

PUBLIC WORKS ASSEMBLY UPDATE
WORK COMPLETED THROUGH DECEMBER 2019

Wastewater Treatment Plant (WWTP) Rehabilitation (CONSTRUCTION PHASE)

Milestones This Period

- Bid period – prepared and published Addenda to the Bid Documents in response to bidder questions
- Bids opened on December 5, 2019.
- One bid received in the amount of \$7,686,000 from MCG Constructors, Inc./Dawson Construction, Inc.- Joint Venture (JV). This lone bid is within the project budget and allows for the required construction contingency. Engineers estimate prior to bid opening was \$7 million.
- Notice of Award was issued to MCG Constructors/Dawson Construction J-V on December 17, 2019.
- Short term land lease application was approved by Alaska Department of Transportation (ADOT) for Parcel D - Airport property, which is adjacent to the WWTP, to be utilized by the Contractor for construction materials staging, tool storage containers, and field offices. The permit is in the process of being executed.

Future Milestones

- January and February 2020 relocate water lab to UAS campus and WWTP office spaces to Sealing Cove Business Center. Relocations are required to be completed prior to March 6, 2020.
- Execute construction contract and issue Notice to Proceed January 6, 2020.
- Project product submittals and contractor mobilization, January - March 2020.
- Exterior siding demolition and abatement (construction) start up late February 2020.
- Exterior wall framing installation, May and June, 2020.
- Mechanical and electrical work to begin July 2020.
- Anticipated project Substantial Completion May 20, 2021.

Background

The Wastewater Treatment Plant was built in the early 1980's and many of the building systems, including the building envelope (exterior siding, windows and doors), electrical, plumbing and mechanical, including the HVAC (ventilation air) system, have failed or are past their useful life and require replacement. The air quality within the building is inadequate and corrosive, and as a result the exposed piping and metal within the building have corroded.

Total project cost is estimated at \$10 million. Funding for this project is provided by the following sources:

\$263,000	– WW Fund Working Capital
<u>\$9,737,000</u>	– DEC Loans
\$10,000,000	– Total Available Project Funding

Current Contracts: McCool Carlson Green (design)	\$898,284
MCG Constructors, Inc./DCI Joint Venture	\$7,686,000

Crescent Harbor Float Replacement – Phase I (CONSTRUCTION PHASE)

Milestones This Period

- Final Lump Sum Price approval of \$12,999,045 with Turnagain Construction (Design-Builder) November 8, 2019.
- Harbor vessels have been moved to other berthing locations.
- Fully executed State Harbor Matching Grant Agreement received December 2, 2019.
- Endangered Species Concurrence from National Marine Fisheries Service Received November 15, 2019.
- Corp of Engineers permit received, dated November 26, 2019.
- Construction project startup (electrical demo) scheduled for December 15, 2019.
- Requested quotation from Contractor critical repairs to the Crescent Harbor High Load Dock/Net Shed and Lightering Dock – expected late December.

Future Milestones

- Pile and float demolition to begin, January 4, 2020.
- Pile driving scheduled to begin, January 20, 2020.
- Cathodic protection (anodes) scheduled for installation, February 19, 2020.
- Substantial Completion of piles and floats, March 15, 2020.
- Total Substantial Completion required, per contract, by May 1, 2020 with vessels likely permitted to enter back into the harbor in late April.

Background

The physical condition of Crescent Harbor has deteriorated to point where in-house repairs are no longer sufficient to adequately maintain the facility. Harbor Department staff and Public Works Department engineers have determined the harbor now presents an operational and safety risk due to floats sinking, decay of wooden beams, corrosion of metal fixtures and failure of walk-down ramps to meet ADA accessibility requirements.

The project has an estimated total cost of \$13 million for design and construction. Funding for this project is provided by the following sources:

\$1,000,000 – Harbor Fund Working Capital
\$5,000,000 – AK DOT Harbor Matching Grant
<u>\$8,025,000</u> – Harbor Revenue Bonds
\$14,025,000 – Total Available Project Funding

Current Contracts: Jacobs (project admin & Plan review)	\$154,531
PND, Inc (construction inspection)	\$189,455
Moffatt and Nichol (third party estimating)	\$79,948
Turnagain Marine Design-Build Contract	\$12,999,045

Thomsen Harbor (DESIGN PHASE)

Milestones This Period

- Design Contract signed with PND Engineers, Inc. (in progress).

