

## **CHAPTER 5. CAPITAL FACILITIES**

The Growth Management Act (GMA) requires that comprehensive plans include a Capital Facilities Element that addresses the capital facilities needs to adequately support anticipated growth over the next twenty (20) years. This plan identifies existing and future public facilities needed to be consistent with the Land Use Element. Updates of the Capital Improvement Program (CIP), which contains a list of adopted capital projects including costs and projected revenues, are incorporated into the Capital Facilities Element through the annual budgeting process by Town Council ordinance. Attached in Appendix CF-1 is the 2015 CIP for the Town.

This Capital Facilities Element summarizes information from other planning documents for the particular service, where they exist. The purpose of this summary is to assist the Town in prioritizing resources. Readers desiring more extensive background are referred to the source document. The Capital Facilities Plan should be reviewed each year and updated if necessary. Certain functions *must* be updated at a specified time, based on state or federal law.

While the Capital Facilities element includes summary information pertaining to parks and recreation and transportation facilities; more comprehensive consideration of these policy areas are provided in the Park & Recreation (Chapter 8) and Transportation Elements (Chapter 7) of the Comprehensive Plan.

The following table lists the planning documents, date of adoption, and the next scheduled or required update. Copies of the documents are included as appendices CF-2 through CF-7 and are hereby adopted by reference.

<b>Function</b>	<b>Documents</b>	<b>Last Update</b>	<b>Next Update</b>	<b>Appendix</b>
Water	Water System Plan	2012	2018	CF-2
Sewer	Wastewater Treatment Plan	2003		CF-3
	Sanitary Sewer I & I Report	2014		CF-4
Transportation: Roads, Sidewalks	6-year TIP	2015	2016	CF- 5
	Transportation System Plan: Comprehensive Plan, Chap. 7	2005	2017	
Airport	Airport Layout Plan (ALP)	2008		CF-6
Parks	Comprehensive Plan, Chap. 8		2017	
The following functions are described only in this Capital Facilities Plan:				
Town Facilities: Admin, Public Works, other	Comprehensive Plan, Chap. 5	2016	2023	
Public Safety: Police, Fire	Comprehensive Plan, Chap. 5	2016	2023	
Stormwater	Comprehensive Plan, Chap. 5	2016	2023	

This Capital Facilities Plan covers needed improvements that are of relatively large scale, are generally non-recurring, and which may require multi-year financing. For the purposes of this plan, a capital project is defined as an expenditure greater than \$3,000 for an item with a life span of at least three years. The Town reviews the six-year Capital Facilities Plan annually to coordinate capital expenditures, construction of public facilities, and to help target applications for grants and loans for the next six years.

Concrete has three general criteria for the funding of capital improvement projects.

- The Town is committed to meeting all county, state and federal laws, regulations and guidelines, particularly as they apply to public health and safety.
- The Town wishes to meet its capital facilities needs in the most cost-effective manner possible. To this end, the Town will attempt to invest in facilities which, if left unimproved, will cost more to improve in the future or will require higher expenditures for operations and/or maintenance.
- The Town attaches a great deal of importance to financial responsibility. Although it is anticipated that the capital improvements included in this plan will contribute to greater economic vitality for the Town, fiscal prudence and the limited ability to pay by community residents and businesses dictate that the Town must plan for relatively flat revenues.

This Capital Facilities Plan is intended to implement the Comprehensive Plan and to meet the requirements of those state and federal agencies that mandate a thoughtful process for prioritizing projects as a prerequisite to offering loans and grants to solve infrastructure problems.

Capital outlays in Concrete have varied a great deal from year to year, depending on need and the ability of the Town to secure grants to fund particular projects. In the past, Concrete has not typically allocated General Fund revenues for large capital projects. Instead, these projects have been funded through bond issues, state and federal grants, and revenues from enterprise funds such as water and sewer revenues.

The Town's population growth has been flat for the last two decades. The Land Use Element of this plan (Chapter 3) and Appendix LU-4 of the Land Use Chapter include the details of how the current population estimates were developed. It is assumed that Concrete's slow rate of growth will continue throughout the planning horizon with an additional 320 residents for a total population of 1,193 by 2036. This is a decrease of 157 people from the previous updated and reflects the recent economic downturn that impacted the entire country.

It is assumed that infill will occur within the town limits at densities consistent with current zoning. New development in areas outside the existing town limits will be zoned and served in a manner consistent with the Comprehensive Plan, the Water System Plan, the General Sewer Plan, the Capital Facilities Plan, the Parks and Recreation Plan and the Six-Year Transportation Improvement Plan (TIP).

Developers will be required to provide water and sewer lines and construct roads both within a new development and leading to it. An agreement has been reached with Skagit County to assure that new development in the Town's future service area (the unincorporated Urban Growth Area) is consistent with Town plans in regard to water, sewer, stormwater, street design, and densities.

## ***WATER SYSTEM***

### **Water System Plan**

The Town's Water System Plan (WSP) was updated in 2012. The WSP is the source of extensive system analysis and description, of which a brief summary appears here. A full copy of the plan is included as Appendix CF-2.

### **Background**

The Town of Concrete was incorporated in 1909. One of the Town Council's first acts, on June 15th of that year, was to adopt an ordinance granting the Baker River Power, Light and Water Company the right to build and operate a water system in the town for a period of fifty years. That right was eventually extended. On January 1, 1982, ownership and operation of all of the assets of the water system were conveyed to the Town of Concrete from Lone Star Industries, which then owned the Baker River Power, Light and Water Company. The Town has operated the system since then.

When acquired by the Town, the system did not meet contemporary standards for a municipal water system. There was neither a system map nor documentation of system components. The

Town started upgrading the system in 1983, shortly after acquiring it, and continues to improve it to this day.

According to the current Water System Plan, there remain several areas in need of upgrades to current standards for pressure and fire flow. In the summer of 2015 the last 400 feet of wood stave pipe remaining in the system were removed and replaced with ductile iron. Despite these obstacles, the water continues to meet water quality standards and needs no treatment.

### **Source**

The Town's water supply source is known as the Grassmere Spring. The main spring and line is 125 feet inside a sealed tunnel into the hillside. From the covered intake structure, the water enters a concrete spring box, and is then conveyed by a pipeline to the distribution system.

The Town has sufficient water rights to accommodate future population projections, but a second groundwater source is needed to ensure the reliability of the system. For example, an earthquake could divert or destroy the spring.

Additional source data is included in the 2012 Water system Plan (WSP), Chapters 1, 3, and 5 (included as Appendix CF-2).

