



MCMINNVILLE LANDING INNOVATION DISTRICT

Infrastructure Assessment and Funding Plan

McMinnville, Oregon

Job No. 24001418

Prepared for:

City of McMinnville

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MCMINNVILLE LANDING INNOVATION DISTRICT

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1.0 INTRODUCTION

The McMinnville Landing Innovation District (The Landing) is an approximately 190 Acre development within the City of McMinnville city limits. The purpose of the master plan was to develop a development framework from which development would meet the primary landholder and city objectives of providing a vibrant development to spur economic development within the city. The framework divided the property into three land blocks: Commercial (44 Ac), Employment (101 AC), Parks/Open Space (36 AC) and Right of Way (9 AC).

The purpose of this report was to review existing information on the infrastructure available to support the development, the condition of that infrastructure, and conceptualize the public improvements necessary to foster individual parcel development proposals within The Landing.

The following analysis provides information on the existing conditions, design considerations and conceptual pricing/funding strategies for the initial public improvements within The Landing property boundary. There are external infrastructure needs necessary to adequately serve The Landing, but those costs are identified as Capital Improvement Program (CIP) elements withing the ongoing master plan efforts that are required to serve properties within the City of McMinnville city limits. Ongoing studies include:

- Sanitary Sewer Master Plan
- Water System Master Plan
- Transportation System Plan
- Airport Master Plan

Each of these plans, once completed, will provide specific recommendations on city wide infrastructure improvements necessary to serve the area with which The Landing property resides. At the time of this report these discrete recommendations were not available and sections have been provided within this report to include those recommendations when they are published to complete the final report and provide documentation on how The Landing fits within the city-wide infrastructure development.

2.0 STORM DRAINAGE

2.1 EXISTING CONDITIONS

The existing system is limited in both capacity and depth by the current infrastructure in NE Three Mile Lane (which is controlled by the Oregon Department of Transportation) and therefore cannot provide service to The Landing.

2.2 STORMWATER DESIGN CONSIDERATIONS

The City of McMinnville currently does not have adopted stormwater management requirements or an MS4 but follow Oregon Drainage Law in the implementation of

stormwater improvements within the city. It may be some time until a DEQ MS4 permit, and its requirements are adopted by the City. In absence of these regulations the City feels it prudent that stormwater be addressed as part of The Landing infrastructure analysis. McMinnville's Storm Drainage Master Plan was not adopted by the City Council but provides a published record of storm water criteria in Appendix E, Design and Construction Standards for storm drainage. Without other published data for the city, these criteria were used as the basis of analysis for The Landing storm sewer infrastructure. The Master Plan identifies two basins within The Landing property, East End Basin K (E-K) and East End Basin L0 (E-L0). These basins have been delineated on the Storm Drainage plan, Figure 1 (Appendix A), with E-K discharging to the existing drainage to the west and E-L0 discharging to the south to the South Yamhill River. Final engineering should review if a single facility can be used for The Landing to limit downstream modifications and costs and provide a single point of discharge to the South Yamhill River without detention rather than over existing farmland outside the Urban Growth Boundary (UGB).

The standards provide the following guidance:

- Stormwater Detention:
 - The stormwater manual indicates that detention is not required when discharging directly to the South Yamhill River so basin E-L0 would be providing no detention, only water quality prior to discharge.
 - Stormwater detention, if required, needs to restrict the 10-yr post condition to the pre-existing condition per the rational method.
- Stormwater Quality:
 - Grassy Swales – During design of the infrastructure, infiltration test should be conducted to assure adequate dissipation of the wet wells particularly basin EL-0 and potentially design a large grassy swale or mechanical treatment for water quality if infiltration rates are not sufficient.
 - Water Quality Flows estimated for 2-yr event:
Basin E-K – 46 Cubic Feet per Second (CFS)
Basin E-L0 – 63 CFS
 - Wet Ponds – The wet ponds illustrated on Figure 1 are sized to provide regional facilities for both basins. City public works has indicated there is concern with the ability of existing soils to adequately infiltrate storms to prevent bird attraction and therefore conflict with the adjacent airport.
 - Estimated Pond Volumes for Wet Ponds:
Basin E-K - 375,000 Cubic Feet (CF)
Basin E-L0 - 495,000 CF