Future Milestones

- Design to be completed January 2020.
- Construction advertisement January/February 2020.
- Harbor Matching Grant agreement after award of construction contract.
- Construction planned – Spring 2020.

Background

The Old Thomsen Harbor was originally built in 1976. In 2006, the CBS replaced the Old Thomsen Harbor floats with new timber floats as part of a comprehensive capital improvement program. At the time of construction, a cathodic protection system was considered, but not installed due to financial considerations. This project will install cathodic protection on all of the steel pipe piles in Thomsen Harbor in the form of sacrificial anodes welded to the piles. These anodes are designed to protect the piles for 20 years, thereby extending the life of this important and expensive harbor facility.

The project has an estimated total cost of \$406,000. Funding for this project is provided by the following sources:

\$203,000 – Harbor Fund Working Capital
<u>\$203,000</u> – AK DOT Harbor Matching Grant
\$406,000 – Total Available Project Funding

Current Contracts: PND Engineers, Inc. (pending)

\$17,870

Sitka Seaplane Base (SPB) (PLANNING PHASE)

For more information and history on this project, visit the City website at:

www.cityofsitka.com > Public Works Department > Public Works Projects > New Sitka Seaplane Base – or go directly to:

<https://www.cityofsitka.com/government/departments/publicworks/SitkaSeaplaneBaseSitingStudy.htm>

Milestones This Period

- Kicked off the environmental and planning phase with a meeting (December 11 & 12) for stakeholders and public to engage in the details of the process and concept plan. We understand there are concerns over the length of the process especially as it relates to these initial grant phases of work for the Environmental Assessment.
- The kickoff meeting was important to help clarify and brainstorm options in navigating the required federal process as well as to provide an opportunity to give comments and ask questions, before the project proceeds into the permitting phase.
- Some key takeaways from the meeting and/or comments we received:
 - Most who attended the meeting were generally supportive of the project and moving forward as quick as possible.

- Essential project for access to Sitka especially with reduced ferries and growth in health care needs.
- How will the CBS pay for the 6.25% match?
- At least 24 people attended the public meeting on December 11.
- Concerns were raised about harbor users subsidizing the facility and operations.
- Concerns about the length of the process and wanting to move forward with the land acquisition ahead of the Federal funding.
- Sound impacts were raised as a concern wanting it to be included in the study.
- Additionally we received comments/concerns from the following entities:
 - Corp of Engineers (permitting advice)
 - NOAA (permitting advice)
 - ADEED (land siting and operational impacts for MEHS and noise)
 - DNR (highlighted key tideland acquisition considerations)
 - SEARHC (expressed concerns over increased traffic and noise)
- For detailed meeting notes and presentation materials, visit the project web page at the link above.

Future Milestones

- Permitting: DRAFT NEPA Environmental Assessment (EA) prepared and ready for Public Review: Fall 2020.
- DRAFT planning for the facility layout, land acquisition, and business plan: Fall 2020.
- Public Meeting and/or input on drafts EA, facility layout, and business plan: Fall 2020
- Prepare and submit AIP grant applications to FAA for next phase Design/Land Acquisition: Fall 2021 (depends on federal funding cycle).

Background

The existing Seaplane Base has been operating for 65 years and is at the end of its useful life. The Assembly passed an action plan to construct a new facility just inside the breakwater on Japonski Island (end of Seward Street) making this a top priority to secure Federal Funding, land, and ultimately construction. Federal funding is anticipated to cover 93.75% of the cost of construction and another \$150k per year in operational maintenance. For this reason it is essential for the project development to follow the required Federal funding process anticipated to span four years.