### **Storage and quality**

Water storage is provided by two 200,000 gallon concrete tanks built in 1998 and 1999, and one forty-year-old 105,000-gallon wood tank. Storage characteristics and capacity analysis are found in Chapters 1 and 3 of the WSP (included as Appendix CF-2).

### **Transmission/Distribution system**

The Town currently maintains approximately 34,000 feet of pipe in the transmission and distribution system. Excluding service connections, pipe sizes range from 4 to 12 inches in diameter. The majority of the pipe material in the water system is PVC. The Town has adopted engineering design standards for new lines in compliance with Department of Health (DOH) rules. The design standards must be used by private developers to avoid review by DOH.

### **Fire Flow Recommendations:**

Interior service within the Town should be constructed with a minimum eight-inch mains that are looped so that the flow patterns are relatively short within a given area. Shorten some of the existing long loops to provide more reliable service and reduce pressure fluctuations.

**Recommended Town Improvements** Appendix CF-1 includes a list of proposed improvements for the Town's water system.

### **Metering**

The Town has installed water meter setters for businesses and for all new services, but most of the community is not metered. State law requires meters to be installed for all services by the year 2017. The purpose is to ensure system reliability, conserve water resources, and to protect the Town's water rights. Compliance with this requirement will enable the Town to apply for certain

State funding sources. The financial challenge is that new meters are costly and the Town is seeking funding assistance.

### **Hydrants**

Fire hydrant port sizes are typically five-inch, however there are some with two and a half-inch ports. The valves that have been located are checked by Town staff and are kept functional. Hydrants are exercised every six months and valves annually in conformance with national (American Water Works Association) and state (Department of Health) guidelines.

### **Projected demand**

For planning purposes, the demand forecast for residential water service connections is 383 gallons per ERU per day. (Chapter 2 of the WSP). The WSP anticipates that with a Water Use Efficiency Program in place to encourage conservation, water use rates will drop.

In terms of single-family connections, the total as of 2015 is 430. The Town is approved for 557 connections. Using 2.35 people per household the 557 connections could accommodate 1,309 people which exceeds the 1,198 people projected for 2036.

Future water usage by non-residential customers will also be impacted by conservation efforts (e.g., meters, summer rates). For planning purposes, the forecasts for non-residential water usage is based upon published demands provided by the Washington State Department of Ecology.

With the installation of a source meter, future demand forecasting can be established through the use of actual historical data.

## **WASTEWATER SYSTEM**

### **Current treatment**

A Membrane Bio Reactor (MBR) Wastewater Treatment plant was completed in 2009 by Boss Construction. The design of the MBR system was completed by HDR Engineering. The \$8,259,000.00 system was financed in part by two Public Works Trust Fund loans, a CTED grant, a DOE loan and DOE grant, a USDA Forest Service grant, a Skagit County grant, a Skagit County Public Facility grant, three (3) USDA loans, and a USDA grant. The MBR wastewater system replaced collection and treatment systems that were built in the early 1970's.

In 2000, the Town adopted a Comprehensive Sewer and Wastewater Facility Plan prepared by Gray & Osborne, Inc. In 2003, the Town adopted the wastewater treatment facility plan prepared by EES, Inc., which included the design for the new treatment plant. Construction started in 2006 and the completed plant was accepted by the Town Council on March 22, 2010.

The Membrane Bio-Reactor (MBR) treatment system is a 240,000 GPD facility which is design to be expandable to 400,000 GPD. The plant is located on approximately a 2 acre site situated west of the Baker River, north of Highway 20. The effluent is treated by UV disinfection prior to discharge into the Baker River.

The technology associated with the Membrane Bio-Reactor (MBR) treatment system has never functioned as the Town envisioned and requires continual maintenance and costs not anticipated by the Town when the technology was selected. Shortly after its completion the Town was forced into litigation and mediation by the contractor and the engineer for the project. The results of the mediation was to add an additional \$250,000 to the costs of the project. The costs of the system and resulting mediation forced the Town to borrow money. The payment on the resulting loans has resulted in regular increases in the utility bills for the Town's rate payers. These increases will continue throughout the planning period and beyond.

With Janicki Bioenergy Corporation's invention of the Omni Processor, a more efficient and cost effective system for treating waste water may be viable. The Town will work with Janicki as they bring the system on line and to market in an attempt to form a partnership that will allow Concrete to replace its Membrane Bio-Reactor (MBR) treatment system with something that requires less maintenance and is more cost effective for the Town's rate payers.

### **Proposed collection system improvements**

In 2012, Stantec Consulting Services, Inc. was hired by the Town of Concrete to assess infiltration and inflow (I/I) in their wastewater system. The Town is required as a condition of their Wastewater Discharge Permit to assess I/I and compare to previously reported I/I. If the amount of I/I has increased by more than 15%, then a plan and schedule need to be developed to correct problems within the collection system. Stantec found that the Town's wastewater system was experiencing an increase in I/I that could be problematic. In addition, they found that the Town's system was experiencing sufficient infiltration to warrant further investigation. Based on the findings of this assessment, Stantec recommended that the Town develop a plan and schedule to address I/I in their wastewater system. The Town then hired Reichardt & Ebe (R&E) to prepare that plan. The resulting engineering report is included as Appendix CF-4.

R&E analyzed the data obtained from CCTV investigation of the Town's sewer lines and categorized sections of pipe, as high, medium and low priorities for repair based on the number, type and severity of deficiencies that were identified. After the individual sections of pipe were prioritized, the wastewater system was then divided into areas to create projects. The prioritized list of projects, the repair method, and costs are included in Appendix CF-1 as well as in the I&I report that is included as Appendix CF-4.

## ***STORMWATER SYSTEM***

### **Current system**

The current stormwater system consists of approximately nine drainage routes.

Ross Alley to old railroad:	24-inch diameter; 1,100-foot length; galvanized.
Hillside Alley to Dillard:	26-inch diameter; concrete.
Siedel Street to Limestone:	36-inch diameter, galvanized steel.
Main Street under Dillard:	Two 12-inch diameter; 200-foot length; concrete.
Main Street to Highway 20:	24-inch diameter, galvanized steel.

The majority of the pipes in the system have not been upgraded recently.

### **Drainage, flooding and runoff problems**

The main problem in stormwater planning is the lack of detailed knowledge about the existing natural water runoff patterns. In recent years there have been incidents of flooding and runoff problems in many parts of town. The Town has taken steps to solve these problems, for example by adding new pipes off Seidel Street. A remaining problem in this area is that the culvert carrying Lorenzan Creek under Limestone near Seidel is undersized at the headend.