- Pipe Sizing: Pipes have been conceptually sized (minimum size twelve”) for the projected discharges for the basins to allow for project cost estimating: (Flows are conceptual and final analysis conducted during final engineering)
 - E-K 50-yr discharge to basin estimated at 87 CFS.
 - E-L0 50-yr discharge to basin estimated at 117 CFS.

3.0 SANITARY SEWER

3.1 EXISTING CONDITIONS

Sanitary sewer infrastructure is owned and operated by the City of McMinnville. There is existing gravity sewer infrastructure in both NE Three Mile Lane and NE Norton Lane. The wastewater master plan (WWMP) is currently being updated by the City’s consultant team and a copy of the plan was not available at the time of this report’s publication. The master plan team indicated that there are upstream and downstream deficiencies with the existing system that will impact development on The Landing. A review of the Public Facilities Plan’s Capital Improvement Plan (CIP) provides the following improvements required to adequately serve The Landing: (Note - will be completed when available through either an addendum to the report or as a reprint for a final issue)

1. CIP Item	\$XXX	Year identified.
2. CIP Item	\$XXX	Year identified.
3. CIP Item	\$XXX	Year identified.

Based upon review of the gravity sewer infrastructure within NE Three Mile Lane Area it was determined that the available gravity system could not serve the entire property without pump station within The Landing or downstream modifications to support gravity service to the entire property.

3.2 SANITARY SEWER DESIGN CONSIDERATIONS

The City of McMinnville currently uses the Oregon Department of Transportation (ODOT) Standard Specification for Construction, 2021 as the basis of their construction of public sanitary sewer infrastructure. The following design parameters were used to prepare The Landing sanitary sewer infrastructure:

- Six-foot minimum depth for sanitary sewer mains.
- Eight-inch minimum size for infrastructure sanitary sewer mains with ten-inch pipes estimated for piping to The Landing pump station.
- Minimum pipe slope 0.004 ft/ft
- Per the master plan sanitary sewer usage is estimated to be 30 gallons per day per acre (GPD/AC) for commercial property and 24 GPD/AC for employment.
- Work is ongoing with the master plan team to determine public pump station

sizing and costs but have not been provided final information at the time of this report.

- Using 30 GPD/employee and 24 employees per acre and 300 GPD/EDU The Landing would develop approximately 610 EDUs over the site. This results in an estimated peak hourly demand (PHD) for the pump station of approximately 350 GPM. This is based on the number of employees when you add an additional 30% for process discharge in the employment areas a conceptual estimate for The Landing pump station would be 450 GPM.

3.3 DEVELOPMENT ALTERNATIVES

The property cannot be entirely served by the existing gravity sewer system in NE Three Mile Lane. The sanitary sewer plan, Figure 2 (Appendix A), illustrates a conceptual layout within the spine roads and potential extension of the system throughout The Landing with discharge to a pump station located in the SW corner of the site and ultimate discharge to the gravity system near the NW corner of the property in NE Three Mile Lane.

The master plan team is looking at the entire sanitary sewer collection system within the city and their analysis has indicated several deficiencies in the existing infrastructure including gravity sewer capacity requiring upsizing/deepening and pump station upgrades. Analyzing the options for the area in and around The Landing, the WWMP team has developed three alternatives to meet the needs of The Landing and the greater system outside The Landing. The alternatives are listed below. Their final report will need to be reviewed, and the Preferred Alternative incorporated into the final infrastructure plan for The Landing.

