



CITY OF TROUTDALE

"Gateway to the Columbia River Gorge"

AGENDA

CITY COUNCIL – WORK SESSION

Troutdale City Hall - Council Chambers
219 E. Historic Columbia River Hwy. (Lower Level, Rear Entrance)
Troutdale, OR 97060-2078

Tuesday, November 17, 2015 – 6:30pm

Mayor

Doug Daoust

City Council

David Ripma

Eric Anderson

Larry Morgan

Glenn White

Rich Allen

John Wilson

City Manager

Craig Ward

1. Roll Call
2. A discussion regarding the long term financial analysis and sustainability of the Water, Sewer and Stormwater Funds. Steve Gaschler, Public Works Director
3. A review and discussion of the Capital Improvement Plan. Steve Gaschler, Public Works Director
4. Adjourn

Doug Daoust, Mayor

Dated: 11/10/15

Further information and copies of agenda packets are available at: Troutdale City Hall, 219 E. Historic Columbia River Hwy., Monday through Friday, 8:00 a.m. - 5:00 p.m.; on our Web Page www.troutdaleoregon.gov or call Sarah Skroch, City Recorder at 503-674-7258.

The meeting location is wheelchair accessible. A request for an interpreter for the hearing impaired or for other accommodations for persons with disabilities should be made at least 48 hours before the meeting to: Sarah Skroch, City Recorder 503-674-7258.



CITY OF TROUTDALE



STAFF REPORT

SUBJECT / ISSUE: A discussion regarding the long term financial analysis and sustainability of the water, sewer and stormwater funds.

MEETING TYPE:
City Council Work Session

MEETING DATE: November 17,, 2015

STAFF MEMBER: Steve Gaschler
DEPARTMENT: Public Works

ACTION REQUIRED
Information/Discussion

ADVISORY COMMITTEE/COMMISSION RECOMMENDATION:
Not Applicable

PUBLIC HEARING
No

Comments:

STAFF RECOMMENDATION: Develop a long term comprehensive plan to bring all fund rates up to recommended level.

EXHIBITS: Reference binder delivered at the meeting

Subject / Issue Relates To:

- Council Goals
 - Legislative
 - Other (describe)
- Maintain stability in Public Works Funds*

Issue / Council Decision & Discussion Points:

- ◆ The protection of the health, safety and property of residents and businesses through the provision of potable water, fire-fighting water, sanitary sewer collection, treatment and disposal and storm drainage systems and services are all critical functions of the City.
- ◆ The City requires adequate funding for operation, maintenance and improvements to all of the City's utility systems.
- ◆ Fees have not kept pace with increasing costs.
- ◆ Future capital asset rehabilitation and replacement needs as the utility systems age requires funding from user fees and therefore requires the City to build reserves to prepare for the near and long-term future.

Reviewed and Approved by City Manager:

Jarah Smoak for Craig Ward

- ◆ The City of Troutdale presently has the lowest utility fees for all comparator cities identified
- ◆ Public outreach and education strategy
- ◆ Replacing our infrastructure at failure is not a recommended option.
- ◆ Affordability and low income programs.

BACKGROUND:

The Troutdale Municipal Code establishes Water, Sewer and Stormwater utility fees and authorizes the City Council to adjust the amount of the fees by Resolution. Costs of personnel, materials, services, capital projects and reimbursements to other funds continue to increase. Additionally, the City needs to build capital reserves to cover the cost of anticipated future capital costs that will be needed to maintain, upgrade and rehabilitate components of the system as they age and degrade. Additionally, there are upgrades needed in the system for seismic resiliency, connectivity and to meet current fire-fighting standards that will require significant capital expenditures. Some of these needs are in the near future, some can be held off to out-years. However, there are already important water, sewer and stormwater system rehabilitation projects of immediate need that have been deferred for multiple years due to lack of available capital in the respective Fund.

The City recently completed and adopted its new Master Plans for each utility. The Water Master plan in 2012, the Sewer Master plan in 2013, the South Stormwater plan in 2012 and the North Stormwater plan in 2007. A thorough financial analysis of all of the utility funds was recently completed with the assistance of economic analysis specialists, to project the impact of escalating operation and maintenance costs, capital projects and establishing reserves for system reinvestment.

PROS & CONS:

Pros:

- Without adequate rate increases, the fund risks becoming unstable, resulting in reduced levels of service and inability to fund needed operation, maintenance and capital projects.
- Planned maintenance and replacement is the lowest cost and best management practice for operating and maintenance of utility systems.
- Repair and replacement at failure is costly, interrupts service and causes property damage and possible personal injury

Cons

- Increased fees to residents and businesses.

Current Year Budget Impacts Yes (*describe*) N/A

Future Fiscal Impacts: Yes (*describe*) N/A

Increases revenue as described above and maintains stability of utility funds for the coming fiscal year.

City Attorney Approved N/A Yes

Community Involvement Process: Yes (*describe*) N/A



CITY OF TROUTDALE



STAFF REPORT

SUBJECT / ISSUE: A review and discussion of the Capital Improvement Plan

MEETING TYPE:
City Council Work Session

MEETING DATE: November 17, 2015

STAFF MEMBER: Travis Hultin, Chief Engineer

DEPARTMENT: Public Works

ACTION REQUIRED
Information/Discussion

ADVISORY COMMITTEE/COMMISSION RECOMMENDATION:

Not Applicable

PUBLIC HEARING
No

Comments:

STAFF RECOMMENDATION: Provide feedback and guidance on the draft CIP

EXHIBITS:

- A. Draft Transportation Capital Improvement Plan Project List
- B. Draft Water Capital Improvement Plan Project List
- C. Draft Sanitary Sewer Capital Improvement Plan Project List
- D. Draft Storm Drainage Capital Improvement Plan Project List
- E. Draft Parks Capital Improvement Plan Project List

Subject / Issue Relates To:

Council Goals

Legislative

Other (describe)

Capital Improvement Plan

Issue / Council Decision & Discussion Points:

- ◆ The Capital Improvement Plan enumerates the capital improvement projects that the City anticipates will need to be executed in the foreseeable future
- ◆ The Capital Improvement Plan hasn't been comprehensively updated since 2009. Some interim updates have occurred since then.
- ◆ Capital improvements are projects that build new facilities, add capacity to existing facilities, or otherwise upgrade the performance of a facility. Studies and planning

Reviewed and Approved by City Manager:

Samuel Snodgrass for Craig Ward

projects that identify and inform the scoping of such projects are also considered capital improvement projects. Normal replacement or maintenance projects that do not add capacity or upgrade performance of the facility are not “improvements”, and hence not included in the CIP.

- ◆ This draft Capital Improvement Plan project lists attached address the following systems: Water, Sanitary Sewer, Stormwater, Transportation and Parks
- ◆ The Capital Improvement Plan provides part of the basis for developing system development charge and utility user fee rates. By law, projects must be in the capital improvement plan to be accounted for in the system development charge rate methodology and for system development charges to be expended on those projects.
- ◆ The Parks CIP included in this draft reflects the existing Parks CIP developed in the 2006 Park Master Plan with minimal changes only to reflect known projects that have been completed. Staff recommends that the Parks Master Plan be updated, and the Parks CIP be updated subsequently.
- ◆ These draft CIP lists still requires refinement of some project information in some areas that will require additional research and analysis by Staff.
- ◆ These draft CIP lists are presented for discussion and to give Council an opportunity to provide feedback and guidance to Staff as the CIP is finalized.
- ◆ The final draft of the CIP will be brought forward in a future regular Council meeting for final review and adoption by Council.

BACKGROUND:

The Capital Improvement Plan provides a listing of significant infrastructure improvement projects that the City expects will be needed in the foreseeable future. State law requires that the City develop a Capital Improvement Plan in part to form the basis for developing a system development charge methodology and SDC rates. The CIP also provides an integrated and centralized compendium of planned projects that is critical for work planning, budgeting and rate setting.