There are 5 main phases required to complete to be eligible to proceed to the next stage and receive Federal funding:

1. Planning and Environmental Review (current funded stage):
Complete early 2021
2. Layout plan (current funded stage): Complete early 2021
3. Land acquisition (not funded until EA is completed and approved):
Complete Summer 2022
4. Design/Final Permitting (must build or give back FAA funds):
Complete Summer 2022
5. Construction: 2023-2024

The preliminary total project cost is estimated at \$16 million. Funding for this project is provided by the following sources:

- \$842,629 – FAA AIP Grant (E/A & Planning Grant)
- \$56,176 – General Fund Working Capital (Req'd CBS Match @ 6.25%)
- \$898,805 – Total Available Project Funding

Current Contracts: DOWL (E/A & Aviation Planning) \$707,079

Sitka Sea Walk Phase 2 (PLANNING & DESIGN PHASE)

Milestones This Period

- Conducted project kickoff and scoping meeting with funding agency and consultant on November 20, 2019.

Future Milestones

- Draft preliminary scoping report due from Western Federal Lands, January 2020.
- Western Federal Lands (WFL - granting agency) to determine project delivery agent, February 2020 – project likely to be delivered (managed) by WFL.
- Design phase to kick off in early 2020 with plans for multiple meetings throughout the process.
- Construction is estimated to begin in Summer 2021.

Background

The project includes extending the Sitka Sea Walk from the Sitka Public Library toward (and under) O'Connell Bridge and terminating at the west end of Lincoln Street at its intersection with Harbor Way. Phase 2 of the Sea Walk, an 8-foot wide handicap accessible multi-use path, will continue the same theme as the first phase of the Sea Walk that extends from Harrigan Centennial Hall East through Crescent Harbor Park toward Sitka National Historical Park. The project is being delivered (managed) by Western Federal Lands (WFL), will be designed in 2020 and construction is expected to begin Summer 2021. Multiple rounds of public involvement are anticipated throughout the design process. The current funding plan is as follows:

- \$ 1,674,713 – Grant from Western Federal Lands
- \$158,060 – CBS GF and/or CPET Funds
- \$1,832,773 – Total Available Project Funding

Current Contracts: No CBS contracts at this time.

Critical Secondary Water Supply (DESIGN PHASE)

For more information and history on this project, visit the City website at: www.cityofsitka.com > Public Works Department > Public Works Projects > Critical Secondary Water Supply – or go directly to: <https://www.cityofsitka.com/government/departments/publicworks/projects.html>

Milestones This Period

- Reviewed responses to filtration equipment RFP. Recommend award to Pall Water, the firm that provided rental filter units during the Blue Lake Dam project.
- Advanced negotiations with Pall to provide water filtration equipment.
- Hired a local consulting firm to help us pursue a \$3 million Dept. of Commerce Economic Development Administration grant.
- Scheduled a January meeting with the EPA and BlankRome, our lobbying firm, to pursue other project funding.

Future Milestones

- Finalize negotiations with Pall and award Notice to Proceed, January 2020.
- Design water treatment plant around selected filtration equipment. Receive 35 percent design package: January 2020.
- Solicit construction bids: November 2020.
- Substantial Completion for secondary water source project anticipated in December 2021.

Background

The project is for design and construction of a secondary water source, for when the primary water source – Blue Lake water treated with ultraviolet (UV) radiation – is unavailable. Blue Lake water will not be available when the Electric Department inspects and maintains the penstock providing water from the dam to the power plant. Blue Lake water may also require filtration – not just UV treatment – if turbidity levels continue to exceed regulatory thresholds.

Total project cost is estimated at \$18 million. Funding for the project is provided by:

\$150,000 – Working Capital
\$380,000 – transferred from UV Disinfection project Working Capital
\$17,620,000 – Alaska Clean Water Fund loan
\$18,150,000 – Total Available Project Funding

Current Contracts:	CRW Engineering Group (design)	\$362,780
	Uproar Consulting (grant-writing)	\$1,000

Peterson Storm Sewer Rehabilitation (DESIGN PHASE)

Milestones This Period

- Received 95% design submittal for Peterson Street culvert.

Future Milestones

- USFW NEPA Evaluation, January 2020.
- Bid construction project, August 2020.
- Complete construction work, November 2020.

Background

The project includes replacement of deteriorated 60" corrugated metal culvert crossing under Peterson Street, allowing for fish passage. Peterson Street is a collector street that provides critical access to side streets and local residences as well as to Sitka High School.