The most pressing concern for preventative repair seems to be the route from Hillside Alley through town and out to Highway 20, because there is a possibility that the headend works are too small to handle the amounts of water coming through. The culvert under South Superior Avenue near the intersection of Cedar Street needs to be replaced and the Town is working with Skagit Fisheries Enhancement Group to replace this culvert with a larger one to improve flows and eliminate sediment buildup.

## ***TRANSPORTATION: STREETS, SIDEWALKS AND BRIDGE***

### **Current system**

#### **Streets**

The street system consists of seven collector streets and several miles of local streets. The majority of streets are blacktop or chip and seal, while a handful of gravel streets exist as well. As part of the development of this Capital Facilities Plan, an inventory of the town's streets was completed, and is included in Appendix CF-1. The conditions of the streets vary a great deal—from newly resurfaced chip and seal to deteriorated blacktop to simple gravel

#### **Pedestrian Improvements**

All future street improvements will include features such as sidewalks and ramps to encourage pedestrian access. The Town is actively seeking funding to ensure that its pedestrian accesses are ADA compliant.

#### **Baker River Bridge (Henry Thompson Bridge)**

When built in 1917, this bridge was the only link between the two halves of the town of Concrete. It is an early example of a reinforced-concrete open spandrel arch and was reputedly one of the longest single-span concrete structures in the West when built. The bridge is ornamented in a classical style. This bridge has been listed in the National Register of Historic Places and underwent restoration in 2004.

### **Main Street Improvement Project**

This major project is being constructed in three phases:

1. North Dillard to Cupples Alley (complete)
2. Cupples Alley to Superior (completed)
3. Superior to Grassmere

Phase 1 of the Main Street Improvement Project is complete. The project included repaving Main Street from North Dillard down to Cupples Alley, adding and improving the sidewalks and incorporating landscape designs to improve the aesthetics of the Town Center District.

Phase 2 has also been completed and includes sidewalks, curbs, gutters, repaving, and landscape design.

Phase 3 Funding for design and construction of Phase 3 is the first priority in the Town's TIP. See Appendix CF-4

## ***TOWN FACILITIES: ADMINISTRATIVE, PUBLIC WORKS, OTHERS***

### **Inventory and proposed projects**

#### **Town Hall**

Town Hall, located at 45672 Main Street, was built in 1908 and was used as a school, the senior center, the Concrete Public Library and now the Town Hall/Skagit County Sheriff's Department East Detachment. Needed improvements include:

- Seismic Upgrade
- ADA Accessibility
- Exterior painting
- Carpeting
- Bathroom Improvements

#### **Superior Office Building, also known as the Lone Star Building**

The Town was awarded a \$7,000 grant in 2011 from the state Department of Archeology and Historic Preservation to conduct a feasibility study and historic structure report for this important reminder of the town's industrial heritage. The Town augmented the grant amount with \$5,000 to conduct a detailed structural assessment to help decide whether to proceed with rehabilitation. This feasibility study builds on previous efforts to initiate this building's preservation.

The building was donated to the Town along with land for Silo Park in 1993. The Concrete Heritage Museum Association obtained the services of a historic building expert to walk through the Lone Star building in August 1996. Architect Michael Smith of Zervas Group Architects in Bellingham made a number of detailed recommendations for improvements after noting the historic significance of the building and much of its contents. Also in 2006, students from the University of Oregon completed a building assessment intended to assist with a historic structure analysis. The building was added to the list of 10 most endangered buildings in Washington, and was nominated for addition to the National Historic Register.

The group developed a three-phased program to stabilize the building, to seek funding to restore the building for municipal and youth purposes, and lastly, to examine other potential uses. The building was also considered for re-use as a library.

The project is a major goal of Imagine Concrete, an organization formed to envision the Town's future. Volunteers from that organization contributed many hours to a recent project to clean debris from the building and preserve historic objects. At the same time, measures were taken to prevent leaks in the roof. Those measures proved inadequate given that the exterior wooden roof had collapsed.



A feasibility study completed in 2012 found that the building would need to have roof repairs by the end of 2015 in order for the structure to remain viable. Town Council voted to allow citizens until the end of 2015 to raise the needed funds and if they could not do so the building would be demolished. To date the funding has not been obtained and Council is currently exploring options for using the building as a training facility for fire department's (to simulate different burning conditions) or for demolition.

### **Town Center Signage Project**

To attract visitors to the Town Center, the Town sponsored the construction of a landmark sign on Main Street at the T-intersection with Douglas Vose III Way. Steve Backus and his carving team from Big Shot Woodcarvings, built the sign in 2008. It was funded in part by a \$10,000 grant from the Port of Skagit County, with the Town funding the balance of \$10,000. The sign lists local businesses and is maintained and coordinated by the Town, with the rules codified in the municipal code.

### **Public Works**

The Public Works Department is located at 7285 Baker St., where there is a pole building built in 1972 with equipment storage, an office and small bathroom, and an adjacent 2250 square-foot equipment storage building. The current facilities have inadequate secure storage and temperature control and parts of the buildings are deteriorating. Public works is considering options for relocating. One option would be to consolidate the department in a new facility located at 46051 Lagoon Ave. on top of the decommissioned lagoon from the old wastewater treatment plant. Estimated cost of a 3,000 square-foot building with office and bathroom is \$150,000 – 200,000. A reserve fund has been established for this purpose and as of 2012 has a balance of \$100,000. To date the sewer lagoon has not been decommissioned.

## ***TOWN EQUIPMENT***

### **Inventory**

The inventory of capital equipment used by Public Works is included in Appendix CF-1

## ***POLICE AND FIRE PROTECTION***

### **Police department**

Since 2004, the Town of Concrete has contracted with the Skagit County Sheriff's Office for law enforcement services. The group of deputies assigned to the Town and surrounding area is called the "East Detachment." Since 2009, the East Detachment has been housed in a remodeled portion of the Town Hall. The offices are in the north end of Town Hall formerly occupied by the now-defunct Town library. No facilities upgrades have been identified for the capital facilities planning period of 2016-2036.

### **Fire Department**

In 2015 a new Fire and Life safety building was completed. The building is located on Main Street between the Superior Building and the Community Garden. A variety of funding sources

was used to construct the building and through the efforts of the Town and the chosen contractor the building was completed on time and within budget.

## **Fire Equipment**

A listing of fire equipment is included in Appendix CF-1.

## ***AIRPORT***

The Concrete Municipal Airport is located south of the town center, adjacent to the school facilities. The main runway is asphalt and is 2600 feet long and 60 feet wide. Concrete accepts no federal funds for its airport and therefore does not have to meet federal requirements.. Security fencing is located only on the north side of the airport.