The primary sources for identifying projects in the CIP are the respective Master Plans. Master Plans have been developed for each system discussed in this draft CIP. Additionally, projects may be identified by staff for consideration in the CIP based on Staff’s knowledge and experience with these systems and knowledge of actual realized development patterns. Further, projects may be proposed for inclusion in the CIP by goals set out by the Council, as well as by regional infrastructure planning efforts.

The last comprehensive update to the CIP was in 2009. Since 2009, the water and storm sewer CIP’s were updated in a less robust and less detailed format, following the updated Water Master Plan and South Troutdale Storm Sewer Master Plan.

The Sanitary Sewer Master Plan and Transportation System Plan were updated in 2013 and 2014, respectively. The CIP has not been updated since the adoption of those plans. This draft incorporates updates to the CIP’s for all systems, including the projects identified in those plans.

The Parks CIP was discussed extensively in 2013, but the CIP has not been formally updated since its original adoption in 2008, though the Council did adjust the SDC rate downward dramatically. That CIP is based on the Parks Master Plan that was adopted in 2006. The existing Parks Master Plan methodology had a significant component that was directly based on population, specifically parkland acquisition and the related land development costs. Population forecasts have been revised downward since that time, and the land acquisition computations should be recalculated and revised based on the current build-out population expectations. The balance of the needs identified in the Parks Master Plan (i.e. not directly computed from population) were determined based on community involvement processes (surveys, workshops, advisory committee, etc.). Those community opinions, attitudes and desires may have changed since those community involvement processes were conducted in the mid-2000's. Additionally, the Parks Master Plan envisioned a planning horizon out to somewhere between 2015 and 2020, assuming build-out of the City by that time, which hasn't occurred due to economic conditions. All of these factors lead Staff to recommend that the Parks Master Plan be updated, and the Parks CIP be subsequently updated to reflect the results of that process. A project to update the Parks Master Plan in the immediate future is reflected in the draft CIP.

The project listings provided herewith are still only in draft form. The project listings require additional research and refinement by staff in a few instances that will be completed in conjunction with any desired revisions, additions or deletions that the Council indicates during this work session discussion. The final draft that is presented for adoption will include some additional elements as well, including introductory and explanatory narrative, project maps, and summary tables.

<p>Current Year Budget Impacts <input type="checkbox"/> Yes (<i>describe</i>) <input checked="" type="checkbox"/> N/A</p> <p>Future Fiscal Impacts: <input checked="" type="checkbox"/> Yes (<i>describe</i>) <input type="checkbox"/> N/A When adopted this will inform future SDC and utility rate calculations, and future budgeting for capital projects</p> <p>City Attorney Approved N/A <input type="checkbox"/> Yes</p> <p>Community Involvement Process: <input type="checkbox"/> Yes (<i>describe</i>) <input checked="" type="checkbox"/> N/A</p>
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Transportation Improvements

1. **Project Name:** Improve NW Graham Road
 - Project Number:** ST-080
 - Timeframe:** Immediate (in-progress)
 - Estimated Cost:** \$ 550,000 (City Share)
 - Funding Source:** Street Improvement Fund
 - Problem:** Portions of NW Graham Road need to be reconstructed, widened and/or structurally upgraded to accommodate traffic growth, especially freight, with the development of the north industrial area including the Troutdale Reynolds Industrial Park.
 - Proposed Solution:** Widen and improve selected portions of NW Graham Road.
 - Identified By:** *City of Troutdale Transportation System Plan (Project M8)*
 - In Previous CIP?** Yes
 - Related Project(s):** SD-N20

2. **Project Name:** Downtown Parking Lot
 - Project Number:** ST-090
 - Timeframe:** Immediate
 - Estimated Cost:** \$ 50,000
 - Funding Source:** Police Facility Capital Project Fund
 - Problem:** Additional parking capacity is desired in the central business district and business owners have indicated a desire for more public parking availability in the CBD for all users. The construction of the new Police Facility has left the old Police Department site available for redevelopment and reuse.
 - Proposed Solution:** Construct a public parking lot on the old Police Department site at 141 SE Dora Avenue
 - Identified By:** City Council
 - In Previous CIP?** No
 - Related Project(s):** ST-082, ST-081

3. **Project Name:** Downtown Parking Study
- Project Number:** ST-091
- Timeframe:** Immediate
- Estimated Cost:** \$ 50,000
- Funding Source:** Street Fund, General Fund (Planning Fund)
- Problem:** Additional ADA and bicycle parking is desired in the central business district and business owners have indicated a desire for more public parking availability in the CBD for all users.
- Proposed Solution:** Conduct a study to optimize existing parking in the CBD, and to identify and assess opportunities for developing additional public parking, including ADA and bicycle parking
- Identified By:** *City of Troutdale Transportation System Plan (Project M13)*
- In Previous CIP?** No
- Related Project(s):** ST-081, ST-082
4. **Project Name:** Columbia Gorge Bike Hub
- Project Number:** ST-082
- Timeframe:** Immediate
- Estimated Cost:** TBD
- Funding Source:** Grant/Donations, General Fund [Parks]
- Problem:** The CBD is a town center intended to be bicycle-friendly. Additionally, the CBD lies on a very popular bicycle touring route and experiences large, and increasing, bicycle traffic volumes. Bicycle parking and support facilities for cyclists are currently very limited in the CBD, discouraging CBD workers from bicycling and discouraging bicyclists from visiting and stopping in the CBD. Travel Oregon is partnering with Cities (including Troutdale) along the Columbia Gorge and other community groups to develop Bicycle Hubs in each City to provide rest stops and support services for bicycle riders. Troutdale currently lacks such a bike hub.
- Proposed Solution:** Construct a Bike Hub along Historic Columbia River Highway
- Identified By:** Travel Oregon, Chamber of Commerce, City Council
- In Previous CIP?** No
- Related Project(s):** ST-090, ST-081
5. **Project Name:** ADA Transition Plan for PW Facilities
- Project Number:** ST-083
- Timeframe:** Immediate

Estimated Cost: \$ 15,000
Funding Source: Public Works Management Fund
Problem: All municipalities are required to prepare, adopt and pursue an ADA transition plan to remove existing ADA barriers. The City's ADA transition plan is out of date and needs updated.
Proposed Solution: Prepare a new ADA transition plan for Public Works Facilities
Identified By: Staff
In Previous CIP? No
Related Project(s): ST-088

6. **Project Name:** Primary Access to Urban Renewal Area
Project Number: ST-084
Timeframe: Short Term
Estimated Cost: \$2,600,000
Funding Source: Urban Renewal Agency
Problem: The Urban Renewal Area lacks a sufficient primary automobile access road
Proposed Solution: Acquire right-of-way and construct a new public street through the Columbia Factory Outlet Mall property from the intersection of SW 257th Avenue and SW 257th Way to the Urban Renewal Area
Identified By: *Riverfront Renewal Plan, 2006*
In Previous CIP? No
Related Project(s): None

7. **Project Name:** Bicycle Parking in the CBD
Project Number: ST-081
Timeframe: Short Term
Estimated Cost: \$ 30,000
Funding Source: Bike Paths and Trails Fund, Street Fund
Problem: The CBD is a town center intended to be bicycle-friendly. Additionally, the CBD lies on a very popular bicycle touring route and experiences large, and increasing, bicycle traffic volumes. Bicycle parking is currently very limited in the CBD, discouraging CBD workers from bicycling and discouraging bicyclists from visiting and stopping in the CBD.
Proposed Solution: Install bicycle parking in the CBD at one or more locations, including covered/long-term bicycle parking