Total project cost is estimated at \$1,215,000. Funding for the project is provided by:

- \$150,000 – General Fund FY2019 Working Capital
- \$220,000 – General Fund FY20 Working Capital
- (\$50,000) – transferred to Davidoff Street Sewer Rehab project
- \$55,000 – National Fish & Wildlife Foundation design grant
- \$60,000 – U.S. Fish and Wildlife Service Fish Passage construction grant
- \$80,000 – U.S. Fish & Wildlife Service Fish Passage construction grant
- \$515,000 – Total Available Project Funding

Note: Additional project funding required. Up to \$700,000 may be requested with upcoming FY21 General Fund Capital Projects Budget.

Current Contracts: DOWL (design) \$78,072

Brady, Channel and Eagle Way Lift Station Rehabilitation (BIDDING PHASE)

Milestones This Period

- Received stamped drawings and specifications from design consultant.
- Awarded contract to DXPE (Alaska Pump & Supply) to provide Flygt pumps for the Brady and Eagle Way lift stations.
- Awarded contract to Boreal Controls, Inc., to provide electrical and control equipment for all three lift stations.
- Secured temporary construction easements needed to build the project.
- Project posted to Bid Express, December 27, 2019.

Future Milestones

- Construction bid period: December 27 to January 30, 2020.
- Construction notice-to-proceed: February 2020.
- Rehabilitate lift stations: February through June 2020.

Background

Eagle Way Lift Station is responsible for pumping all sewage east of Eagle Way toward the Wastewater Treatment Plant (WWTP). Brady Lift Station is responsible for all sewage north of Brady Street. Channel Lift Station is responsible for an apartment complex and one private residence on Halibut Point Road. All three lift stations require excess maintenance due to corrosion and/or outdated pumping equipment. Project will rehabilitate lift stations, re-using existing infrastructure to the extent feasible.

The estimated construction cost for the project is approximately \$1.6 million. Funding for the project is provided by:

- \$250,000 – DCCED grant (Eagle Way Life Station)
- \$220,000 – Wastewater Fund Working Capital (Eagle Way Lift Station)
- \$217,400 – ACWF loan (Brady Lift Station)
- \$165,000 – Wastewater Fund Working Capital (Brady Lift Station)
- \$100,000 – Wastewater Fund Working Capital (Channel Lift Station)

\$350,000 – ADEC loan for Brady and Channel remaining from larger loan
\$550,000 – Wastewater Fund Working Capital remaining from completed projects
 \$1,827,400 – Total Available Project Funding

Current Contracts:	DOWL (design)	\$128,930
	DXPE (supply pumps)	\$110,444
	Boreal Control (supply electric/control equipment)	\$194,900

Airport Terminal Improvements (DESIGN PHASE)

Milestones This Period

- Applied to TSA for an amendment to the grant for additional time and additional costs due to delays caused by the Federal Government Shutdown last year and changes required by TSA to the 30% design for TSA related work only.

Future Milestones

- Complete the 35% revisions for the rest of the terminal improvements design and move into the Design Development Phase (65%) where the improvements will be developed and defined in separate phases for construction and funding, March 2020.
- Resolve the remaining 30% TSA design submittal issues for the TSA Baggage Screening Area.
- AK DOT involvement 65%, especially regarding potential FAA AIP funding & Improvement staging.
- Other funding sources for terminal improvements beyond the PFC/Bonding and AIP grant requests are being developed for consideration, including airport terminal user fees and TSA grants for screening/security improvements.
- Phased construction has been delayed to at least 2021 through 2023, due to the Federal Government shutdown at the end of 2018 and the lack of project funding.
- Still awaiting and anticipating the State of Alaska DOT sending the CBS information about the upcoming parking lot management changes and options.

