

PUBLIC WORKS ASSEMBLY UPDATE
WORK COMPLETED THROUGH SEPTEMBER 2019

Wastewater Treatment Plant (WWTP) Rehabilitation (DESIGN PHASE)

Milestones This Period

- Completing bid documents and working on full set coordination and QC review for the 100% bid set.

Future Milestones

- Anticipate project to go out for bid, October 10, 2019.
- Award construction contract and begin construction of the WWTP rehabilitation project, December 2019.
- Anticipated project completion, Spring 2021.

Background

The Wastewater Treatment Plant was built in the early 1980's and most of the building systems, especially the HVAC (ventilation air) systems have failed or are past their useful life and require replacement. The air quality within the building is inadequate and corrosive and the exposed piping and metal within the building are corroded. The building's envelope leaks air and does not allow for proper pressurization of the office areas and other clean rooms. Corrosive air in these spaces results in electronics regularly becoming dysfunctional within months, in addition to creating an unhealthy air quality for the WWTP operators. It is the intent of Public Works to move this project forward as quickly as possible as there are life safety issues that need to be addressed in the existing facility. It is anticipated that the current project funding will be insufficient to rehabilitate the building, correct the life safety, code compliance and non-functional existing conditions. The preliminary total project cost is estimated at \$10 million. Funding for this project is provided by the following sources: \$263,000 in Wastewater fund Working Capital and DEC loans for \$2,832,500 and \$1,825,000 (secured) and a third DEC loan of \$5,079,500 (approved and pending signed agreement).

Current Contracts: McCool Carlson Green (design) \$898,284

Critical Secondary Water Supply (DESIGN PHASE)

Milestones This Period

- Posted Cost Estimate, Sawmill Creek Intake and Backwash Disposal memos on the CBS web site:
<https://www.cityofsitka.com/government/departments/publicworks/projects.html>
- Issued Request for Proposal (RFP) for membrane filtration equipment on September 26:
<https://www.cityofsitka.com/government/departments/publicworks/BidRFP.html>

Future Milestones

- Filtration equipment proposals due October 30, 2019.
- Evaluate proposals, select supplier, award equipment contract: November 2019.
- 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

SMC Transmission Main Break Repair (CONSTRUCTION PHASE)

Milestones This Period

- Project was completed under budget by 18%.

Future Milestones

- Working on project closeout.

Background

Public Works has discovered a break in the 24-inch water transmission main to town on Sawmill Creek Road (SMC) by the Indian River Bridge. The Assembly passed Ordinance 2019-28 (second reading) on July 9, establishing a \$400,000 budget for this work.

Current Contracts:	Core & Main (materials Purchase Order)	\$76,213
	K&E Alaska (construction)	NTE \$250,000
	CRW Engineering Group (design support)	\$16,000
	Northern Utility Services (leak detection)	\$9,400

Crescent Harbor Float Replacement – Phase I (DESIGN PHASE)

Milestones This Period

- Review and provided comments on 65% cost estimate, September 3, 2019.
- Authorized procurement of Steel Piling through Progressive Design-Build contract with Turnagain Marine Construction, September 2019.
- 95% Harbor Plans submitted and under reviewed, September 2019.
- Draft Guaranteed Maximum Price submitted for review.

Future Milestones

- Electrical design submission and review, October 2019.
- Final Guaranteed Maximum Price approval, October 2019.

- State Harbor Matching Grant Agreement, October 2019.
- Construction project scheduled, Fall 2019 to March 15, 2020.

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 that 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 estimated total cost of \$14,025,000. Of this, the harbor grant will provide \$5,000,000. The Harbor Fund working capital has allocated \$1,000,000 for the project. The remaining \$9,025,000 is planned to be provided with \$8,025,000 in harbor revenue bond proceeds and the use of the Harbor Fund working capital in the amount of \$1,000,000 noted above.

Current Contracts:	Jacobs (project admin & Plan review)	\$154,531
	Moffatt and Nichol (third party estimating)	\$79,948
	Turnagain Phase I Design Build Contract	\$700,000
	Turnagain Float Procurement	\$6,282,666
	Turnagain Steel Pile Procurement	\$556,726

Sitka Seaplane Base (SPB) (PLANNING PHASE)

Milestones This Period

- Executed Professional Services Contact with DOWL.

Future Milestones

- Develop project schedule with consultants and contact stakeholders, October 2019.