Identified By: *City of Troutdale Transportation System Plan (Project B18)*
In Previous CIP? No
Related Project(s): ST-072, ST-082

- 8. Project Name:** Shared Roadway Pavement Markings
Project Number: ST-092
Timeframe: Short Term
Estimated Cost: \$ 60,000
Funding Source: Street Fund
Problem: Several bicycle routes in the City do not have sufficient roadway space for separated bicycle lanes and are low-speed roads where bicycles can share the travel lanes with autos
Proposed Solution: Install shared roadway pavement markings
Identified By: *City of Troutdale Transportation System Plan (Projects B11-B15)*
In Previous CIP? No
Related Project(s): None
- 9. Project Name:** Pedestrian Crossings/Traffic Calming in the CBD
Project Number: ST-079
Timeframe: Short Term
Estimated Cost: \$ 150,000
Funding Source: County, Developer, Street Fund, Street Improvement Fund
Problem: The CBD is a town center intended to be pedestrian-oriented, with additional focus on pedestrian safety, accessibility and circulation. Current configuration of Historic Columbia River Highway is auto-oriented and needs to be friendlier and more inviting to pedestrians, encourage pedestrians to circulate between north and south sides of street, and ADA compliant. On-street parking limits site distance for vehicles entering from side-streets. Traffic calming is needed to reduce vehicle speeds and improve vehicular and pedestrian safety.
Proposed Solution: Install curb extensions, including new ADA ramps, along HCRH at Kendall, Buxton, Dora, Harlow and Kibling intersections on north and south sides of HCRH
Identified By: *City of Troutdale Transportation System Plan (Project P37)*
In Previous CIP? No
Related Project(s): None

- 10. Project Name:** Improve Stark Street from 257th to Troutdale Road
- Project Number:** ST-007
- Timeframe:** Short Term
- Estimated Cost:** \$ 3,094,000
- Funding Source:** County/Regional Funds, Street Improvement Fund
- Problem:** This portion of Stark Street needs additional travel lanes, a center turn lane, and bike and pedestrian capacity.
- Proposed Solution:** Widen this portion of Stark Street to provide four travel lanes and a turn lane, reduce vertical and horizontal curves, and construct sidewalks and bike lanes.
- Identified By:** *City of Troutdale Transportation System Plan (Project M4)*
- In Previous CIP?** Yes
- Related Project(s):** SD-S27
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- 11. Project Name:** Halsey Corridor Plan
- Project Number:** ST-089
- Timeframe:** Short Term
- Estimated Cost:** TBD
- Funding Source:** Street Fund, General Fund
- Problem:** A cohesive corridor plan for Halsey Street is needed to provide a consistent and integrated design for the Halsey Street corridor in the cities of Troutdale, Wood Village and Fairview
- Proposed Solution:** Prepare a new Halsey Corridor Plan in collaboration with Multnomah County, Wood Village and Fairview
- Identified By:** Staff
- In Previous CIP?** No
- Related Project(s):** None
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- 12. Project Name:** Construct Pedestrian Access ways
- Project Number:** ST-064
- Timeframe:** Short, Med and Long Term
- Estimated Cost:** \$ 75,000
- Funding Source:** Bike Paths and Trails Fund
- Problem:** Lack of pedestrian connectivity in several areas of the City.
- Proposed Solution:** Construct pedestrian connection access ways in various locations in the City.

Identified By: Staff
In Previous CIP? Yes
Related Project(s): None

13. Project Name: Improve SW Hensley Road – N/S leg
Project Number: ST-012
Timeframe: Medium Term
Estimated Cost: \$ 350,000
Funding Source: Street Improvement Fund, Street Fund
Problem: The north/south leg of SW Hensley does not meet current City street standards due to a lack of curbs, sidewalks and other standard streetscape elements.
Proposed Solution: Improve SW Hensley Road by widening the roadway and constructing curbs, sidewalks, pedestrian crossings and other streetscape elements to meet current standards.
Identified By: *City of Troutdale Transportation System Plan (Project P8)*
In Previous CIP? Yes
Related Project(s): SD-S34, UG-XX

14. Project Name: Signal at Buxton/Historic Columbia River Highway
Project Number: ST-078
Timeframe: Medium Term
Estimated Cost: \$ 1,000,000 (City Share: \$200,000)
Funding Source: County/Regional Funds, Street Improvement Fund
Problem: This intersection is currently stop controlled and experiences heavy volumes during peak hours. Proximity to 257/HCRH intersection creates traffic issues and backups. There is limited opportunity for traffic making a left turn from Buxton onto the Historic Columbia River Highway, resulting in delay and backups on Buxton.
Proposed Solution: Install a traffic signal at the intersection of Buxton Avenue and the Historic Columbia River Highway. Coordinate signal phasing with 257th/Columbia River Highway signal.
Identified By: *City of Troutdale Transportation System Plan (Project M11)*
In Previous CIP? Yes
Related Project(s): None

- 15. Project Name:** Reconstruct and Improve NW Dunbar Avenue
- Project Number:** ST-045
- Timeframe:** Medium Term
- Estimated Cost:** \$ 450,000
- Funding Source:** Street Improvement Fund, Street Fund
- Problem:** NW Dunbar Avenue is too narrow and lacks sidewalks.
- Proposed Solution:** Improve NW Dunbar Avenue by widening it, constructing sidewalks, and making related improvements to bring it to commercial/industrial standard.
- Identified By:** *City of Troutdale Transportation System Plan (Project M14)*
- In Previous CIP?** Yes
- Related Project(s):** SD-N16
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- 16. Project Name:** Pedestrian Bridge from CBD to URA
- Project Number:** ST-085
- Timeframe:** Long Term
- Estimated Cost:** \$ 2,500,000
- Funding Source:** Urban Renewal Agency
- Problem:** There is a lack of direct pedestrian connectivity between the URA and the CBD. The Union Pacific Railroad presents a barrier to developing traditional ground-level pedestrian connections between the CBD and the URA
- Proposed Solution:** Construct a pedestrian bridge over the UPRR right of way between the CBD and the URA
- Identified By:** *Riverfront Renewal Plan, 2006*
- In Previous CIP?** No
- Related Project(s):** None
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- 17. Project Name:** Backage Road (Marine Drive Extension)
- Project Number:** ST-077
- Timeframe:** Long Term
- Estimated Cost:** \$ 8,163,000
- Funding Source:** ODOT STIP, Street Improvement Fund (grant matching funds)
- Problem:** There are congestion and turning movement conflicts on the southern Frontage Road.

Proposed Solution: Construct a roadway from the intersection of Marine Drive/South Frontage Road southerly and easterly to the intersection of 257th Drive/257th Way behind the Frontage Road businesses.

Identified By: *City of Troutdale Transportation System Plan (Project M9)*

In Previous CIP? Yes

Related Project(s): None

18. Project Name: Update the Transportation System Plan

Project Number: ST-086

Timeframe: Long Term (FY 2029-30?)