Background

The Airport Terminal Improvement Project is intended to remedy some of the existing critical problems identified in the Airport Terminal Master Plan 2008-2011, including working conditions in the baggage make-up area and TSA baggage screening area, as well as problems with congested passenger queuing, screening, baggage, fish boxes, waiting areas and passenger flow. CBS accepted a TSA design grant in the amount of \$158,569.25 to design specific improvements to the TSA Baggage Screening Area. Other areas impacted by these design changes are ineligible for the TSA design funding. The Assembly approved moving forward to the 65% Schematic Design Milestone for the preferred concept plan that was presented in the Assembly work-session August 8, 2017. Passenger Facility Charges (PFC) were applied for and approved by ADOT and FAA. Collection of the PFCs began May 1, 2018. The total anticipated revenue collection over the 20-year period of collection is \$6,840,000.00, which will finance the \$4,025,000 revenue bond along with its fees and debt service.

The estimated cost for the project as identified is approximately \$15-million. The current funding plan outlines the following components:

- Passenger Facility Charge Revenue \$4,025,000 Bond secured
- TSA Funding \$3,397,500 Unsecured
- Eligible AIP Grant Request \$10,283,954 Unsecured

Current contracts: MCG Architects (design) \$449,069

Lincoln Street Paving – Harbor Way to Harbor Drive (DESIGN PHASE)

Milestones This Period

- Conducted Assembly work session on project status and alternatives, December 10, 2019.
- Project currently on hold, pending direction from Administrator and Assembly.

Future Milestones

- Assembly Discussion and Direction item coming in January or February 2020.

Background

The project includes replacing non-ADA-compliant curb ramps, failing storm drain, limited curb, gutter and sidewalk and all asphalt pavement on Lincoln Street from approximately Harbor Way to Harbor Drive. Water and sewer utilities will be installed on Cathedral Way, which will also be re-paved.

Funding for the project is provided by:

\$1,760,000 – General Fund
\$105,000 – CPET Funding
\$20,000 – Water Fund
\$20,000 – Sewer Fund
\$1,905,000 – Total Available Project Funding

Current Contracts: Professional and Technical Services, Inc. \$383,290
(Lincoln portion of Lincoln & Katlian contract)

Nelson Logging Road Upgrades (CONSTRUCTION PHASE)

Milestones This Period

- Added safety barrier with delineators at HPR intersection.

Future Milestones

- DNR Survey by North 57 Surveying to prepare easement plan completed by January 2020.
- Utilize remaining State grant funds, approximately \$60,000 to complete additional improvements (emergency phone line to shooting range, guardrail at HPR intersection, turnaround area at new bridge), March 2020.
- Final Project Closeout, Summer 2020.

Background

The project includes replacing both inadequate bridges, realignment at HPR intersection to raise the road elevation out of the stream floodplain, upgrading Nelson Logging Road to include drainage improvements, resurfacing, widening, and pedestrian amenities.

Funding for the project is provided entirely by a \$2,343,000 State of Alaska Department of Commerce Community and Economic Development Grant.

Current Contracts: LEI Engineers & Surveying (design)	\$471,120
K & E Alaska, Inc (construction)	\$1,544,280

MAINTENANCE ACTIVITIES

Streets

- Graded gravel roads.
- Training and prepping equipment for snow removal.
- Worked on water leak on Price Street.
- Removed abandoned vehicles from town to the Scrapyard.
- Ditching.
- Cleaned storm drains.
- Scrapped boats for Harbors, hauled to CD Landfill.
- Hauled recycled glass to Landfill.
- Buried approx. 80yds of Bio Solids from Wastewater Plant.
- Filled potholes.
- Put away spray patching and paint equipment for season.

Central Garage

- 34 repairs on vehicles and equipment.
- Manufactured gate for Building Maintenance for the Library.
- Repaired playground equipment for Parks and Recreation.
- Researched many different vehicle tracking systems. Have narrowed them down to the following best candidate for our fleet that provide vehicle tracking, driver habit tracking, and virtual mechanic.
 - Vehicle Gateway - \$37,560 per year for 71 units
 - Vehicle Tracking Solutions – Silent Passenger - \$27,240 per year for 71 units
 - Harman Spark (limited to passenger vehicles only) - \$6,530 for the first year for 51 units out of 71 vehicles fleet (\$80 one time purchase of unit & \$48 annual fee per unit)
 - Units that are significantly cheaper appear to have reliability concerns.

Scrapyard

- Shipped 6 gondolas, totaling 117,470lbs (58.735 tons).
- Received 5 abandoned vehicles from Streets and 3 vehicles impounded from Police Department.