- Alternative 1 – Innovation campus develops with new gravity system within the property and a public pump station that serves only The Landing. This requires downstream upsizing and upgrade of the existing PS Three Mile Lane – 3 pump station at the intersection of NE Three Mile Lane and SE Cumulus Avenue.
- Alternative 2 – Decommission the pump station at SE Cumulus Avenue, upsize and deepen the gravity piping within The Landing to accommodate the additional off-site flow and upsize The Landing pump station and force main.
- Alternative 3 – Decommission the pump station at SE Cumulus Avenue, upsize and deepen the gravity piping within The Landing to accommodate the additional off-site flow and deepen downstream gravity piping to eliminate the need for The Landing pump station.

Any one of these alternatives would provide adequate public sanitary sewer service to The Landing. Alternatives 2 & 3 would have a significant impact on the sanitary

sewer infrastructure cost for The Landing and the incremental cost would need to be identified and allocated to the City CIP rather than the cost of developing The Landing.

4.0 WATER

4.1 EXISTING CONDITIONS

The water system is owned and operated by McMinnville Water and Light (MWL). The existing water infrastructure adjacent to the Innovation Center consists of a series of underground mains connected to their reservoir system that maintains a constant pressure zone of 80-100 Punds per Square Inch (psi). Although the system has sufficient capacity, the consultants for the water system masterplan which is currently under way indicates that upstream restrictions may impact fire flow to The Landing. Fire flow demand may require upsizing mains in The Landing which is not standard policy of MWL. A review of the masterplan and capital improvement plan (CIP) with timing of improvements provide the follow improvements required to adequately serve The Landing: (Note - will be completed when available through either an addendum to the report or as a reprint for a final issue)

- | | | |
|-------------|-------|------------------|
| 1. CIP Item | \$XXX | Year identified. |
| 2. CIP Item | \$XXX | Year identified. |
| 3. CIP Item | \$XXX | Year identified. |

4.2 WATER SYSTEM DESIGN CONSIDERATIONS

The Water Main Plan, Figure 3 (Appendix A), provides a conceptual layout of the water mains using standard sizing for fire flow without upsizing to compensate for upstream deficiencies. A review of the final water system master plan should be completed to determine if adjustments to the proposed layout is necessary.

MWL has also indicated that their long-range planning (20-30 years out) has a new water treatment plant to treat water from the Willamette River to be located just south of the Willamette Valley Medical Center. This placement could require a 36-inch raw water line to be located within The Landing Street network and a 36-inch treated waterline leaving the treatment facility to be placed within The Landing Street network. These have not been added to Figure 2 due to the long-range nature and uncertainty of siting the treatment facility and routing needs. Coordination with MWL will need to be conducted during design of The Landing Street network to allow for the future facilities. For purposes of The Landing infrastructure costs, these facilities are not being included since the cost of this work would be solely covered by MWL.

In developing The Landing water system layout, the following design considerations were used: (Work is ongoing with the masterplan team on water demand estimates for the property)

- Mains to be minimum twelve (12") for a maximum of 8 FPS at fire flow demands. These were indicated on the spine roads and secondary piping will need to be evaluated for fire flow demands as the pipes are extended within The Landing.
- Hydrants will be installed at six hundred feet on-center.
- Pipe will be C52 D.I. pipe with tyton/fastite joints.
- Butterfly valves on 12-inch pipes and Gate Valves on smaller pipes.

5.0 DRY UTILITIES

5.1 POWER AND COMMUNICATIONS

The power supply system is owned and operated by McMinnville Water and Light (MWL). There is currently a distribution system (primarily overhead, with some underground) located on the north side of NE Three Mile Lane. The distribution system in this area currently does not have sufficient capacity to serve The Landing.

