the existing asphalt while still leaving at least a layer of asphalt in place to apply the new asphalt to. This leaves a clean, flat surface that will also help with the compaction of the new asphalt. The project manual called out a two-inch grind removal. The existing asphalt for many of the local streets involved in this project had a depth of two inches or slightly less. The result of which was that the grinding went completely through the existing asphalt which created pockets of loose rock to be removed. The areas where the loose rock was removed caused for more asphalt to be used to fill the space which added to the overall quantity of asphalt used on the project.

Another issue with the loose rock being removed during the grinding process was that the loose rock then contaminated the asphalt grindings that were to be recycled into new asphalt. The contractor had given the City a \$10,000 credit for the grindings. Due to the contamination, they were unable to utilize the grindings for recycle and the contractor wanted to rescind that credit. We were able to negotiate with them to only rescind half of the credit, meaning that the City had to pay an additional \$5,000 for that part of the project.

The total costs for the additional cold plane removal and extra asphalt was approximately \$18,685. There was also a change order for an unexpected repair to a very shallow storm water line that was an additional \$3,090 and some additional costs for some of the full depth replacements (potholes) that had to be done prior to the asphalt application.

The contractor's original bid for the project was \$256,690.00. The total for all of the unexpected costs including the recycle credit was \$38,448.41, which exceeded the contingency of the project by \$10,138.41.

The additional \$10,138.41 was paid to the contractor out of funds currently budgeted in the street fund for this fiscal year for the Street Preservation Project.

RELATED CITY POLICIES

The project was paid for from the \$425,000 budgeted under the Street Fund in the 2016/2017 budget year as part of the City's six-year Pavement Preservation Plan.

COUNCIL OPTIONS

Informational update only.

CITY ADMINISTRATOR'S RECOMMENDATION

Informational update only.

SUGGESTED MOTION

None

ATTACHMENTS

A. Progress billing dated 11-10-16