Grounds Maintenance

COMPLETED:

- Fall/Winter seasonal rotation/maintenance on grounds and athletic fields. 2 PMs, 17 Reactive/Requested (Still working on entering PMs into the work order system).
- Holiday Décor & Tree Lights Down Town
- New Grounds Maintenance Specialist Training on operations and duties. Chad Mulligan Started 12/2/2019.
- Herring Cover, volunteer lead site cleanup by Al & Gal Galo. THANK YOU! - Grounds Team took refuge to Transfer Station on 12/10/2019.
- De-ice Seawalk prior to Saturday 12/14 community 5K run from Centennial through Totem Park.
- Herring Cover, Beaver Lake Trail – 12/16/19 One large 3' diameter tree broken and pitched over trail, Crew dropped tree for safety along with removing 3 additional trees from across the trail that were blown over with exposed roots.
- Repair damaged wayfinding sign – downtown West Mark location

ONGOING:

- Lower Moller East Playground – ongoing work to re-open playground (site old surfacing material removed, repairs and replacement started on remaining playground equipment, new drainage catch basin installed, landscape fabric and edging for p-stone material starting to go down.
- Goddard Hot Springs needs repair to hot water supply line.
- Working on security cameras for the Moller Complex.

Building Maintenance

COMPLETED:

- Preventive maintenance schedule – Normal Operations 20 PMs.
- Reactive/Requested Work Orders – 11.
- Airport – Weather Event Prep- Alaska Airline requested facility to remain open overnight. Plan was in motion. Flights ended up getting in/out.
- Winter Intern/temp Hired (College Break) Assist with Assists in Work Order System and Operation Manual Updates.
- Long Term Care Facility, New Outpatient Space on lower level.

ONGOING:

- Tom Young Cabin – Reported problems with the oil stove and outhouse door.
- Goddard Hot Springs – Reported problem with bottom tub not getting hot water persons felt there is a clogged line.
- City State Main pneumatic controller failed. Bypass put in place to allow system to operate while quotes come in replacement pneumatic control box.
- Fire Hall, overhead door spring broke – special order replacement, wrong spring was shipped.

- Library – Water infiltration during NE wind driven rain. Investigation underway. Team will be investigating with contractor to troubleshoot issue.
- Fire Hall range –replacement required. Sent out motherboard to be rebuilt – repairs to motherboard did not solve problem. Replacement Range Estimate 7-8K. Fire Hall also looking into alternative ranges that will cover their needs.
- Police Department –Original Contractor has not followed through therefore moving onto next in line to replace two broken windows.
- Police Department – HVAC Plan for short term solution and long term planning. Discussion Meeting set for January.
- Airport – luggage cart maintenance.
- Centennial Hall – Gutter membrane installation – Contractor scheduled spring 2020.
- Library – interior LED lighting issues: restroom corridor, bathrooms, and other fixtures.
- Marine Service Center – Condenser Replacement, Work Scheduled Mid-February
- Senior Center – kitchen hood suppression – Work Scheduled for January 14th, 15th, and 16th Assist with Airport Leases/Space (Legal).

MONITORING:

- WWTP boiler circulation pump 1 has leaking flanges (we are going to monitor due to renovations). Pump can be isolated, if needed. We have back up circulation using pump 2.
- WWTP fan unit 2 failed and temporary fan was installed (we will continue to monitor until renovation). Fan unit is for storage area exhaust.
- Harrigan Centennial Hall – tile floor cracking common areas.

Old Sitka Rocks Lift Station Repair

The discharge piping at the Old Sitka Rocks Lift Station developed a leak due to corrosion. In order to replace the corroded piping a temporary discharge line was installed so the corroded piping could be inspected and repaired or replaced. During the early morning hours of Dec 13th the temporary line failed causing the dry well to fill with sewage. Approximately 13,200 gallons of sewage needed to be pumped to the ocean while the crew fabricated a discharge into the force main utilizing our portable bypass pump. The solids settled into the wet well and there was no sheen or debris visible at the discharge location. The incident was reported to both the federal and state regulatory agencies.