MWL intends to purchase land south of the Willamette Medical Center (adjacent to where they intend to site a water treatment facility) and construct a new substation within the next five years to support development in this area. An over-head transmission line will be installed to supply the substation, and it will come from the west along NE Three Mile Lane to the substation and extend south which may require a 50-foot power easement through the Innovation Center to feed the substation. This easement will need to be coordinated with MWL and the master plan team to identify a suitable location.

Fiber communications, also controlled by MWL, will follow the power facilities, when installed, and be available to The Landing. The Dry Utilities Plan, Figure 4 (Appendix A) provides a conceptual layout of The Landing.

MWL has indicated that placement of primary power/communication infrastructure should not be placed under sidewalks. This requirement conflicts with the guiding principles of establishing an urban streetscape with buildings placed adjacent to the Right-of-Way. Further discussion with providers will need to come to a consensus on utility placement. During development, the team will need to coordinate closely with MWL to determine placement of vaults, sectionalization cabinets and equipment within easements that can be integrated into the fabric of the development while meeting the standards of MWL.

5.2 NATURAL GAS

Natural gas in this area is supplied by Northwest Natural Gas Company (NWN). They currently have facilities located in NE Three Mile Lane adjacent to the property. There are four-inch (4") and 4.5" lines in NE Three Mile Lane and a two-inch (2") line extending to the Medical Center on the west side of the property. NWN has indicated that these lines have sufficient capacity to serve The Landing. MWL has indicated they do not allow gas to be in a joint trench with power, so Figure 4 shows the NWN line behind the ROW within a 5-foot Public Utility Easement (PUE). Again, this goes against the guiding principles of establishing an urban streetscape and exact placement will need to be worked out with NWN and MWL.

6.0 STREET INFRASTRUCTURE

6.1 EXISTING CONDITIONS

There are currently no public streets within The Landing. SE Stratus Avenue is currently a private street serving the Willamette Valley Medical Center and runs along the west edge of the property. SE Cumulus Avenue enters the site on the north and provides private access to properties east of The Landing as well as access the McMinnville Airport west terminal area.

6.2 INTERNAL STREET DESIGN CONSIDERATIONS

The city intends to update their 2010 Transportation System Plan (TSP) and streets within The Landing will be classified accordingly based upon the recommendations of that update. Rights-of-Way indicated on the

The exact configuration at NE Three Mile Lane will be developed through coordination with ODOT. For the purposes of the primary infrastructure analysis and cost estimating a single typical section for a major collector was used for the “spine roads” which are the east/west extension of SE Stratus Ave to SE Cumulus Avenue and the southern extension of SE Cumulus Avenue. Additional streets within the campus would likely utilize a minor collector or local street typical section, to be determined in the upcoming TSP planning process.

Spine Roads - Major Collector: (East/West spine road, SE Stratus Avenue along west property line and SE Cumulus Avenue from the east/west spine road to NE Three Mile Lane)

- 44-foot curb to curb width (2'-11' travel lanes, 1-12' median lane, five' bike lanes) per City of McMinnville Drawing No. 40.
- Concrete Curb and Gutter
- 10-foot sidewalks with tree wells (from face of curb)
- Right-of-Way width seventy-eight feet
- Seven-foot City utility zone behind sidewalk and eight-foot PUE behind ROW. (Note: The “dry utility placement behind the sidewalk is the desire of MWL and conflicts with the guiding principles of establishing an urban streetscape with buildings place to the Right-of-Way. This will require further discussions with providers to come to a consensus on utility placement)

The current Airport Master Planning effort indicates that Cumulus Avenue will provide public access to the west terminal area as well as a planned park on airport property. Coordination will be necessary during final design of the eastly properties to provide adequate public infrastructure access to the west terminal area and any cross-fence integration with the airport.

7.0 PRIMARY PUBLIC INFRASTRUCTURE PRICING

A conceptual cost opinion has been developed for the primary public infrastructure within The Landing to provide access and utilities to facilitate development on the site. The secondary infrastructure needed to serve the site will be addressed in the City's infrastructure master plan updates (water, sewer and transportation) with a summary provided in Section 8.0.