Estimated Cost: \$100,000

Funding Source: General Fund [Planning]

Problem: The current Transportation System Plan, prepared in 2014, will be in need of update. May also be driven by Periodic Review or other state Planning requirements

Proposed Solution: Prepare an updated Transportation System Plan

Identified By: Staff

In Previous CIP? No

Related Project(s): None

19. Project Name: Sidewalk Infill

Project Number: ST-087

Timeframe: Ongoing

Estimated Cost: \$7,500 annually

Funding Source: Bike Paths and Trails Fund, Street Fund,

Problem: There are numerous gaps in the City's sidewalk system and some streets lack sidewalks entirely

Proposed Solution: Construct sidewalks to infill gaps and to provide sidewalks on streets that have none

Identified By: Staff

In Previous CIP? No

Related Project(s): None

20. Project Name: ADA Infill/Upgrades on Public Streets

Project Number: ST-088

Timeframe: Ongoing

Estimated Cost: \$25,000 annually ||[THI]

Funding Source: Street Fund, Bike Paths and Trails Fund

Problem: The ADA Transition Plan will identify needed ADA infill and upgrade projects

Proposed Solution: Construct new and upgraded ADA facilities on public streets where directed by the ADA Transition Plan

Identified By: Staff

In Previous CIP? No

Related Project(s): ST-083

Water Improvements

- 1. Project Name:** Reservoir Seismic Study
- Project Number:** WA-044
- Timeframe:** Short Term
- Estimated Cost:** \$ 88,000
- Funding Source:** Water Fund
- Problem:** Reservoirs were built prior to the implementation of current seismic standards and appear to be deficient with respect to modern seismic protections. Reservoirs are critical infrastructure to protect life and health during a disaster event. Additionally, reservoir failure in an earthquake could result in significant property damage. Reservoirs should be constructed and equipped to survive the Maximum Credible Earthquake (MCE) event to the maximum extent practicable based on current knowledge and standards.
- Proposed Solution:** Conduct a study to determine the seismic performance of all four of the City's reservoirs under the MCE event scenario and to make specific retrofit recommendations for each reservoir to improve its ability to survive the MCE event without failure or loss of contents. This will inform and determine the specific scopes of work for WA-045 and WA-046.
- Identified By:** *City of Troutdale Water Master Plan, 2012*
- In previous CIP?** Yes
- Related Project(s):** WA-045, WA-046
- 2. Project Name:** Extend Water Line from Spectro (Commerce Court) to Galli Container Storage Property (formerly RMAC)
- Project Number:** WA-028
- Timeframe:** Short Term
- Estimated Cost:** \$ 94,000
- Funding Source:** Water Improvement Fund
- Problem:** The water distribution system is not looped in this area.
- Proposed Solution:** Construct a water line to loop the system. Looping the distribution system in this area increases capacity and reliability by allowing flow from either direction, and improves water quality by eliminating dead ends in the system where water can become stale and accumulate

EXHIBIT B

sediments. This increased capacity and reliability is needed to serve growth in the north industrial area.

Identified By: *City of Troutdale Water Master Plan, 2012, Staff**
In previous CIP? Yes*
Related Project(s): WA-040

*This is a staff-developed variation on the project identified in the Master Plan and prior CIP

3. **Project Name:** Rogers Circle to Spectro (Commerce Court) Water Main Loop
Project Number: WA-040
Timeframe: Short Term
Estimated Cost: \$ 75,000
Funding Source: Water Improvement Fund
Problem: The water distribution system is not looped in this area
Proposed Solution: Construct a water line to loop the system. Looping the distribution system in this area increases capacity and reliability by allowing flow from either direction, and improves water quality by eliminating dead ends in the system where water can become stale and accumulate sediments. This increased capacity and reliability is needed to serve growth in the north industrial area.

Identified By: *City of Troutdale Water Master Plan, 2012/Staff**
In previous CIP? Yes*
Related Project(s): WA-028

*This is a staff-developed variation on the project identified in the Master Plan and prior CIP

4. **Project Name:** Urban Renewal Area to Harlow Place Loop
Project Number: WA-042
Timeframe: Short Term
Estimated Cost: \$ 171,000
Funding Source: Water Improvement Fund, Developer, URA
Problem: The water distribution system is not looped in this area.
Proposed Solution: Construct a water line to loop the system. Looping the distribution system in this area increases capacity and reliability by allowing flow from either direction, and improves water quality by eliminating dead ends in the system where water can become stale and accumulate sediments.. This improvement is needed to serve growth in the URA and along Harlow Place. Additionally, this loop will increase capacity

EXHIBIT B

and reliability of fire flows to serve growth in the north industrial area. Include a PRV at the pressure zone boundary.

Identified By: *City of Troutdale Water Master Plan, 2012*

In previous CIP? Yes

Related Project(s): None

5. Project Name: 7th Street – Kings Byway Water Main Upsizing

Project Number: WA-048

Timeframe: Short Term

Estimated Cost: \$ 435,000

Funding Source: Water Fund

Problem: Modeled fire flows along Kings Byway are below current firefighting standards. Residents along these street experience low pressures when the altitude valve opens due to the higher velocities developed in the existing small main.

Proposed Solution: Upsize the water main in 7th Street and Kings Byway from 6” to 8” diameter.

Identified By: *City of Troutdale Water Master Plan, 2012*

In previous CIP? Yes

Related Project(s): None

6. Project Name: Construct a 1.0 MG Standpipe (Reservoir No. 5) with line to Zone 1

Project Number: WA-008

Timeframe: Medium Term

Estimated Cost: \$ 3,025,000

Funding Source: Water Improvement Fund

Problem: There is inadequate storage for Zones I, II, & III. Zone 6 currently requires booster pumping to maintain adequate service pressures and flows.

Proposed Solution: Construct a 1.0 MG Standpipe to provide additional capacity for fire flow and periods that wells are inoperative or unable to meet demand, with a transmission line connecting to pressure Zone 1 at Stark Street. Interconnect current Zone 6 to incorporate Zone 6 into Zone 1.

Identified By: *City of Troutdale Water Master Plan, 2012*

In previous CIP? Yes

EXHIBIT B

Related Project(s): None

- 7. Project Name:** Rogers Circle to Graham Circle Water Main Loop
Project Number: WA-041
Timeframe: Medium Term
Estimated Cost: \$ 107,000
Funding Source: Water Fund
Problem: The water distribution system is not looped in this area
Proposed Solution: Construct a water line to loop the system. Looping the distribution system in this area increases capacity and reliability by allowing flow from either direction, and improves water quality by eliminating dead ends in the system where water can become stale and accumulate sediments.
Identified By: Staff
In previous CIP? No
Related Project(s): None

- 8. Project Name:** Well No. 9
Project Number: WA-043
Timeframe: Medium Term
Estimated Cost: \$ 2,925,000
Funding Source: Water Improvement Fund
Problem: Firm production capacity of the City's well field will not meet future demands
Proposed Solution: Construct an additional well to provide additional firm production needed to meet future demand
Identified By: *City of Troutdale Water Master Plan, 2012*
In previous CIP? Yes
Related Project(s): None

- 9. Project Name:** Reservoir No. 2 Seismic Improvements
Project Number: WA-045
Timeframe: Long Term
Estimated Cost: \$ 550,000

EXHIBIT B

Funding Source: Water Fund

Problem: Reservoir 2 was built prior to the implementation of current seismic standards and appear to be deficient with respect to modern seismic protections. Reservoirs are critical infrastructure to protect life and health during a disaster event. Additionally, reservoir failure in an earthquake could result in significant property damage. Reservoir 2 is the City's most important reservoir, and also the reservoir with the highest potential property damage consequence in a structural failure. Reservoir 2 should be constructed and equipped to survive the Maximum Credible Earthquake (MCE) event to the maximum extent practicable based on current knowledge and standards.

Proposed Solution: Retrofit seismic upgrades to the reservoir in accordance with the recommendation of a reservoir seismic study

Identified By: *City of Troutdale Water Master Plan, 2012*

In previous CIP? Yes

Related Project(s): WA-044

10. Project Name: Reservoir Nos. 1, 3 and 4 Seismic Improvements

Project Number: WA-046

Timeframe: Long Term

Estimated Cost: \$ 480,000

Funding Source: Water Fund

Problem: Reservoirs 1, 3 and 4 were built prior to the implementation of current seismic standards and appear to be deficient with respect to modern seismic protections. Reservoirs are critical infrastructure to protect life and health during a disaster event. Additionally, reservoir failure in an earthquake could result in significant property damage. Reservoirs 1, 3 and 4 should be constructed and equipped to survive the Maximum Credible Earthquake (MCE) event to the maximum extent practicable based on current knowledge and standards.