The wastewater crew has since been working on bringing the lift station back to life. This includes drying and inspection of the electric pump motors, repair of the discharge piping, and relocating the electrical panel to an above ground location to improve operator safety and reduce potential damage should the dry pit experience a flood in the future. A portable generator has remained on scene to power heaters and fans to aid in drying of lift station. The portable bypass pump continues to pump sewage into the force main. Crews expect to have the lift station up and running the 2nd week of January.

2019 WATER/WASTEWATER HIGHLIGHTS

Water operators flush the water distribution system on an annual basis. In preparation for the annual flushing the main line valve boxes were cleaned and valves are verified to be operable. The flushing takes about two weeks. During the flushing, water mains are isolated a section at a time and the water is flushed out via hydrants and water blow-offs. By isolating water mains a section at a time, the velocity in the pipe increases which allows a scouring action to take place that removes sediment and film that may have accumulated in the pipes.

The wastewater division completed the annual cleaning of the lift station wet wells. The Camel (vacuum truck) is used to remove grease, grit, sludge and debris.

The Water/Wastewater division is making a concerted effort to implement a geographic information system (GIS). GIS is a system designed to capture, store, manipulate, analyze, manage, and present spatial or geographic data. GIS analyzes spatial location and organizes layers of information using maps which will reveal a deeper insight into data, such as patterns, relationships, and situations which will help us make smarter decisions. A few of the GIS milestones this year include:

- Built and populated the GIS Reference Document System (drawings)
- Created and implemented GIS workflows to support data currency
- Created and populated GIS layers representing vertical plant information

Critical assets are defined as assets that sustain our water and wastewater systems' performance. Determining the criticality of assets is based on an asset having a high risk of failure and major consequences if it does fail. The water and wastewater divisions have developed a list of critical assets, where they are located and if spares are available. This is one of the steps in developing a fully functioning asset management program which is a project that the water/wastewater division has been working on.

Throughout the year the wastewater division has been working to clean up/out the wastewater treatment plant so it's ready for the rehabilitation project. Historical files are boxed and ready to be scanned, obsolete parts and equipment have been scrapped and other parts and equipment have been inventoried. During construction the wastewater division will move their offices to the Shee Atika Office Building on Alice Loop. UAS is graciously allowing us to use their lab for our water and wastewater analyses. Our lab tech will be working with DEC to get the temporary lab certified for our regulatory compliance monitoring. The wastewater plant needs to remain fully functional during the rehabilitation so significant coordination between the contractor and wastewater division will be necessary.

Throughout the year the water division repaired 13 water leaks. The leaks occurred on a mix of copper services and ductile iron pipe of various sizes. Corrosion was the common theme amongst the leaks.

The water and wastewater divisions are a team of highly skilled individuals. It's because of this that we are able to complete most of our repairs and rehabs in-house. Most of the projects are to replace obsolete equipment and often require fabrication, welding, masonry, carpentry, electrical, and most importantly ingenuity. Some of the special projects that were completed in 2019 include:

- Replacement of corroded sludge line at the wastewater treatment plant
- Reconfigure and replacement of the soda ash piping at the corrosion control facility
- Installation of new online turbidimeter at the Blue Lake water plant
- Replacement of the scum concentrator pump and drive at the wastewater plant
- Installation of a backflow preventer and water line at the Granite Creek lift station
- Removal of obsolete parts and unnecessary bends in the water line on Alice Loop
- Installation of new pumps and electrical equipment at Thomsen Harbor lift station
- Installation of new generators at Sandy Beach and Halibut Point lift stations
- Installation of a blower for the sludge thickener at the wastewater treatment plant
- Installation of new pump and discharge elbow at lift station #7
- Replacement of the scum line plug valve at the wastewater treatment plant
- Exterior painting of the Blue Lake water treatment plant
- Replacement of pump and check valve at the Wortman booster station
- Replacement of UVT analyzer parts at the UV treatment plant
- Replacement of the corroded discharge line at the Old Sitka Rocks lift station
- Replacement of the corroded level control at the Granite Creek lift station
- Installation of valve actuator at the Harbor Mountain water tank

For more information about the projects listed above or to learn more about the work the water and wastewater divisions do please contact the Environmental Superintendent at 747-4060.