The primary public infrastructure consists of the following elements:

1. The two spine roads and development of SE Stratus Ave west of the Willamette Valley Medical Center to City street standards. (Will require cooperation with the Medical Center)
2. Storm infrastructure in the streets and to the discharge points including treatment, if required.
3. Sanitary Sewer in the spine streets and a pump station to serve The Landing.
4. Water System within the spine streets, subs for extensions and two taps to the existing waterlines in Three Mile Lane.
5. Dry utilities to include power, fiber and trenching for natural gas.
6. Earthwork has not been estimated to either cut or fill the entire site as this is a high-level estimate and only nominal earthwork estimates have been included for the street infrastructure and allowances provided for the regional stormwater ponds.

The costs provided in this study are for service within The Landing and connection to infrastructure capable of supporting the proposed masterplan development. Consideration has not been provided for upsizing facilities to support city wide improvements that could be implemented to or through The Landing.

Unit pricing has been based upon discussions with local contractors. Discussions with the master planning teams are on-going and unit pricing consistent with the master planning efforts was not available at the time of this report. Pricing will be updated and validated with a summary of the pricing provided below with a detailed estimate in Appendix B:

Table 6.1 – Cost Opinion

Description	Estimated Amount (Rounded to \$100K)
Streets	\$4,000,000
Storm Drainage	\$1,600,000
Sanitary Sewer System	\$2,300,000
Water System	\$1,100,000

Description	Estimated Amount (Rounded to \$100K)
Dry Utilities	\$1,600,000
Estimated Construction Costs:	\$10,600,000
Mobilization/Overhead 10%	\$1,000,000
Construction Contingency 30%	\$3,200,000
Total Estimated Construction Costs:	\$14,800,000
City Administration 10%	\$1,500,000
Engineering/Testing/Permitting 25%	\$3,700,000
Total Estimated Project Cost	\$20,000,000

This estimate is based upon 2025 dollars and the values below represent probable cost for periods beyond 2025:

2030	\$26,700,000
2035	\$35,800,000
2040	\$47,900,000

This assumes a 6% interest rate and yearly compounding.

8.0 SECONDARY PUBLIC INFRASTRUCTURE

The City's water and wastewater master plan updates will be completed by November 30, 2025. The City's Transportation System Plan update has been delayed and a special Three Mile Lane Area Plan will be identified in the Transportation System Plan update scope of work to detail the needs in the entire Three Mile Lane Area. This is not anticipated to be completed until December 31, 2025.

9.0 FUNDING STRATEGIES

Funding public infrastructure to open new areas to development requires forethought and a concerted strategy to make this happen. It may require a phased approach to stimulate initial development which will fund further investment in The Landing. A phased approach would be to construct the access on SE Cumulus Ave. extended to the southerly boundary of The Landing and along the east/west spine road to a temporary cul-de-sac at the McMinnville Landing Commons which would open a large area of the site to development. A CIP for this phased approach could be something in the order of these Improvements:

• SE Cumulus Lane to Southern Boundary of The Landing	\$10,300,000
• East/West Spine Road to McMinnville Landing Commons	\$2,900,000
• Completion of the East/West Spine Road	\$4,000,000
• SE Stratus Avenue adjacent to Willamette Valley Medical Center	<u>\$1,100,000</u>
	\$18,300,000

Note: SE Cumulus Lane to southern boundary of The Landing includes the sanitary sewer pump station and associated piping throughout so overloads this first item. There may be an opportunity to serve some of the properties in this first phase by gravity and reduce the cost of the first item in the CIP.

The following provides several options that may be useful to the city working outside the general fund:

Establish a Local Improvement District (LID): Local Improvement Districts (LIDs) are a means of financing capital improvements that will primarily benefit property owners within a specific area. LIDs are formed by a city, town, county, or other local government with the approval of the property owners but are not self-governing special purpose districts. Capital improvements are then financed and paid for over time through special assessments on the benefiting properties. A LID must be approved both by a local government and the benefited property owners.