Proposed Solution: Retrofit seismic upgrades to the reservoirs in accordance with the recommendation of a reservoir seismic study

Identified By: *City of Troutdale Water Master Plan, 2012*

In previous CIP? Yes

Related Project(s): WA-044

11. Project Name: Upgrade Booster Pump Station No. 2

Project Number: WA-047

EXHIBIT B

Timeframe: Short Term
Estimated Cost: \$ 50,000
Funding Source: Water Fund
Problem: Booster pump station No. 2 boosts pressure and flow to the southernmost service area of the City (Zone 6). The current booster station is under capacity and as a result the service area experiences periods of low pressure and fire flows could be impaired.
Proposed Solution: Upgrade the booster pumping station to increase capacity, providing more reliable service pressures and fire flows.
Identified By: *City of Troutdale Water Master Plan, 2012*
In previous CIP? Yes
Related Project(s): None

12. Project Name: Update the Water Master Plan
Project Number: WA-038
Timeframe: Long Term
Estimated Cost: \$ 125,000
Funding Source: Water Improvement Fund, Water Fund
Problem: The current Water Master Plan was prepared in 2012 and will need updated
Proposed Solution: Update the Waster Master Plan
Identified By: Staff
In previous CIP? No
Related Project(s): None

Sanitary Sewer Improvements

1. **Project Name:** GO Bond Debt Service
Project Number: NA
Timeframe: Through FY 2017-18
Estimated Cost: \$ 11,389,291 (Remaining Balance: \$ 3,555,000)
Funding Source: Sanitary Sewer Improvement Fund (39%), Sewer Fund (28%) and Property Tax (33%).
Problem: Although the new treatment facility constructed with these GO bonds provided for a 47% increase in capacity (from 1.6 mgd to 3.0 mgd), the City Council determined that only 39% of the debt service payments should be paid by the Sanitary Sewer Improvement Fund.
Proposed Solution: Pay 39% of the debt service payment from the Sanitary Sewer Improvement Fund, plus an additional \$1,128,400 originally intended to be paid from SDCs but actually paid from property taxes due to lack of SDC revenue.
Identified By: Staff
In Previous CIP? Yes
Related Project(s): None

2. **Project Name:** Upgrade Pump Station #5 (Beaver Creek Pump Station)
Project Number: SA-046
Timeframe: Immediate (In progress)
Estimated Cost: \$ 750,000
Funding Source: Sewer Fund
Problem: Future flows to this pump station will exceed pumping capacity. The pump station configuration and equipment is aged and in need of upgrades, resulting in operational issues, reliability issues and poor efficiency relative to what can be provided with current technology. Dry well configuration and existing controls and equipment are antiquated and need upgraded to current technology for improved reliability, operability and efficiency.
Proposed Solution: Upgrade the capacity, reliability and efficiency of the pump station by providing pump/motor and control upgrades, and converting to wet well configuration.
Identified By: *City of Troutdale Sanitary Sewer Master Plan, 2013*
In Previous CIP? No

EXHIBIT C

Related Project(s): None

3. Project Name: Wastewater Operations Annex (“GSA Property”) Improvements

Project Number: SA-063

Timeframe: Immediate

Estimated Cost: \$ 35,000

Funding Source: Sewer Fund

Problem: The City acquired this property adjacent to the WPCF through a grant from the Federal Government, for use in support of wastewater operations. The property lacks improvements to render it useable in its intended role. The Federal Government requires that the City improve and utilize the property or risk rescission of the grant.

Proposed Solution: Construct basic improvements on the property, including access and circulation roads and drainage facilities.

Identified By: Staff

In Previous CIP? No

Related Project(s): None

4. Project Name: Onsite Water Recycling System at the WPCF

Project Number: SA-064

Timeframe: Short Term

Estimated Cost: TBD

Funding Source: Sewer Fund

Problem: The WPCF operations and irrigation is one of the largest consumers among the City’s water customers, driving up the total water demand on the City’s system and consuming water resources. This is also a significant expense for the City.

Proposed Solution: Install a water recycling system at the WPCF to recycle treated effluent for use onsite as process water and for irrigating the WPCF grounds.

Identified By: Staff

In Previous CIP? No

Related Project(s): None

EXHIBIT C

- 5. Project Name:** Upgrade Pump Station #2 (Husky Pump Station)
Project Number: SA-040
Timeframe: Short Term
Estimated Cost: \$ 512,000
Funding Source: Sewer Fund
Problem: The pump station needs increased pump and motor capacity, increased wet well capacity, and enhanced motor controls.
Proposed Solution: Upgrade the capacity of the pump station by providing pump/motor, controls, and wet well improvements.
Identified By: *City of Troutdale Sanitary Sewer Master Plan, 2013*
In Previous CIP? Yes
Related Project(s): None
- 6. Project Name:** Pump Station Emergency Backup Power
Project Number: SA- 062
Timeframe: Short, Medium Term
Estimated Cost: \$ 200,000
Funding Source: Sewer Fund
Problem: Several of the City's sanitary sewer pump stations lack onsite emergency power supply and rely on a very limited number of portable generators that must be deployed from the WPCF. In the event of a power outage, especially an outage affecting multiple pump stations, sanitary sewer overflows could occur.
Proposed Solution: Install onsite emergency backup power generators with automatic transfer switches at pump station #'s 2, 3, 4, 6, 7 and 8.
Identified By: Staff
In Previous CIP? No
Related Project(s): None
- 7. Project Name:** Airport to Graham Road Sewer Main Upsizing
Project Number: SA-057
Timeframe: Medium Term
Estimated Cost: \$ 897,000
Funding Source: Developer

EXHIBIT C

- Problem:** The existing segment of sewer main from the Sundial Road to the western end of Perimeter Way (via Graham Road) is undersized with future flows, depending on intensity of industrial development
- Proposed Solution:** Upsize approximately 1,700 linear feet of the sewer main from 8” to 10”
- Identified By:** *City of Troutdale Sanitary Sewer Master Plan, 2013*
- In Previous CIP?** No
- Related Project(s):** None
- 8. Project Name:** South Buxton Road Sewer Main Upsizing
- Project Number:** SA-055
- Timeframe:** Medium Term
- Estimated Cost:** \$ 696,000
- Funding Source:** Sanitary Sewer Improvement Fund, Sewer Fund
- Problem:** Existing sewer mains in the southern segment of S Buxton Road are projected to be under capacity with future growth
- Proposed Solution:** Upsize approximately 1200 linear feet of the sewer mains in S Buxton Road from 8” to 10”
- Identified By:** *City of Troutdale Sanitary Sewer Master Plan, 2013*
- In Previous CIP?** Yes
- Related Project(s):** SA-056
- 9. Project Name:** Upgrade/Replace PS-1, new force main (10-inch, 3,560 feet)
- Project Number:** SA-060
- Timeframe:** Medium Term
- Estimated Cost:** \$ 2,690,000
- Funding Source:** Sanitary Sewer Improvement Fund, Sewer Fund
- Problem:** Future flows to this pump station/force-main will exceed its current capacity. The pump station configuration and equipment is aged and in need of upgrades, resulting in operational issues and poor efficiency relative to what can be provided with current technology. The alignment of the existing force main was based on the location of the old Wastewater Treatment Plant, resulting in flows from this pump station taking an unnecessarily circuitous route to the current WPCF location, which in turn puts unnecessary pressure on other force mains and pump stations along Frontage Road.

EXHIBIT C

Proposed Solution: Upgrade or replace the existing pump station and construct a new 3,560 linear foot, 8" diameter force main directly east through the airport in an existing sanitary sewer easement to Graham Road .