The airport does not have runway lighting and the Town has no plans to install lighting in the future. Town policy-makers discourage night flying in part because of the many mountains in the area, but also because residents would not want the night noise from airplanes.

The Town leases 50'x50' lots and 100'x100' lots. Pilots provide their own hangars. It is the desire of the Town to have hangars constructed on each of the leased lots. To that end Council amended the leases to require that hangars be constructed within five years or the leases could be revoked. That five years elapsed December 31, 2014. Council voted to impose a one-time fee to allow for a one year extension for hangars to be constructed. While the majority of the leaseholders impacted by the fee paid it, to date only one hangar has been constructed. It remains to be seen what Council's next action will be.

The airport includes a lighted emergency medical service helicopter facility. This heliport substantially improves access to major medical facilities in Seattle for citizens of, and visitors to, Concrete and the surrounding area. It also greatly improves the chances of survival for victims of vehicle accidents along Highway 20.

The Pilot's Lounge was completed in 2003 and is used for local and visiting pilots and is occasionally leased out to groups for meetings or events.

The Annual Concrete Old Fashioned Fly-In brings in pilots from mostly the west coast and Canada and generally range from 150 to 200 aircrafts. This event is weather dependent and is held in Summer for improved weather conditions. The event lasts three days and brings in visitors to the Town.

In 2014 a fueling station was added to the airport.

The Town received a grant from the Washington Department of Transportation Aviation Division for an Airport Layout Plan (ALP) to identify and address the existing facilities and future needs of the Airport during the ultimate 20 year planning period with emphasis on the short-term, 0-5 year time frame. The ALP was completed by the Town's consultant, Bucher, Willis and Ratliff

Corporation (BWR), and approved by the Town Council on January 28, 2008 by Ordinance 609. A copy of the plan is included as Appendix CF-6.

In 2007 the windsock was relocated and the segmented circle constructed. In 2008 the existing pavements were slurry sealed and new striping and marking were applied to the runway and adjacent ramps. In 2009 trees were removed at the West and East ends of the runway and a Web Cam was installed at the Pilot's Lounge to provide visual access to the weather conditions at the airport.

In the time since the ALP was adopted, it has become evident that the runway will need to be rebuilt in its entirety at an estimated cost of \$250,000, though no timeframe has been identified. The next ALP update should address this issue and identify funding sources. Additional Airport improvements are include in Appendix CF-1.

### ***GOALS AND POLICIES***

#### **Goal CF-1: Ensure consistency between the capital facilities plan and the other Comprehensive Plan elements.**

Policy CF 1.1 Reassess the Comprehensive Plan to ensure that all of its elements continue to be coordinated and consistent, especially if capital facilities funding falls short of expectations.

Policy CF 1.2 Periodically update the capital facilities plan, especially the financial section.

#### **Goal CF-2: Continue the stated criteria for selecting and funding capital projects.**

Policy CF 2.1: Meet all county, state and federal laws, regulations, and guidelines, particularly as they apply to public health and safety.

Policy CF 2.2: Meet capital facilities needs in the most cost-effective manner.

Policy CF 2.3: Invest in facilities which, if left unimproved, will cost more in the future or will require higher expenditures for operations and/or maintenance.

#### **Goal CF-3: Meet long-held community values of financial responsibility and the expectations of flat revenues over the next few years.**

Policy CF 3.1: Apply for grants and loans from state and federal agencies for expensive capital facilities rather than rely solely on local revenue sources.

Policy CF 3.2: Rely on local utility rates and other local sources of income for operations and maintenance costs.

#### **Goal CF-4: All new development should be encouraged to locate where services are currently being provided so that expensive system extensions can be avoided.**

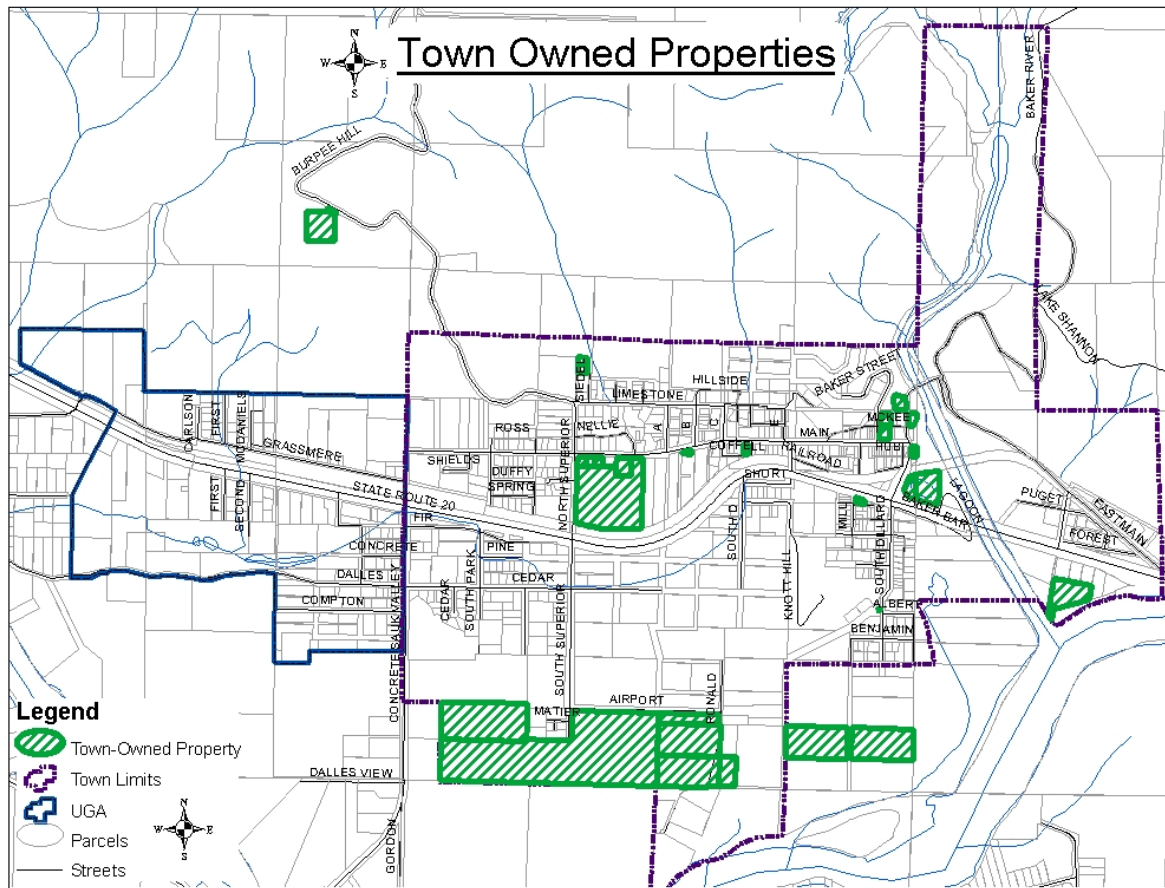
Policy CF 4.1: The Town will attempt to avoid all “leapfrog” development and encourage “infill” development.