Reimbursement of Advanced Funding of Public Improvements (RAFPI) The McMinnville Municipal Code, Chapter 3.14, provides a process where an advanced financing agreement between a developer and the city, which is authorized by the council and executed by the City Manager, provides for the installation of, and payment for advanced financed public improvements. The city or a developer could be the applicant for such an agreement. This agreement is like an LID but does not carry the same number of steps and may prove a streamlined alternative to an LID.

Regionally Significant Industrial Sites program (RSIS) is a performance-based economic development program that reimburses RSIS project sponsors for approved site improvement expenditures such as land assembly, site preparation, utility and transportation improvements, environmental remediation and mitigation, and financing costs.

Special Public Works Fund (SPWF), that provides low-cost financing to eligible municipalities for planning, design, and construction of utilities and facilities essential to industrial growth, commercial enterprise, and job creation. Loan funding is available for financing small to large projects with favorable interest rates and terms up to 30 years or the useful life of the project, whichever is less, for most projects. Limited grant funding is available for technical assistance and emergency projects based on financial analysis.

Soil Banking, Preparing a “mass grading” plan for The Landing would be a means of providing an area where excess soil from local construction sites could be placed. The placement would need to be completed under the supervision of testing agency so that the resulting fill could be certified as structural fill. This would allow a revenue source while offsite infrastructure improvements are being completed. A challenge to this option is that the city does not control the land and would require cooperation of the landowners and be sufficiently lucrative to offset loss of crop revenue. Although McMinnville may be fairly remote from major projects with excess material, it would be worth while to review the development needs with local contractors to see if this is a viable alternative.

APPENDIX A

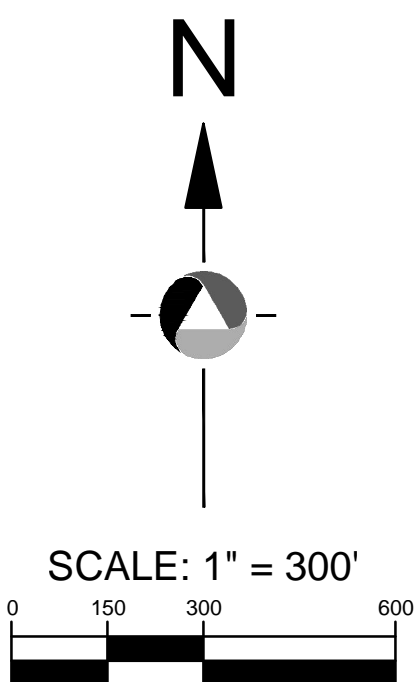
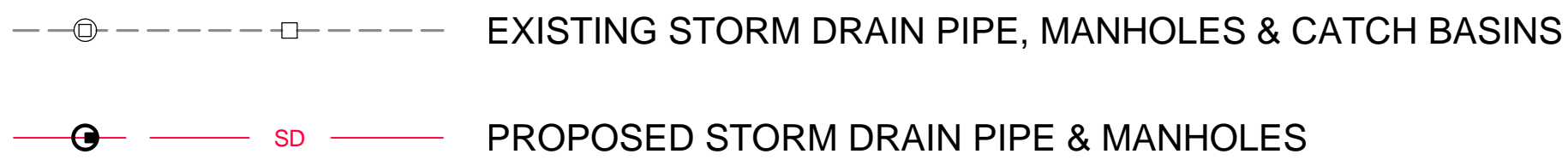
Figures:

Figure 1 – Storm Drainage Plan

Figure 2 – Sanitary Sewer Main Plan

Figure 3 – Water System Plan

Figure 4 – Dry Utilities Plan



SCALE:
AS NOTED

PROJECT MANAGER:
BRADY BERRY, PE

PROJECT ENGINEER:
BRADY BERRY, PE

DESIGNER:
BRIAN DENNEY

ISSUE DATE:
08/27/25

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STORM DRAINAGE PLAN

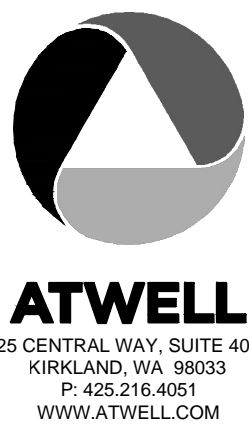
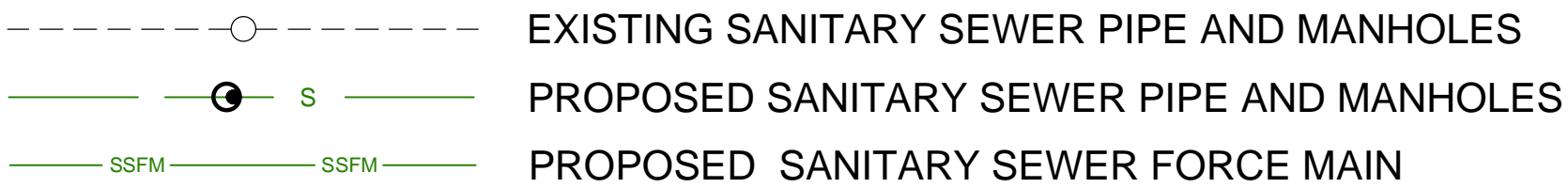
McMINNVILLE LANDING
INNOVATION DISTRICT

CONCEPTUAL DESIGN

CITY OF McMINNVILLE OREGON

JOB NUMBER:
24001418
SHEET NAME:
STRM

SHT 1 OF 4



REVISIONS

[illegible]

SANITARY SEWER MAIN PLAN

**McMINNVILLE LANDING
INNOVATION DISTRICT**

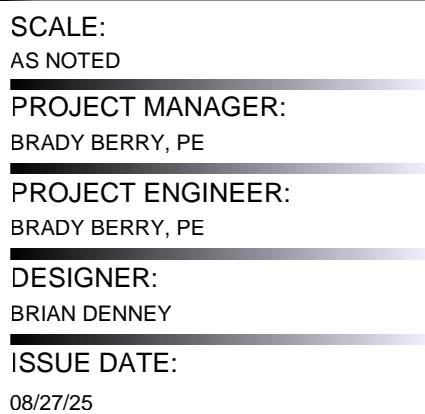
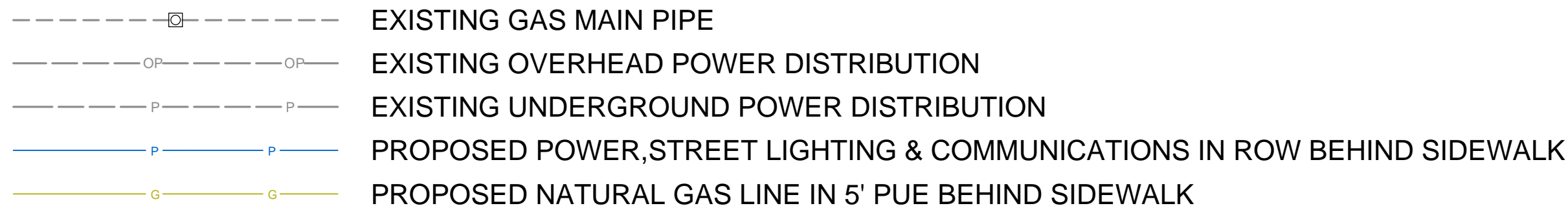
CONCEPTUAL DESIGN