Identified By: *City of Troutdale Sanitary Sewer Master Plan, 2013*

In Previous CIP? No

Related Project(s): None

10. Project Name: Upsize Pump Station #7 (Sundial Pump Station)

Project Number: SA-059

Timeframe: Medium Term

Estimated Cost: \$ 201,000

Funding Source: Developer

Problem: Future flows to PS #7 will exceed existing pumping capacity, depending on intensity of industrial development

Proposed Solution: Install larger pumps

Identified By: *City of Troutdale Sanitary Sewer Master Plan, 2013*

In Previous CIP? No

Related Project(s): None

11. Project Name: Lower Beaver Creek Sewer Main Upsizing

Project Number: SA-056

Timeframe: Long Term

Estimated Cost: \$ 4,744,000

Funding Source: Sanitary Sewer Improvement Fund, Sewer Fund

Problem: Existing sewer main in the southern segment of SE Beaver Creek Lane are projected to be under capacity with future growth

Proposed Solution: Upsize the sewer main

Identified By: *City of Troutdale Sanitary Sewer Master Plan, 2013*

In Previous CIP? No

Related Project(s): SA-055

12. Project Name: WPCF Upgrades

Project Number: SA- 061

EXHIBIT C

Timeframe: Long Term
Estimated Cost: \$ 750,000
Funding Source: Sewer Fund
Problem: Changes in Federal and State NPDES regulations may result in more stringent limitations on Water Pollution Control Facility discharges that the City's WPCF cannot meet with its current treatment systems.
Proposed Solution: Construct additional and/or upgraded treatment systems at the WPCF
Identified By: Staff
In Previous CIP? None
Related Project(s): None

13. Project Name: Update Sanitary Sewer Collection System Master Plan
Project Number: SA-054
Timeframe: Long Term
Estimated Cost: \$ 150,000
Funding Source: Sanitary Sewer Improvement Fund (50%), Sewer Fund (50%)
Problem: The current Sanitary Sewer Master Plan was prepared in 2013 and will need updated
Proposed Solution: Update the Sanitary Sewer Master Plan
Identified By: Staff
In Previous CIP? Yes
Related Project(s): None

Storm Sewer Improvements

1. **Project Name:** Graham Road Storm Drainage
Project Number: SD-N20
Timeframe: Immediate (in progress)
Estimated Cost: \$ 550,000
Funding Source: Storm Sewer Improvement Fund
Problem: There is no developed storm drainage system along NW Graham Road.
Proposed Solution: Construct a storm drainage system on NW Graham Road.
Identified By: Staff
In previous CIP? Yes
Related Project(s): ST-080

2. **Project Name:** Salmon Creek Weir Improvements
Project Number: SD-N21
Timeframe: Immediate (in progress)
Estimated Cost: \$ 130,000
Funding Source: Storm Sewer Improvement Fund
Problem: There are potential storm water capacity problems along Salmon Creek.
Proposed Solution: Relocate and increase the crest length of the existing relief weir located along Salmon Creek and the width of the channel which receives water from the weir. The suggested weir length and the channel width are 50 feet.
Identified By: *North Troutdale Storm Drainage Master Plan, 2007*
In previous CIP? Yes
Related Project(s): None.

3. **Project Name:** Beaver Creek Culverts
Project Number: SD-S27
Timeframe: Immediate (in-progress)
Estimated Cost: \$ 1,178,000 (City share \$100,000)
Funding Source: Storm Sewer Improvement Fund

EXHIBIT D

- Problem:** The Stark Street culvert must be upsized for capacity, upgraded for fish passage and lengthened to accommodate improvements to SE Stark Street. The Troutdale Road culvert requires upgraded fish passage.
- Proposed Solution:** Replace the existing Stark Street culvert with a larger, longer culvert or bridge, with fish passage. Retrofit the Troutdale Road culvert with an upgraded fish passage structure.
- Identified By:** STIP
- In previous CIP?** Yes
- Related Project(s):** ST-007
- 4. Project Name:** Rehabilitate North Evans Outfall
- Project Number:** SD-S28
- Timeframe:** Immediate
- Estimated Cost:** \$ 145,000 (\$125,000 remaining)
- Funding Source:** Storm Sewer Utility Fund
- Problem:** The North Evans outfall bubbler structure is severely undermined and unstable, and its rip-rap toe protection has unraveled and is sloughing away. The outfall structure's foundation is in imminent danger of failure, resulting in loss of the outfall structure and damage to Beaver Creek.
- Proposed Solution:** Rehabilitate and upgrade the outfall by constructing an upgraded foundation for the bubbler, resetting the bubbler, replacing the rip-rap toe protection and adding tie-backs to the slope with soil nails and cabling.
- Identified By:** Staff
- In previous CIP?** Yes
- Related Project(s):** None
- 5. Project Name:** Update the North Troutdale Storm Drainage Master Plan
- Project Number:** SD-N29
- Timeframe:** Immediate
- Estimated Cost:** \$ 100,000
- Funding Source:** Storm Sewer Improvement Fund, Storm Sewer Fund
- Problem:** The current North Troutdale Storm Drainage Master Plan was prepared in 2006 and 2007. Shortly after that, the Port began designing and developing the Troutdale Reynolds Industrial Park, encompassing a large portion of the study area. Concurrently, Multnomah County

EXHIBIT D

Drainage District conducted a complete remodeling of their service area. More recently, the owner of the Edgefield North property has conducted detailed site specific stormwater modeling and design work for that property, which may affect the need for downstream improvements. Considering all of this, it is prudent to update the North Troutdale Master Plan to incorporate the known changes within the study area and the additional information now available. This update may reveal that some currently planned projects are no longer needed, or that other, previously unidentified, projects should be added.

Proposed Solution: Update North Troutdale Storm Drainage Master Plan
Identified By: Staff
In previous CIP? No
Related Project(s): None

6. **Project Name:** Columbia River Highway Bypass
Project Number: SD-N25
Timeframe: Short Term
Estimated Cost: \$ 671,000
Funding Source: Storm Sewer Improvement Fund
Problem: The existing 24-inch drain line located in the Columbia River Highway's railroad underpass does not provide sufficient conveyance capacity for future flows.
Proposed Solution: Install a bypass where future flows leave the drainage area north of Halsey and cross Columbia River Highway. The bypass will consist of 5 elements: 50 feet of 24-inch trenched culvert under Columbia River Highway, 160 feet of 24-inch drain line, 40 feet of 24-inch culvert under a railroad embankment, another 40 feet of 36-inch drain line, and 80 feet of 36-inch culvert under a second railroad embankment.
Identified By: *North Troutdale Storm Drainage Master Plan, 2007*
In previous CIP? Yes
Related Project(s): None

7. **Project Name:** North Arata Creek Drain Line Improvement
Project Number: SD-N23
Timeframe: Short Term
Estimated Cost: \$ 806,000
Funding Source: Storm Sewer Improvement Fund

EXHIBIT D

Problem: There are potential storm water capacity problems along Arata Creek south of Marine Drive with increasing flows from urbanization.

Proposed Solution: Install 160 feet of 48-inch CMP culvert under the railroad immediately upstream of the outlet to Salmon Creek and 520 feet of 48-inch PVC drain line directly west of the airport runway and parallel to the existing drain lines.

Identified By: *North Troutdale Storm Drainage Master Plan, 2007*

In previous CIP? Yes

Related Project(s): None

8. Project Name: South Arata Creek Culvert Improvement

Project Number: SD-N24

Timeframe: Short Term

Estimated Cost: \$ 498,000

Funding Source: Storm Sewer Improvement Fund

Problem: The existing railroad culvert needs to be augmented with an additional culvert to prevent localized flooding in the area immediately upstream of the railroad embankment.