Policy CF 4.2: The Town will require that all new development pay its fair share of the costs to upgrade facilities that are impacted by the development.

**Goal CF-5: System development charges should continue to be adjusted to meet the increasing costs of facilities required by new development.**

Policy CF 5.1: The Town will adjust system development charges after annual reviews of future costs of capital facilities.

# Town-Owned Properties



## LINKS TO CAPITAL FACILITIES ELEMENT APPENDICIES

### CF-2 Water System Plan

<http://www.townofconcrete.com/PlanLegal/2012%20Water%20System%20Plan.pdf>

### CF-3 Wastewater Treatment Plan

<http://www.townofconcrete.com/PlanLegal/Sewer%20Comp%20Plan%202000.pdf>

### CF-4 Sanitary Sewer I & I Report

<http://www.townofconcrete.com/PlanLegal/Town%20of%20Concrete%20I&I%20Engineering%20Report%20FINAL.pdf>

### CF- 5 TIP

<http://www.townofconcrete.com/PlanLegal/TIP%202016-2021.pdf>

### CF- 6 ALP

<http://www.townofconcrete.com/PlanLegal/Airport%20Layout%20Plan.pdf>

## APPENDIX CF-1 CAPITAL IMPROVEMENT PROGRAM & INVENTORY

Item	Location (Address if applicable)	Date Acquired	Est. Present Value	Capacity	Present Condition	Improvements Required (Deficiencies)	Project Needed (Expansions or new project)	Year Needed	Estimated Cost
<b>General Government Buildings, e.g., City Hall, Courthouse, Other Office Buildings, etc.</b>									
Superior Building	45418 Main St	1994	\$ 211,806	5040 sq ft	Poor	Renovation/Adaptive Reuse			\$ 1,250,000
							Demolition		
							Roof Repair		
							Interior & Exterior Remodel		
Generator Building	45418 Main St	1994	\$ 48,760	628 sq ft	Poor	Renovation/Repurpose			
Old Fire Hall/Office Space	7337 N. Dillard Ave	1934	\$ 325,189	2900 Sq Ft	Fair	Renovation/Stabalization			
Wastewater Treatment Plant Old Lab	46051 Lagoon Ave	1973	\$ 33,819	120 Sq Ft	Good		Convert To Storage		
Town Hall/Sheriff's Office	45672 Main St	1926	\$ 210,730	2399 Sq Ft	Good	Improvements			
							ADA		
							Seismic Upgrade		
							Exterior Paint		
							Carpeting		
							Bathroom Improvements		
Maitenance Shop/Old Shop	7285 Baker Avenue	1979/1950	\$ 53,109	1800 Sq Ft 2700 sq ft	Fair	Replace with New	Demolition		
Public Restrooms	45813 Main	1988	\$ 20,197	510 Sq Ft	Good	Improvements	Heating System, Hot Water Tank, Hand Dryers/Blowers		
Town Center Sign	45813 Main St	2008	\$ 20,000		Excellent				
SR 20 Sign		2015			Excellent				
<b>Fire Stations &amp; Engines</b>									
Fire and Life Safety Facility	45396 Main St	2015	\$ 1,600,000	4680 sq ft	Excellent				
SCBA (MSAG1)		2015	\$ 48,000	8 units	Excellent				
1968 Chevy Howe Pumper Truck (Engine 2812)		1969	\$ 5,000	750 gallons		Surplus			
Turn Out Gear				20 full sets		Need ASAP			\$ 31,200
Turn Out Gear Rack						Need ASAP			\$ 7,000
Emergency Vehicle		1976	\$ 2,500	1 unit	Fair	Needs Engine work			

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Item	Location (Address if applicable)	Date Acquired	Est. Present Value	Capacity	Present Condition	Improvements Required (Deficiencies)	Project Needed (Expansions or new project)	Year Needed	Estimated Cost
1990 Ford Darley Pumper Truck (Engine 2811)		1990	\$ 25,000	1000 gallons		Needs to be replaced ASAP			\$ 250,000
1990 Spartan Fire Truck (Engine 2813)		2010	\$ 50,000	1000 gallons			Should be ugraded in 5 years		\$ 300,000
SCBA (MSAG1)				2 units		Need			\$ 16,000
Antique Ford Ladder Truck		1936	\$ 2,500	1 unit	Good	Needs Paint (for show only)			
Thermal Imager				1 unit					\$ 5,400
Washer				1 unit					\$ 8,300
Dryer				1 unit					\$ 5,400
<b>Sewer System (collection system)</b>									
1,380 Feet of 6" Force Main PVC Pipe		1973			Good				
1,800 Feet of 4" Force Main PVC Pipe		1973			Good				
24,093 Feet of 8" Concrete Pipe		1973			Poor	Repair I & I in Collection System		2016	\$ 1,460,138
589 Feet of 8" Ductile Iron Pipe		1973			Fair	Repair I & I in Collection System		2016	
No. 1 Lift Station	S. Dillard Ave. and Albert St.	1973			Poor	Upgrade Pump Guide Rails		2026	
No. 2 Lift Station	S. Park Ave. and Fir St	1973			Poor	Upgrade Pump Guide Rails		2026	
No. 3 Lift Station	N. Everett Ave	1973			Poor	Upgrade Pump Guide Rails		2026	
<b>Sewer Treatment Plant</b>									
Wastewater Treatment Plant	46051 Lagoon Ave.	2008	\$ 7,000,000	0.24MGD	Good				
Wastewater Treatment Plant Building		2008	\$ 1,000,000	5,600 Sq Ft	Excellent				
Membranes		2008			Fair	Replacement of Membranes	New Membrane System	2017	\$ 637,000
Screens		2008			Fair	Replace the Screens at the Headwork's	New Ultra Fine Drum Screens	2017	\$ 200,000
Grit Chamber		2008			Poor	Grit Chamber not Removing the Grit	Upgrade Grit Removal System	2017	
New Omniprocessor Treatment Plant							Replace existing system with something simpler and more reliable		
<b>Lagoon</b>									