CITY OF McMinnville OREGON

JOB NUMBER:
24001418

SHEET NAME:
SSWR

SHT 2 OF 4



DRY UTILITY PLAN

McMINNVILLE LANDING
INNOVATION DISTRICT

CONCEPTUAL DESIGN

CITY OF McMINNVILLE

OREGON

JOB NUMBER:
24001418

SHEET NAME:
UTIL

SHT 4 OF 4

APPENDIX B

Cost Estimate



McMinnville Landing Innovation District - Primary Infrastructure Engineer's Cost Opinion

No.	Item	Quantity	Unit	Unit Price	Estimated Cost	Section Total
Streets:						
1	Major Collector ¹	5700	LF	\$ 700	\$ 3,990,000	\$ 3,990,000
Storm Drain:						
1	12" SD (50 LF/350 LF of Road)	800	LF	\$ 95	\$ 76,000	\$ 1,630,250
2	18" SD	1950	LF	\$ 110	\$ 214,500	
3	24" SD	1850	LF	\$ 175	\$ 323,750	
4	36" SD	1600	LF	\$ 225	\$ 360,000	
5	48" SD	1100	LF	\$ 350	\$ 385,000	
6	48" SD Manholes (Up to 36" Pipes @ 450 o.c.)	12	EA	\$ 5,000	\$ 60,000	
7	72" SD Manholes (48" Pipes @ 450' o.c.)	3	EA	\$ 12,000	\$ 36,000	
8	West Stormwater Water Quality/Detention Pond	1	Allowance	\$ 75,000	\$ 75,000	
9	South Stormwater Quality Pond/Swale	1	Allowance	\$ 100,000	\$ 100,000	
Sanitary Sewer:						
1	10" SS Main - 0-10' Deep	3500	LF	\$ 115	\$ 402,500	\$ 2,298,500
2	Depth Greater than 10'	1500	LF	\$ 200	\$ 300,000	
3	SS Manholes	12	EA	\$ 8,000	\$ 96,000	
4	SS Pump Station - Smaller station for Innovation Campus Only	1	EA	\$ 1,500,000	\$ 1,500,000	
Water Sytem:						
1	12" D.I. CL 52 Water Main	5770	LF	\$ 150	\$ 865,500	\$ 1,078,900
2	12" Butterfly Valves (Est. one at 600' o.c. of main and 2-4 at intersections)	18	EA	\$ 3,500	\$ 63,000	
3	8" Gate Valves (Assumes all extensions beyond primary are 8")	11	EA	\$ 2,400	\$ 26,400	
4	Fire Hydrants (500' spacing of main)	12	EA	\$ 8,000	\$ 96,000	
5	12" Tap	2	EA	\$ 14,000	\$ 28,000	
Dry Utilities:						
1	Utility Trench (4'x5') - Power/Communications	10800	LF	\$ 50	\$ 540,000	\$ 1,639,500
2	Utility Trench (2'x4') - Gas	10500	LF	\$ 35	\$ 367,500	
3	2 - 6" Power Conduit	10800	EA	\$ 24	\$ 259,200	
4	2 - 4" Utility Conduit	10800	EA	\$ 16	\$ 172,800	
5	5106 Power Vaults (Per 1000 LF of Trench one for each power and comm.)	20	EA	\$ 15,000	\$ 300,000	

Total Construction Cost Estimate	\$	10,637,150
Mobilization	10%	\$ 1,063,715
Contingency	30%	\$ 3,191,145
Total Cost Opinion	\$	14,892,010
City Administration	10%	\$ 1,489,201
Engineering/Testing/Fees	25%	\$ 3,723,002
Estimated Total Cost	\$	20,104,213

Footnotes:

- 1 Major collector per Drawing No. 40 - 44' curb to curb width; 12' S/W w/Tree Wells 25' o.c., pcc curb and gutter, 42' pavement (5" AC on 2" 3/4"-0 on 10" 1.5"-0 aggregate base) and street lights each side at 125' o.c. with 1" conduit each side and Jct. box at each light.