Proposed Solution: Install an additional 470 feet of 36-inch culvert where Arata Creek crosses the railroad embankment north of Interstate 84 and additional piping under the paved area directly north of the embankment.

Identified By: *North Troutdale Storm Drainage Master Plan, 2007*

In previous CIP? Yes

Related Project(s): None

9. Project Name: Marine Drive Culvert Bypass

Project Number: SD-N26

Timeframe: Medium Term

Estimated Cost: \$ 1,042,000

Funding Source: Storm Sewer Improvement Fund

Problem: There is a potential for flooding northeast of the Marine Drive curve.

Proposed Solution: Provide a cross connection between the two south-to-north drainage systems to help balance flows by providing 2100 feet of 36-inch drain line north of and parallel to Marine Drive and an additional 150 feet of 36-inch culvert crossing Marine Drive east of the I-84 Corporate Center.

Identified By: *North Troutdale Storm Drainage Master Plan, 2007*

EXHIBIT D

In previous CIP? Yes
Related Project(s): None.

10. Project Name: NW Dunbar Avenue Storm Line
Project Number: SD-N16
Timeframe: Medium Term
Estimated Cost: \$ 395,000
Funding Source: Storm Sewer Improvement Fund
Problem: When NW Dunbar Avenue is improved, a new storm water collection and conveyance system will be required.
Proposed Solution: Construct a new storm water collection and conveyance system for NW Dunbar Avenue.
Identified By: Staff
In previous CIP? Yes
Related Project(s): ST-045

11. Project Name: SE 3rd Street and SE Dora Main Upsizing
Project Number: SD-S29
Timeframe: Medium Term
Estimated Cost: \$ 200,000
Funding Source: Storm Sewer Utility Fund
Problem: Potential flooding along 3rd and Dora Streets during high flow events due to insufficient capacity in the mains
Proposed Solution: Upsize approximately 453 linear feet of the storm sewer mains in Dora Avenue from 12" to 15"
Identified By: *South Troutdale Storm Drainage Master Plan, 2012*
In previous CIP? Yes
Related Project(s): None

12. Project Name: SE 21st Street Main Upsizing
Project Number: SD-S30
Timeframe: Medium Term
Estimated Cost: \$ 156,000
Funding Source: Storm Sewer Utility Fund

EXHIBIT D

Problem: Potential flooding along SE 21st Street during high flow events due to insufficient capacity in the main

Proposed Solution: Upsize approximately 364 linear feet of the storm sewer mains in SW 21st Street from 12” to 15”

Identified By: *South Troutdale Storm Drainage Master Plan, 2012*

In previous CIP? Yes

Related Project(s): None

13. Project Name: Sandee Palisades Detention Pond Retrofit

Project Number: SD-S31

Timeframe: Short Term

Estimated Cost: \$ 201,000

Funding Source: Storm Sewer Utility Fund

Problem: There is no storm water quality treatment for existing development in this area of the City. The City’s NPDES MS4 permit requires that the City take incremental steps to provide treatment to existing developed areas in the City.

Proposed Solution: Retrofit the existing detention pond to provide add stormwater quality treatment capability

Identified By: *South Troutdale Storm Drainage Master Plan, 2012*

In previous CIP? Yes

Related Project(s): None

14. Project Name: Strawberry Meadows Detention Pond Retrofit

Project Number: SD-S32

Timeframe: Medium Term

Estimated Cost: \$ 135,000

Funding Source: Storm Sewer Utility Fund

Problem: There is no storm water quality treatment for existing development in this area of the City. The City’s NPDES MS4 permit requires that the City take incremental steps to provide treatment to existing developed areas in the City.

Proposed Solution: Retrofit the existing detention pond to add stormwater quality treatment capability

Identified By: *South Troutdale Storm Drainage Master Plan, 2012*

EXHIBIT D

In previous CIP? Yes
Related Project(s): None

15. Project Name: Hensley Road Storm Drainage – N/S Leg
Project Number: SD-S34
Timeframe: Medium Term
Estimated Cost: TBD
Funding Source: Storm Sewer Improvement Fund; Storm Sewer Utility Fund
Problem: Street widening and improvements to the N/S leg of SW Hensley Road will necessitate the provision of storm drainage systems to serve the improved roadway.
Proposed Solution: Install storm drainage facilities associated with roadway improvements on the N/S leg of SW Hensley Road
Identified By: Staff
In previous CIP? No*
Related Project(s): ST-012, UG-XX

* The Hensley Road street improvements have long been in the Transportation CIP, but there has not been a corresponding storm drainage project in the CIP previously

16. Project Name: Stuart Ridge Detention Pond Retrofit
Project Number: SD-S33
Timeframe: Long Term
Estimated Cost: \$ 117,000
Funding Source: Storm Sewer Utility Fund
Problem: There is no storm water quality treatment for existing development in this area of the City. The City’s NPDES MS4 permit requires that the City take incremental steps to provide treatment to existing developed areas in the City.
Proposed Solution: Retrofit the existing detention pond to provide add stormwater quality treatment capability
Identified By: *South Troutdale Storm Drainage Master Plan, 2012*
In previous CIP? Yes
Related Project(s): None

EXHIBIT D

- 17. Project Name:** Pump Station Upgrade, Phase II
Project Number: SD-N07B
Timeframe: Long Term
Estimated Cost: \$ 602,000
Funding Source: Storm Sewer Improvement Fund, Storm Sewer Utility Fund.
Problem: There will be inadequate pumping capacity at the Sandy Drainage Improvement Company's pump station with future flows from urbanization.
Proposed Solution: Construct additional pumping and/or storage capacity.
Identified By: North Troutdale Storm Drainage Master Plan, March 1990, prepared by David J. Newton Associates, Inc.
In previous CIP? Yes
Related Project(s): None
- 18. Project Name:** Unified Storm Drainage Master Plan
Project Number: SD-SN1
Timeframe: Long Term
Estimated Cost: \$ 150,000
Funding Source: Storm Sewer Improvement Fund, Storm Sewer Fund
Problem: The North Troutdale Storm Drainage Master Plan, prepared in 2007, and South Troutdale Storm Drainage Master Plan, prepared in 2012, will be outdated and in need of update. These master plans should be unified in the future.
Proposed Solution: Update both the North and South Troutdale Storm Drainage Master Plans in a new unified City of Troutdale Storm Drainage Master Plan
Identified By: Staff
In previous CIP? No
Related Project(s): None

Parks Improvements

- 1. Project Name:** Update Parks Master Plan
- Project Number:** PA-001
- Timeframe:** Immediate
- Estimated Cost:** \$ 50,000
- Funding Source:** Parks Improvement Fund; General Fund [Parks]
- Problem:** The Parks Master Plan, prepared in 2006, and the Glenn Otto Park Master Plan, prepared in 2002, are near the end of their planning horizon. Changes in population forecasts, demographics, community needs and land availability render the existing Park Master Plan and Glenn Otto Park Master Plan antiquated and in need of update.
- Proposed Solution:** Prepare a new Parks Master Plan, including a new Glenn Otto Park master Plan.
- Identified By:** Staff
- In previous CIP?** Yes
- Related Project(s):** None
- 2. Project Name:** Improve Existing Parks PH I
- Project Number:** PA-002
- Timeframe:** Short Term
- Estimated Cost:** \$ 2,148,992
- Funding Source:** Parks Improvement Fund, Parks Fund
- Problem:** Increases in population and intensification of use at various parks, together with existing deficiencies at various parks, necessitates improvements, upgrades and additional amenities.
- Proposed Solution:** Make improvements at various parks to meet growth needs and provide desired upgrades as described in tables 6.11-6.13 of the *Parks Master Plan, 2006*.
- Identified By:** *Parks Master Plan, 2006*
- In previous CIP?** Yes
- Related Project(s):** PA-007
- 3. Project Name:** Special Use Park Development
- Project Number:** PA-003
- Timeframe:** Short Term
- Estimated Cost:** \$ 4,000,000