## APPENDIX CF-1 CAPITAL IMPROVEMENT PROGRAM & INVENTORY

Item	Location (Address if applicable)	Date Acquired	Est. Present Value	Capacity	Present Condition	Improvements Required (Deficiencies)	Project Needed (Expansions or new project)	Year Needed	Estimated Cost
Decommission Lagoon	46051 Lagoon Ave.	1973		1.7 Million Gallons		No Longer Needed	Remove Biosolids, Liner and Fill to Grade	2017	
<b>Water Tanks/ Reservoirs</b>									
Seidel Reservoir 2	200,000 gal Concrete Tank	1998		200,000 gals	Good				
Spring Reservoir 3	200,000 gal Concrete Tank	1999		200,000 gals	Good				
Wood Reservoir 1	100,000 Wood Reservoir	1982		100,000 gals	Poor	At the End of it's Service Life	200,000 gal Concrete Tank Upgrade	2022	\$ 300,000
Telemetry For all reservoir							Water Level Telemetry	2022	
<b>Water Distribution System</b>									
3,982 Feet of 4" Pipe					N/A				
7,240 Feet of 6" Pipe					N/A				
17,738 Feet of 8" Pipe					Good				
2,172 Feet of 10" Pipe					Good				
5,068 Feet of 12" Pipe					Good				
Source Meter, Reservoir Overflow Meters					N/A	Not Metered	Install Meters	2017	\$ 85,000
Service Meters for All Utility Customers					N/A	Not Metered	Install Meters	2017	\$ 327,000
Main St. from N. Superior Ave to A Ave.		1982			Fair	6" AC Line	Replace 6" AC Pipe with 8" PVC Pipe	2017	\$ 110,000
S. Dillard Ave. from Erikson Pl. to Benjamin St., Albert, St Gardner Ave., Benjamin St.		1982			Fair	6" PVC, 2" Steel, 2" PVC	8" PVC Pipe Upgrade	2022	\$ 275,000
Washington St., Forrest Place., Mildred Alley, Scott Alley		1982			Poor	1"and 2" Steel Pipe	8" Loop Line from E. Main to N. Everett Ave. and a 4" Loop Line	2022	
N. Park from Duffy St. to Main St., Spring St. to N. Rietze Ave. to Main St.		1982			Fair	2" PVC Line and Area Not Looped	8" Looped Extension	2022	\$ 162,000
Limestone from C Ave., Calcite St. to E Ave.		1982			Fair	2" Steel	8" PVC Pipe Extension	2022	\$ 155,000
B Ave. from Main St. to Limestone St.		1982			Fair	4" PVC and 1.5" Steel	8" PVC Upgrade	2022	\$ 51,000
S. Park Ave from Pine St. to Cedar St.					N/A	No Pipe	8" PVC Pipe Extension	2022	
Baker Street Ave. to N. Dillard					N/A	No Pipe	8" PVC Pipe Extension	2022	\$ 38,000
Douglas Vose III Way along SR20 to Mill Ave.					N/A	No Pipe	8" PVC Extension	2022	\$ 87,000
Grassmere Rd. to First St. along SR20 to Sauk Valley Rd.					N/A	No Pipe	12" PVC Pipe Extension	2022	\$ 302,000
Fir St. to Roberson Ct. on S Rietze Ave.					N/A	No Pipe	8" PVC Pipe Extension	2022	

## APPENDIX CF-1 CAPITAL IMPROVEMENT PROGRAM & INVENTORY

Item	Location (Address if applicable)	Date Acquired	Est. Present Value	Capacity	Present Condition	Improvements Required (Deficiencies)	Project Needed (Expansions or new project)	Year Needed	Estimated Cost
S. Rietze Ave. From Cedar St. to End of the Street		1982			Poor	1" and 2" Steel Pipe	8" PVC Pipe Upgrade with a Hydrant at the end of the Street	2026	
Pine St. to S. Rietze Ave.		1975			Poor	2" Steel Pipe	8" PVC Pipe Upgrade	2022	\$ 57,000
Fir St. to S Superior Ave.					N/A	No Pipe	8" PVC Extension	2022	\$ 99,000
S. Superior Ave. to S. D Ave on Cedar St.					N/A	No Pipe	Upgrade to 8" and 12" Future Connections	2035	\$ 569,000
Limestone St. from Seidel Pl. to C Ave.					Good	6" PVC Pipe	8" Pipe Upgrade	2035	\$ 152,000
S.Dillard Ave. East to S. Everett Ave. Along SR20					N/A	No Pipe	8" Pipe Extension	2035	\$ 216,000
Airport Way to S. Dillard					N/A	No Pipe	8" Pipe Extension	2035	\$ 204,000
Grassmere Rd. From First St. West to Dalles Rd.					N/A	No Pipe	12" Pipe Extension	2035	\$ 760,000
Dalles Rd. to Grassmere Rd.					N/A	No Pipe	12" Pipe Extension	2035	\$ 615,000
Concrete Sauk Valley Rd South					N/A	No Pipe	8" and 12" Pipe Extension	2035	\$ 822,000
Hillside Alley from Limestone St Looped Back Limestone St.		1982			Poor	1" Steel Pipe Services from Limestone	6" Looped Line from Limestone St. Back to Limestone St. with a Hydrant	2026	
<b>Water Sources</b>									
Grassmere Spring SO 1		1982		750 gpm	Good				
Locate and Utilize an Additional Water Source							Locate a Second Source	2026	\$ 3,000,000
<b>Wellhead Protection</b>									
Wellhead Protection							Fencing -- Skagit Fisheries Enhancement Group		
<b>Bridges</b>									
Henry Thompson Bridge		1916			Good	Black Mold, Moss and Ivey	Clean and Paint		
<b>From Current TIP In Rank Order From that Document</b>									
<b>Road/Street Segments</b>									