Background

Assembly Resolution supporting the acquisition of the preferred location/land parcel for the Seaplane Base (SPB), October 9, 2018. The Assembly approved Supplemental Appropriations for FY19, Ordinance 2018-49, for the SPB. Finance Department submitted project information to FAA by October 31, 2018 – required step in order to be considered to receive any of the \$1 billion AIP Supplemental funding. Improvement or replacement of the Seaplane Base has been discussed on and off for the past two decades. Part of the due diligence, staff is researching the necessary staffing, money, and land acquisition needed for adequate maintenance, operations and reporting for the project. The Seaplane Base study, which included an Economic Impact Study, showed that property on Japonski Island was the preferred site for the SPB. The AIP grants from FAA could help fund planning, design, land acquisition, and construction costs for the new SPB. \$16 million is the estimated Project Cost submitted to FAA for AIP grant funding, which may require (6.25%) matching funds from CBS, unless the project wins a grant from the Supplemental AIP funding, which funds 100% without any required match.

Current Contracts:	DOWL (E/A & Planning)	\$707,079
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Brady, Channel and Eagle Way Lift Station Rehabilitation (DESIGN PHASE)

Milestones This Period

- Received 65% design drawings, specifications and cost estimate for lift station rehabilitation project.

Future Milestones

- Bid period: October to November 2019.
- Construction notice-to-proceed, November 2019.
- Rehabilitate lift station, Winter 2019 - Spring 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. Funding for the project is provided by:

Eagle Way Lift Station

\$250,000 – DCCED grant

\$220,000 – Wastewater Fund Working Capital

Brady Lift Station

\$217,400 – ACWF loan

\$165,000 – Wastewater Fund Working Capital

Channel Lift Station

\$300,000 – ACWF loan (left over from larger, four-lift station loan)

\$100,000 – Wastewater Fund Working Capital

\$1,222,400 – Total Available Project Funding

Current Contracts: DOWL (design)

\$128,930

Bio-solids Municipal Landfill Expansion (PLANNING & DESIGN PHASE)

Milestones This Period

- COE permit completed advertisement stage.
- Permit draft prepared for submission to District Engineer by COE reviewer.

Future Milestones

- COE permit expected, October 2019.
- Bid Construction project, October 2019.
- Construction planned to start, Fall 2019.

Background

The project is required because the existing limits of the Bio-Solids Landfill are nearing available storage limits. A COE permit is required to expand the limits of the landfill to the current DEC permit. The project is funded in fiscal year 2018 for \$500,000.00.

Current Contracts: Stantec (design)

\$48,019

Peterson Storm Sewer Rehabilitation (DESIGN PHASE)

Milestones This Period

- Received 65% design submittal for Peterson Street culvert.

Future Milestones

- USFW NEPA Evaluation.
- 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. Funding for the project is provided by:

\$150,000 – General Fund FY2019

(\$50,000) – transferred to Davidoff Street Sewer Rehab project

\$ 60,000 – U.S. Fish and Wildlife Service Fish Passage Program grant

\$ 55,000 – U.S. Fish and Wildlife Service Fish Passage construction grant

\$215,000 – Total Available Project Funding

Current Contracts: DOWL (design)

\$78,072

Nelson Logging Road Upgrades (CONSTRUCTION PHASE)

Milestones This Period

- No significant milestones achieved.

Future Milestones

- DNR Survey by North 57 Surveying to prepare easement plan complete, October 2019.
- Final Project pay request, October 2019.
- Final Project closeout, October 2019.

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 by a \$2,343,000 State of Alaska Department of Commerce Community and Economic Development Grant.

Current Contracts: LEI Engineers & Surveying (design)
K & E Alaska, Inc (construction)

\$471,120
\$1,544,280

Katlian Street (DESIGN PHASE)

Milestones This Period

- No significant milestones achieved.

Future Milestones

- Project currently on hold, pending direction from Administrator and Assembly.

Background

The project includes replacing non-ADA compliant curb ramps, failing storm drain, and limited curb, gutter and sidewalk and all asphalt pavement on Katlian Street from Halibut Point Road to the MSC. Currently, funding for the project is provided by: Total Available Project Funding: \$747,868 (General Fund).

Current Contracts: Professional and Technical Services, Inc. \$394,986
(Lincoln & Katlian design projects, combined)

Knutson Drive Road Repair (INVESTIGATION PHASE)

Milestones This Period

- No significant milestones achieved.

Future Milestones

- Review DOWL geotechnical exploration and recommendations report internally and discuss next steps: funding, design and repair plan, October 2019.

Background

CBS engaged with DOWL in June 2019 to investigate evidence of road failure in two locations on Knutson Drive. The outside edge of the roadway is settling and the guardrail is slowly sinking and falling away from the street. The consultant was hired to study the road failure, potential causes, and evaluate the potential risk of a more significant road failure.

Current Contracts: DOWL \$47,549.50

Gary Paxton Industrial Park Access Ramp (PLANNING PHASE)

Milestones This Period

- PND completed Draft Report for all components of Boat Haul Out Project.

Future Milestones

- Complete change order tasks and scoping study, October, 2019.