EXHIBIT E

Funding Source: Urban Renewal Agency
Problem: The Urban Renewal Area will require public parks space including special use space that will complement the URA and the riverfront
Proposed Solution: Develop approximately 2.0 acres of the former STP site as a special use park.
Identified By: *Parks Master Plan, 2006; Riverfront Renewal Plan*
In previous CIP? Yes
Related Project(s): None

4. **Project Name:** Neighborhood Park Site Acquisition PH I
Project Number: PA-004
Timeframe: Short Term
Estimated Cost: \$ 1,075,000
Funding Source: Parks Improvement Fund
Problem: Increases in population necessitate the acquisition of additional neighborhood park land to meet the City's established Level of Service standard
Proposed Solution: Acquire approximately 4.0 acres of neighborhood park land in growing areas of the City
Identified By: *Parks Master Plan, 2006*
In previous CIP? Yes
Related Project(s): PA-006, PA-008

5. **Project Name:** Community Park Site Acquisition
Project Number: PA-005
Timeframe: Short/Medium Term
Estimated Cost: \$ 1,881,250
Funding Source: Parks Improvement Fund
Problem: Increases in population necessitate the acquisition of additional community park land to meet the City's established Level of Service standard
Proposed Solution: Acquire approximately 7.0 acres of community park land to meet growth needs
Identified By: *Parks Master Plan, 2006*
In previous CIP? Yes
Related Project(s): None

EXHIBIT E

- 6. Project Name:** Neighborhood Park Development
Project Number: PA-006
Timeframe: Short/Medium Term
Estimated Cost: \$ 400,000
Funding Source: Parks Improvement Fund
Problem: Neighborhood park land acquired in Project PA-004 will need to be developed with park improvements and amenities
Proposed Solution: Develop approximately 4.0 acres of neighborhood park land to meet growth needs
Identified By: *Parks Master Plan, 2006*
In previous CIP? Yes
Related Project(s): PA-004
- 7. Project Name:** Improve Existing Parks PH II
Project Number: PA-007
Timeframe: Short/Medium Term
Estimated Cost: \$ 1,074,496
Funding Source: Parks Improvement Fund, Parks Fund
Problem: Increases in population and intensification of use at various parks, together with existing deficiencies at various parks, necessitates improvements, upgrades and additional amenities.
Proposed Solution: Make improvements to existing parks to meet growth needs and provide desired upgrades as described in tables 6.11-6.13 of the *Parks Master Plan, 2006*.
Identified By: *Parks Master Plan, 2006*
In previous CIP? Yes
Related Project(s): PA-002
- 8. Project Name:** Neighborhood Park Site Acquisition PH II
Project Number: PA-008
Timeframe: Short/Medium Term
Estimated Cost: \$ 919,125
Funding Source: Parks Improvement Fund
Problem: Increases in population necessitate the acquisition of additional neighborhood park land to meet the City's established Level of Service standard

EXHIBIT E

Proposed Solution: Acquire approximately 3.42 acres of neighborhood park land in growing areas of the City
Identified By: *Parks Master Plan, 2006*
In previous CIP? Yes
Related Project(s): PA-004

9. Project Name: Community Park Site Development
Project Number: PA-009
Timeframe: Short/Medium Term
Estimated Cost: \$ 400,000
Funding Source: Parks Improvement Fund
Problem: Community park land acquired in project PA-005 will need to be developed with park improvements and amenities
Proposed Solution: Develop approximately 7 acres of community parks in growing areas of the City
Identified By: *Parks Master Plan, 2006*
In previous CIP? Yes
Related Project(s): PA-005

10. Project Name: Pathway Trails Development PH I
Project Number: PA-010
Timeframe: Short/Medium Term
Estimated Cost: \$ 388,080
Funding Source: Parks Improvement Fund
Problem: Additional pathway and trail development is need to complete the "40-mile loop"
Proposed Solution: Develop approximately 1 linear mile of pathway/trails to complete the "40-mile loop" trail on the levee and along Harlow Place
Identified By: *Parks Master Plan, 2006*
In previous CIP? Yes
Related Project(s): PA-015

11. Project Name: Improve Existing Parks PH III
Project Number: PA-011
Timeframe: Short/Medium Term

EXHIBIT E

Estimated Cost: \$ 1,074,496
Funding Source: Parks Improvement Fund
Problem: Increases in population and intensification of use at various parks, together with existing deficiencies at various parks, necessitates improvements, upgrades and additional amenities.
Proposed Solution: Make improvements to existing parks to meet growth needs and provide desired upgrades as described in tables 6.11-6.13 of the *Parks Master Plan, 2006*.
Identified By: *Parks Master Plan, 2006*
In previous CIP? Yes
Related Project(s): None

12. Project Name: Neighborhood Park Site Development PH II
Project Number: PA-012
Timeframe: Long Term
Estimated Cost: \$ 342,000
Funding Source: Parks Improvement Fund
Problem: Neighborhood park land acquired in Project PA-008 will need to be developed with park improvements and amenities
Proposed Solution: Develop approximately 3.42 acres of neighborhood parks in growing areas of the City
Identified By: *Parks Master Plan, 2006*
In previous CIP? Yes
Related Project(s): PA-008

13. Project Name: Community Park Site Acquisition PH II
Project Number: PA-013
Timeframe: Long Term
Estimated Cost: \$ 1,773,750
Funding Source: Parks Improvement Fund
Problem: Increases in population necessitate the acquisition of additional community park land to meet the City's established Level of Service standard
Proposed Solution: Acquire approximately 6.6 acres of land for community parks to meet growth needs
Identified By: *Parks Master Plan, 2006*
In previous CIP? Yes

EXHIBIT E

Related Project(s): None

14. Project Name: Community Park Site Development PH II
Project Number: PA-014
Timeframe: Long Term
Estimated Cost: \$ 660,000
Funding Source: Parks Improvement Fund
Problem: Community park land acquired in Project PA-013 will need to be developed with park improvements and amenities
Proposed Solution: Develop approximately 6.6 acres of community park land to meet growth needs
Identified By: *Parks Master Plan, 2006*
In previous CIP? Yes
Related Project(s): PA-013

15. Project Name: Pathways/Trails Development PH II
Project Number: PA-015
Timeframe: Long Term
Estimated Cost: \$1,090,320
Funding Source: Parks Fund
Problem: Additional pathway and trail development is needed to meet the City's desired level of service
Proposed Solution: Develop approximately 5.9 linear miles of pathway/trails
Identified By: *Parks Master Plan, 2006*
In previous CIP? Yes
Related Project(s): PA-010

16. Project Name: Neighborhood Park Acquisition and Development PH III
Project Number: PA-016
Timeframe: Long Term
Estimated Cost: \$ 1,851,125
Funding Source: Parks Fund
Problem: Existing deficiencies in neighborhood park land necessitate the acquisition and development of additional neighborhood parks to meet the City's Level of Service standard

EXHIBIT E

Proposed Solution: Acquire and develop approximately 5.02 acres of land as neighborhood parks

Identified By: *Parks Master Plan, 2006*

In previous CIP? Yes

Related Project(s): None

17. Project Name: Community Park Acquisition and Development PH III

Project Number: PA-017

Timeframe: Long Term

Estimated Cost: \$ 2,603,375

Funding Source: Parks Fund

Problem: Existing deficiencies in community park land necessitate the acquisition and development of additional community park land to meet the City's Level of Service standard

Proposed Solution: Acquire and develop approximately 7.06 acres of land as a community park

Identified By: *Parks Master Plan, 2006*

In previous CIP? Yes

Related Project(s): None