## APPENDIX CF-1 CAPITAL IMPROVEMENT PROGRAM & INVENTORY

Item	Location (Address if applicable)	Date Acquired	Est. Present Value	Capacity	Present Condition	Improvements Required (Deficiencies)	Project Needed (Expansions or new project)	Year Needed	Estimated Cost
Main Street	Superior to Grassmere				Fair	Resurface of Main Street from Superior to Grassmere		2016	\$ 340,500
Secondary Access	State Route 20 to Airport Way						Construction of second access road to school and airport	2016	\$ 2,136,410
Cedar Street	South Park to South Superior Ave				Poor	Reconstruct Street	Add Sidewalks	2015	\$ 300,000
Limestone Street	Burpee Hill Rd to E Avenue				Poor	Reconstruct Street		2016	\$ 300,000
South Superior Avenue	Airport Way to SR 20				Fair	Reconstruct Street and Culvert Replacement		2016	\$ 250,000
North Superior Avenue	Main Street to SR 20				Fair	Construction and Widening of Road and Reconstruct Sidewalks		2016	\$ 450,000
Secondary Access Intersection	SR20 and D Ave Intersection						Intersection Enhancements	2019	\$ 2,347,000
<b>Sidewalks</b>									
Main Street	Park Ave to Grassmere Rd				Poor	Reconstruct sidewalks and ADA facilities		2015	\$ 283,750
Main Street	Superior Ave to North Park Ave				Poor	Pedestrian Improvements		2016	\$ 311,250
Cedar Street	Sauk Valley Rd to S Superior Rd						Add bicycle lane and add a sidewalk with ADA facilities	2019	\$ 458,960
East Main Street	Henry Thompson Bridge to Everett Avenue						Design and Construct Sidewalks	2016	\$ 185,000
<b>Street Lights</b>									
<b>Refer to Intolight Map and Town Inventory</b>									
<b>Parking Lots</b>									

## APPENDIX CF-1 CAPITAL IMPROVEMENT PROGRAM & INVENTORY

Item	Location (Address if applicable)	Date Acquired	Est. Present Value	Capacity	Present Condition	Improvements Required (Deficiencies)	Project Needed (Expansions or new project)	Year Needed	Estimated Cost
Bear Square	Main St. and Baker Street Ave.				Poor	Resurface			
<b>Heavy Equipment (Graders, Front-Loaders, etc.)</b>									
New Holland Mower/Tractor		2009	\$ 20,326		Good				
Bandit Portable Wood/Brush Chipper		2006	\$ 30,000		Good				
1982 Dodge Ram Pick Up Truck		1982			Poor				
1994 Ford Pickup F150		2000	\$ 10,000		Fair				
1989 JCB Backhoe 1400B			\$ 24,000		Poor				
1991 Dodge Dakota Pickup Truck		2011	\$ 1,000		Fair				
1996 Elgin Street Sweeper		2008			Fair				
1987 Case Tractor Brush Cutter			\$ 10,000		Fair				
1971 Chevrolet Dump Truck- C50		1971	\$ 15,000		Fair				
Ford 515 Tractor/Mower			\$ 2,000		Poor				
1982 GMC Vactor/ Jet Truck		1995	\$ 23,500		Fair				
1988 Iveco Diesel Box Van		2002	\$ 20,000		Fair				
1993 Kubota Lawn Tracker F2400									
Plows				5 units			Replace		
1996 International Dump Truck		2009	\$ 27,000		Good				
2001 Chevrolet Silverado 2500 HD		2008	\$ 16,323		Good				
Excavator							Used Mini Excavator		
<b>Airport</b>									
Airport Property		1980's			Excellent				
						Pave entrance driveway to Pilots Lounge first 100 feet			
						Pave entrance driveway to Pilots Lounge second 100 feet			
						Construct fence on S & W side of the airport property			
						New paved taxiway			
Pilots Lounge	7879 S. Superior Avenue	2002	\$ 130,015	1280 Sq Ft	Excellent				
							Replace Gutters		
Runway		1950's			Poor	Paving		2020 or sooner	
Sewer									

## APPENDIX CF-1 CAPITAL IMPROVEMENT PROGRAM & INVENTORY

Item	Location (Address if applicable)	Date Acquired	Est. Present Value	Capacity	Present Condition	Improvements Required (Deficiencies)	Project Needed (Expansions or new project)	Year Needed	Estimated Cost
							Planning/Prelim Engineering	2017	
							Buildout		
Water									
							Planning/Prelim Engineering	2017	
							Buildout		

Prioritized List of Pipe Sections	Repair Methods and Estimate
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High Priority											
Rank	Upstream Node	Downstream Node	Diameter (in.)	Material	Length (ft)	Lateral Count	Deficiency Count	Estimated Repair Cost	Repair method 1	Repair method 2	Project Number
1	D4-1	D4	8	CONC	391.4	6	4	\$ 220,000.00	Whole Pipe: Remove and replace		1
2	E4	E3	8	CONC	352	5	4	\$ 60,000.00	Full Liner		1
3	I6	I5	8	CONC	264.9	14	3	\$ 60,000.00	Full Liner		2
4	K2	K1	8	CONC	322.7	10	3	\$ 60,000.00	Full Liner		2
5	J6	J5	8	CONC	353.5	7	3	\$ 60,000.00	Full Liner		2
6	B10	B9	8	CONC	136.5	1	3	\$ 40,000.00	Full Liner		1
7	J5	J4	8	CONC	385.5	8	2	\$ 70,000.00	Full Liner		2
8	B7	B6	8	CONC	294.8	4	2	\$ 60,000.00	Full Liner		1
9	M1	LS1	8	CONC	298.1	6	2	\$ 60,000.00	Full Liner		4
10	J4	J3	8	CONC	102.6	0	2	\$ 50,000.00	Spot Repair: Remove and Replace	Chem Grouting	2
11	K3	K2	8	CONC	381.8	10	1	\$ 40,000.00	Liner Section		2
12	B9	B8	8	CONC	351.4	9	1	\$ 30,000.00	Chem Grouting		1
13	R1a	R1	8	PVC	209.8	9	1	\$ 30,000.00	Chem Grouting		1
14	D7	D6	8	CONC	371.6	0	1	\$ 40,000.00	Liner Section		1
15	D2-1	D2	8	CONC	385.8	6	2	\$ 51,000.00	Liner Section	Lateral Remove and Replace	1
16	E2	E2a	8	CONC	159	3	2	\$ 30,000.00	Chem Grouting	Chem Grouting	1
17	G3	G2	8	CONC	399	7	2	\$ 30,000.00	Chem Grouting		2
18	A14-1	A14	8	CONC	396.9	7	1	\$ 30,000.00	Chem Grouting		3
19	A18-1	A18	8	CONC	279.7	3	1	\$ 30,000.00	Chem Grouting		3
20	A18-2	A18-1	8	CONC	179	2	1	\$ 30,000.00	Chem Grouting		3
21	L1-1	L1	8	CONC	306.9	6	1	\$ 20,000.00	Spot Repair: Remove and Replace		4
22	B5	B4	8	CONC	124	1	3	\$ 30,000.00	Chem Grouting		1
23	D6-1	D6	8	CONC	307.2	2	2	\$ 18,000.00	Lateral Remove and Replace	Lateral Remove and Replace	1
24	R3	E4	8	PVC	8.7	0	2	\$ 30,000.00	Chem Grouting		1
25	E3	E2	8	CONC	114.9	2	1	\$ 30,000.00	Chem Grouting		1
<b>TOTAL</b>	<b>25</b>			<b>TOTAL</b>	<b>6877.7</b>	<b>128</b>	<b>50</b>				

Estimate Note: Prices shown estimate repair costs if the repairs were individually addressed. Town may experience an over all cost benefit if multiple repairs can be completed with a single contract.