Background

The project includes planning and design for a multipurpose boat ramp for the Gary Paxton Industrial Park. The ramp is to be associated with the new existing barge ramp constructed adjacent to the Boat Building Lot. Project funding of \$40,000 provided in Gary Paxton Industrial Park Budget. Additional funding approved by Assembly March 3, 2019 for \$21,960 for a total of \$61,960.

Current Contracts: PND Engineers Inc. (design) \$49,716

Airport Terminal Improvements (DESIGN PHASE)

Milestones This Period

- No approval of the 30% TSA design submittal, following 30% review meeting.

Future Milestones

- Complete the 35% revisions for the 'rest of the terminal improvements design' & move into the Design Development Phase (65%) where the Improvements will be developed & defined in separate phases for construction & funding.
- ADOT 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 2020 through 2023 due to the Federal Government shutdown at the end of 2018.
- 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 and will. The total anticipated revenue collection over the 20-year period of collection is \$6,840,000.00, which is anticipated to finance the \$4,025,000 revenue bond along with its fees and debt service.

The current 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 in progress |
| • TSA Funding | \$3,397,500 | Unsecured |
| • Eligible AIP Grant Request | \$10,283,954 | Unsecured |
| • Potential User Fees & Airline | TBD | – dependent on securing grants |

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

Police Station Planning Study (PLANNING PHASE)

Milestones This Period

- Police Station Planning Study final report completed and posted on the City website.

Future Milestones

- This project (phase) is complete.

Background

The Sitka Police Department and jail occupies one-third of the first floor in the City/State Court/Office Building and does not meet current industry standards. The City/State Building was built in 1974-76 in partnership with the State of Alaska. It is unsafe and severely inhibits the effective delivery of police service to Sitka. Expenses for maintenance and operations, per 1993 December agreement, are split (34% CBS and 66% State) based on the occupancy remaining within the building. Maintenance of the facility and its building systems, along with replacement of non-functional and obsolete infrastructure, has not kept pace with facility needs. Repairs to the facility to address its deferred maintenance are conservatively estimated to exceed \$1 million. How these costs are to be shared is to be determined, and is complicated by the shared ownership of the facility with the State of Alaska. Given Alaska's current fiscal status, reaching a timely cost-sharing agreement is a point of significant concern.

Current Contracts: Stantec (planning) \$57,558

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

Milestones This Period

- No significant milestones achieved.

Future Milestones

- Project currently on hold, pending direction from Administrator and Assembly.

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. Red concrete crosswalks are planned to be bid as an additive alternate. 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. \$394,986
(Lincoln portion of Lincoln & Katlian contract)
Anderson Land Planning (design) \$5,000

MAINTENANCE ACTIVITIES

Streets

- Graded gravel roads and dust control.
- Overlaying gravel roads.
- Street sweeping.
- Painted crosswalks, stop bars, and no parking curbs City Hall parking lot
- Ditching and planning for Winter.
- Buried approximately 80yds of bio-solid material from WWTP.
- Removed bulb-out at Monastery and Biorka Streets.
- Picked up approximately 30 abandoned vehicles around town for Police Department.

Central Garage

- Performed 34 repairs on vehicles and equipment mostly routine maintenance.
- We had two dump trucks that developed serious airline leaks, one is still being repaired.
- Central Garage personnel returned from Scrapyard on September 9th.

Scrapyard

- Six gondolas shipped a total of 120,460 lbs or 60.23 tons.
- Received approximately 30 abandoned vehicles from Sitka Police Department.

Grounds Maintenance

COMPLETED:

- Seasonal rotation for mowing and maintenance on grounds and athletic fields.
- Prepared athletic fields for special events/games and completed the following:
 - Fall baseball program Moller.
 - Football programs Moller and Kimsham.
 - Soccer program on Kruger Field and Moller.
- Fall Seasonal preparation and Preventative work:
 - Plantings and fertilization of key locations.
 - Closing up and winterizing sites.
- Harrigan Centennial Hall sidewalk brick work – repoint joints and level concaved bricks in decorative square sections.
- Herring Cove parking lot and fire pit area, cleanup – ongoing problem.
- Provided mulch and tools to Americorp Volunteer Group and students of Sitka High School to weed and mulch beds the school campus on September 11th.
- Assisted Sitka Bike Friendly Coalition with Fix-It unit installation on corner of Lake and Lincoln Streets.
- Pioneer Park necessary cleanup due to the large shelter site being used by prohibited individual camping.
- Tree and Landscape Committee support by helping CBS weed beds along the Crescent Harbor Community Playground and SeaWalk viewing site.
- Rain storm damage management of assessing erosion of parks and grounds and maintenance of drainage systems around athletic complexes and other facilities.

ONGOING:

- Damage to the hot water supply line at Goddard Hot Springs. No action taken yet because repairs will be made in the Fall, when site is not heavily used and rains fill cold water supply source.
- Kimsham Complex needs attention on Field D (Kruger) to fill-in settling areas.
- Policy and procedure updates for training, rotation plans, and work management for next season's crew.

