Appendix A

Figures
Figure 2

Floodplains

Wastewater Master Plan

Legend

- 500 Year Floodplain
- 100 Year Floodplain
- City Limits
- UGB

City of Newberg, OR
May 2018
Figure 3

Legend

City Limits
UGB
Silty Clay Loam
Silt Loam
Wastewater Master Plan
City of Newberg, OR
May 2018
Legend

- City Limits
- UGB
- Streams
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Riverine

Wetlands
Wastewater Master Plan

Figure 4
City of Newberg, OR
May 2018
Legend

- City Limits
- UGB
- Diversion Chamber
- Flush Tank
- Pump Station
- Manhole
- Gravity Main
- Force Main
- Private Pump Station
- Existing System - Pipe Diameter

Figure 5

Wastewater Master Plan

City of Newberg, OR
May 2018
Legend

- City Limits
- UGB
- Diversion Chamber
- Manhole

**Force Main**
- Pump Station

**Gravity Main**
- Concrete (CONC)
- AC
- C-900
- DI
- CI
- PVC
- CLAY
- RCP
- Unknown

Existing System - Pipe Material

Wastewater Master Plan

City of Newberg, OR
May 2018

Figure 6
Figure 9

Flow Monitoring Locations

Wastewater Master Plan

City of Newberg, OR
May 2018
Figure 10

Existing System Evaluation - Peak Flows (PIF5)

Wastewater Master Plan

City of Newberg, OR
May 2018
Figure 12
City of Newberg, OR
May 2018
20-Year System Evaluation - Peak Flows (PIF5)

Wastewater Master Plan

City of Newberg, OR
May 2018
Problem Areas

A - Pinehurst Ct, topographic low point
B - N. Main St, downstream bottleneck
C - HWY240 LS, undersized pumps
D - Excess flows from HWY240
E - S. River St, undersized
F - Wynooski St, downstream bottleneck
G - Villa Rd, downstream bottleneck
H - Hess Creek, undersized and limited or no access to line
I - S. Springbrook Rd, undersized and topographic low point
J - Fernwood/Springbrook Rd, undersized

Buildout System Evaluation - Peak Flows (PIF5)

Wastewater Master Plan

City of Newberg, OR
May 2018
Springbrook Road Alternatives

Wastewater Master Plan

City of Newberg, OR
May 2018
South River Street Improvements
Wastewater Master Plan

City of Newberg, OR
May 2018
Figure 19

Additional Improvements & Lift Station Consolidation
Wastewater Master Plan
Pipe Condition 1-10 PACP Score

Wastewater Master Plan

Figure 22

City of Newberg, OR
May 2018
2017 Smoke Testing Priorities

Wastewater Master Plan

City of Newberg, OR
May 2018

Legend
- UGB
- City Limits
- WWTP
- Lift Station
- Manhole
- Force Main
- Gravity Main
- 2015 I/I Study Smoke Testing
- Priority 1 (19,200 LF)
- Priority 2 (14,400 LF)
- Priority 3 (34,100 LF)
- Priority 4 (20,700 LF)
- Priority 5 (10,400 LF)

Source: ESRI, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, INRADA, IGN and the GIS User Community
Smoke Testing Results

Wastewater Master Plan

Figure 26
City of Newberg, OR
May 2018