Medium Priority											
Rank	Upstream Node	Downstream Node	Diameter (in.)	Material	Length (ft)	Lateral Count	Deficiency Count	Estimated Repair Cost	Repair method 1	Repair method 2	Project Number
26	A10	A9	8	CONC	220.1	4	4	\$ 170,000.00	Remove and replace whole pipe		3
27	C6	C5	8	CONC	339.5	6	4	\$ 60,000.00	Full Liner		3
28	A9	A8	8	CONC	322	7	3	\$ 60,000.00	Full Liner		3
29	C1-1A	C-1	8	CONC	121.1	0	3	\$ 40,000.00	Full Liner		3
30	H1-1	H1	8	CONC	308.4	4	2	\$ 60,000.00	Full Liner		3
31	H1	A8	8	CONC	171.2	0	2	\$ 50,000.00	Full Liner		3
32	H2	H1	8	CONC	144.4	0	2	\$ 40,000.00	Full Liner		3
33	I2	I1	8	CONC	142.8	2	1	\$ 40,000.00	Liner Section		2
34	C3	C2	8	CONC	387.5	4	1	\$ 30,000.00	Chem Grouting		3
35	C5	C4	8	CONC	284.4	0	1	\$ 40,000.00	Liner Section		3
36	B4	B4A	8	CONC	153.7	0	1	\$ 40,000.00	Liner Section		1
<b>TOTAL</b>	<b>11</b>			<b>TOTAL</b>	<b>2595.1</b>	<b>27</b>	<b>24</b>				

Estimate Note: Prices shown estimate repair costs if the repairs were individually addressed. Town may experience an over all cost benefit if multiple repairs can be completed with a single contract.

Low Priority											
Rank	Upstream Node	Downstream Node	Diameter (in.)	Material	Length (ft)	Lateral Count	Deficiency Count	Estimated Repair Cost	Repair method 1	Repair method 2	Project Number
37	A5	A4	8	DI	265.6	0	2	\$ 160,000.00	Remove and replace whole pipe		2
38	B8	B7	8	CONC	298.5	6	1	\$ 20,000.00	Spot Repair: Remove and Replace		1
39	A6	A5	8	CONC	357	2	1	\$ 40,000.00	Liner Section		2
40	K1	A3	8	CONC	230.6	1	1	\$ 30,000.00	Chem Grouting		2
41	A18	A17	8	CONC	263.6	1	1	\$ 30,000.00	Chem Grouting		3
42	B1	LS2	8	CONC	392.6	1	1	\$ 20,000.00	Spot Repair: Remove and Replace		1
43	F2	F1	8	CONC	140.4	0	1	\$ 40,000.00	Liner Section		3
44	G2	G1	8	CONC	55.8	0	1	\$ 40,000.00	Liner Section		2
<b>TOTAL</b>	<b>8</b>			<b>TOTAL</b>	<b>2004.1</b>	<b>11</b>	<b>9</b>				

Estimate Note: Prices shown estimate repair costs if the repairs were individually addressed. Town may experience an over all cost benefit if multiple repairs can be completed with a single contract.

Comprehensive Plan Projects											
Rank	Upstream Node	Downstream Node	Diameter (in.)	Material	Length (ft)	Lateral Count	Deficiency Count	Comprehensive Plan			Project Number
45	A4	A3	8	DI	57.9	0	0			Increase Capacity Per Comp Plan	
46	A3	A2	8	CONC	295.1	0	0			Increase Capacity Per Comp Plan	
47	A2	A1	8	CONC	234.4	0	1			Increase Capacity Per Comp Plan	
<b>TOTAL</b>	<b>3</b>			<b>TOTAL</b>	<b>587.4</b>	<b>0</b>	<b>1</b>				

## Prioritized List of Manholes

High Priority					
Rank	MH	Depth (ft)	Estimated Repair Cost	Repair method utilized	Project Number
1	R1	9.5	\$ 8,000.00	Chemical Grout	1
2	R1A	10.4	\$ 8,000.00	Chemical Grout	1
3	R2	7	\$ 8,000.00	Chemical Grout	1
4	R3	8.9	\$ 8,000.00	Chemical Grout	1
5	E2a	12.6	\$ 8,000.00	Remove and Replace	1
6	G3	5.25	\$ 8,000.00	Chemical Grout	2
<b>TOTAL</b>		<b>6</b>			

Medium Priority					
Rank	MH	Depth (ft) <sup>1</sup>	Estimated Repair Cost	Repair method utilized	Project Number
7	A18-1	8.5	\$ 150.00	Lid Insert	3
8	G1		\$ 150.00	Lid Insert	2
9	A5	10.4	\$ 8,000.00	Chemical Grout	2
10	B5	7.5	\$ 8,000.00	Chemical Grout	1
11	C3	10.4	\$ 8,000.00	Chemical Grout	3
12	A7	8	\$ 150.00	Lid Insert	3
13	A18	8.4	\$ 8,000.00	Chemical Grout	3
14	B8	7	\$ 8,000.00	Chemical Grout	1
15	I7		\$ 8,000.00	Chemical Grout	2
16	B7	7.4	\$ 8,000.00	Chemical Grout	1
17	B4A	8.7	\$ 8,000.00	Chemical Grout	1
18	B1	8.7	\$ 8,000.00	Chemical Grout	1
19	B2	7	\$ 8,000.00	Chemical Grout	1
20	B9	8	\$ 8,000.00	Chemical Grout	1
21	B10	8	\$ 8,000.00	Chemical Grout	1
22	C4	9.9	\$ 8,000.00	Chemical Grout	3
23	D1		\$ 8,000.00	Chemical Grout	1
24	H1-1	8	\$ 8,000.00	Chemical Grout	3
25	I8		\$ 8,000.00	Chemical Grout	2
26	K1-1	7.8	\$ 8,000.00	Chemical Grout	2
<b>TOTAL</b>		<b>20</b>			

Note:

1. Depth unlisted, 8 ft depth assumed.