Building Maintenance

COMPLETED:

- Annual inspections complete for fire suppression system, fire alarms, and back flow preventers – follow up with necessary repairs.
- City/State building repair water line leak.
- Investigated and made necessary repairs to the City/State building roof leak and damaged due to water infiltration. Hole discovered in roof due to birds pecking in a corner and possible roof duct/louver needs to be modified. Will continue to monitor until issue has been resolved.
- Coordinated with IT, Electric, and Fire Departments and removed the old data supply line between City/State building and Fire Hall.
- Waste Water Treatment Plant – investigate issue with heat detector due to corrosion. Found a replacement device is necessary and need to locate reputable supplier.
- Airport Holding Room toilet leaking – pulled toilet and replaced seals.
- City Hall Restroom water leak.
- Airport backflow preventer – seal replacement.
- Normal operation of preventive maintenance schedule. **NOTE:** Due to limited staffing, resources, and other priorities, a number of monthly & quarterly PM work had to be deferred.

ONGOING:

- Replacement of two broken windows at the Police Department. Coordinating with contractor.
- Maintenance of Airport luggage cart.
- City Hall utility counter renovation, carpet repairs, and IT networking.
- Harrigan Centennial Hall gutter membrane installation.
- Library interior LED lighting – issue with restroom corridor fixture.
- Marine Service Center asphalt patches around exterior of building, work scheduling in process.
- Marine Service Center interior lighting – having to work around schedule of occupants – busy season.
- Marine Service Center condenser – construction bid packet being finalized. Final Review by Engineering firm underway before packet goes out to bid.

- Police Department quote for heat pump option and HVAC plan for short term solution and long term planning.
- Researched security camera options for athletic and recreation facilities. Stock on order.
- Transfer Station building project continuation by Sitka High School. Working with contractors on Electrical, Mechanical, Plumbing plans/bids.
- Senior Center kitchen hood suppression – scheduling work with contractor.

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 heating in room 117.
- Harrigan Centennial Hall – tile floor cracking common areas.

Water/Wastewater

Blue Lake Turbidity:

On 9/21 at 4:40am, the turbidity at the Blue Lake Water Plant rose to 4.15 nephelometric turbidity units (NTU's) causing the system to shut down and crews were called out. Water operators turned treatment back on to keep tanks full, as the turbidity has not yet exceed the level specified in the filtration avoidance waiver. At 6:25am the same day, the turbidity dropped to 3.27 NTU's and looked to be on a downward trend, so the equipment was put back into automatic operation and crews returned home. On 9/22 at 12:30am, the turbidity at the Blue Lake water plant rose to 4.04 NTU's, again the plant shut down and crews were called out. Following the same procedure, the plant was turned back on to keep tanks as full as possible. Turbidity did not drop as quickly this time. Once it was apparent that levels would not be rising, the shutdown set points were adjusted to 4.5 NTU's and the plant was put back into automatic operations. At 4:00am on 9/22, the turbidity had dropped to 3.37 NTU's and the crew went home. The turbidity has remained slightly elevated, ranging from 1.0 NTU's to 3.3 NTU's. Neither of the spikes in levels are considered a turbidity event because they did not rise above 5.49 NTU's, which is the level set in our filtration avoidance waiver. Our filtration avoidance waiver allows five turbidity events in 10 years; we have had four at this point, one in each year 2015, 2016, 2017, and 2018. We have one more "freebie" as it could be called, a sixth event could result in the loss of our filtration waiver from ADEC.

Liftstation #7 Pump Installation:

In early May 2019, the pumps at lift station #7, located on Alice Loop, were failing. Investigation revealed, the discharge elbows and flanges were excessively worn causing loss of pumping. Additional research and consultation with the Flygt pump representative confirmed, while the pumps had the power to do the job, they did not physically weigh enough to sustain a solid seal against the discharge line. Based on this

assessment and the condition of the pumps, new discharge parts and pumps were ordered. One of the pumps was repaired to a point it could somewhat function during dry weather but was insufficient for wet weather flows. Liftstation #7 operated on a combination of the repaired pump and a diesel-powered bypass pump as back up. The new larger pumps arrived on September 17th. Work commenced on September 22nd to clean the wet well and replace the worn discharge parts.

During the cleaning there was a significant amount of gravel in the wet well. Once the discharge parts were installed, wastewater crew televised the collection system served by lift station #7 to determine the source of the gravel. Start-up was postponed until the source of the gravel could be determined to prevent damage to the new pumps. The source of the rocks appears to be from the RV dump station near the Wastewater Treatment Plant. The rocks were removed by the vacuum truck and the lines were cleaned. The wet well was cleaned one last time, prior to pump start up. The new pumps were tested and put into service on September 30th.