

PUBLIC WORKS ASSEMBLY UPDATE
WORK COMPLETED MAY 2016

Kettleson Memorial Library Expansion (now Sitka Public Library):

Milestones this period

- Contractor is completing minor changes.
- Building Commissioning completed.
- Stratton Library (temporary location) cleared out and returned to State control.

Future Milestones

- Physical Completion by Summer 2016
- Acquire and Install additional furnishings outside of construction contract

Background

The State funding of \$5.7 million awarded to CBS is a direct appropriation with no funding match requirements. A private donation of \$400,000 has also been given to the project by the John J. and Eleanor Brust Family and the City has committed \$200,000 in CPET funding and \$357,000 from the General Fund. The Friends of the Library have also raised almost \$90,000. \$350,000 of the budget was allocated to the Centennial Hall Parking Lot Project to relocate the Swan Lake storm drain, leaving a current project budget of approximately \$6.4 million for the expansion and renovation of the Library.

Harrigan Centennial Hall (HCH) Renewal:

Milestones This Period

- Grading and installation of exterior concrete is in progress. Paver installation to begin first week of June.
- Installation of casework and wood wainscot and trim in progress.
- Ceiling grid installation is in progress.
- Installation of tile in new Restrooms is complete.
- Installation of the new light fixtures is in progress
- Installation of flooring is in progress.
- Installation of theatrical systems in the Auditorium is in progress.
- Installation of mechanical systems is in progress.
- Rough in for AV and network in progress.

Future Milestones

- Installation of AV Equipment.
- Bid the Furniture, Fixtures, and Equipment (FF&E) package.
- Substantial completion is contractually required December 20, 2016, but the current project schedule shows the project achieving Substantial Completion before this required date.

Background

The current funding includes four State grants totaling \$11,500,000; a \$1,991,271 FY'10 Legislative Grant designated for a lightering facility visitor's center (previously planned for under the O'Connell Bridge), \$1,180,000 FY'11 CPET Head Tax grant, \$1,400,000 Marine Passenger Funds, \$232,620 heat pump grant, and \$66,000 from the Sitka Historical Society for a total project budget/funds of \$16.4 million.

Airport Terminal Upgrades:

Milestones This Period

- Received \$158,569.25 grant offer for CBS signature from Transportation Security Administration (TSA) to design improvements in the TSA luggage screening area.
- Received Assembly Budget Appropriation Approval for TSA funding.

Future Milestones

- Design improvements to the TSA luggage screening area (with TSA grant) and the airport baggage bay where bags are loaded into the carts for delivery to the airplane. Baggage bay design costs as well as required 5 percent match on TSA improvements will be paid with collected Passenger Facility Charges (PFCs). Design timeline is February 2017.
- TSA intends to fund construction of eligible improvements. Work would take place before Delta Airlines begins summer service, or after it ends, in 2017.

Background

The Assembly-approved Airport Terminal Master Plan called for corrections to three critical deficiencies, including (1) working conditions in the baggage make-up area and (2) working conditions in the TSA baggage screening area. CBS addressed the third deficiency – the lack of hold-area rest rooms –in 2010. Passenger Facility Charges have been collected to provide \$275,000 to accomplish this work.

Baranof Warm Springs Dock Replacement:

Milestones This Period

- Pre-construction meeting held May 24, 2016.

Future Milestones

- Submittals and fabrication Summer 2016.
- Turnagain Marine mobilize to site ~September 15, 2016.

Background

The City and Borough of Sitka (CBS) received a \$1,900,000 FY2013 Alaska Legislature Grant to reconstruct the Baranof Warm Springs Dock. The funding was provided with the understanding that CBS would assume ownership and maintenance responsibilities for the dock once it is reconstructed. The Assembly approved the Administrator to execute a Memorandum of Agreement with the Alaska Department of Transportation and Public Facilities (ADOT&PF) for completion of the Baranof Warm Springs Dock Reconstruction and Ownership Transfer. ADOT&PF be reimbursed the cost of designing and constructing the improvements from the FY13 Legislative Grant. The State awarded a contract to Turnagain Marine (TM) in the amount of \$1,457,285 for the Basic Bid and Alternate A which will result in a 200-foot long float. TM has contracted with Bellingham Marine Industries to fabricate the floats and Mantle Industries to design and fabricate the gangway.

Sitka Transient Float Replacement:

Milestones This Period

- Contractor completed several minor punch list items.

Future Milestones

- Contractor plan to address one remaining pile which does not meet contract requirements pending Corps of Engineers approval.
- Final Completion anticipated June 2016.

Background

CBS received a FY15 State of Alaska Municipal Harbor Facility Matching Grant, for the Sitka Transient Float Replacement Project, which will cover 50% of eligible construction costs not to exceed 2,700,000 in match funding. CBS has allocated a total of \$3,450,000 from the Harbor Enterprise Fund, ~\$198,000 from unspent ANB Harbor bond proceeds, and \$500,000 from the CBS Electric Fund for the project for a total budget of \$6,848,000. CBS awarded a contract to Northern Construction Service (NCS) in the amount of \$4,986,329 for the Base Bid and all additive alternates.

Seaplane Base:

Milestones This Period

- Finalized and submitted Request for Entry into the National Plan of Integrated Airport Systems (NPIAS) for the Sitka Seaplane Base to the Federal Aviation Administration (FAA). This document assists FAA with its consideration of the proposed relocation and expansion of the seaplane base (SPB).

Future Milestones

- Completion of repairs to existing SPB anticipated August 2016.
- Siting Study Update completion June 2016.

Background

In August 2002, the Sitka Seaplane Base Master Plan was completed and includes a Condition & Needs Assessment and Master Plan Alternatives Report. The plan considered 12 alternative sites for a new seaplane base and found the north end of Japonksi Island, between the Coast Guard Base and the cove behind the SEARHC buildings on Seward Avenue was the best alternative. In February 2009, the Assembly unanimously approved Resolution 2009-35 "Supporting the development of the Sitka Seaplane Base." This approved staff applying for and executing a Federal Aviation Administration (FAA) Airport Improvement Program grant for up to \$500,000 to develop the siting plan, issues resolution, design, environmental, and permitting phases of the project. Utilizing proceeds from that grant, in June 2012, an updated Sitka Seaplane Base Siting Analysis was completed which considered a new site and redevelopment of the existing site in addition to the previously recommended Japonski site. The Japonski site was again selected as the preferred site. The findings of this study were presented to the Port and Harbors Commission on April 11, 2012 where they unanimously approved further study of the Japonski Island site. Due to a decline in the number of based aircraft, FAA requires an update to the Siting Study prior to application for any future grant funds for this project.

Gary Paxton Industrial Park Dock:

Milestones this Period

- CBS Staff working with consultant on Design/Build (D/B) Request for Proposals (RFP).

Future Milestones

- Finalize D/B RFP scope and formulate RFP documents.
- Advertise RFP June 2016.

Background

The project is funded by a designated Legislative Grant, administered by the State of Alaska, Dept. of Commerce, Community & Economic Development, and Division of Community & Regional Affairs. The total amount of the grant is \$7.5 million. The project is administered by Public Works and the GPIIP Director, Garry White. The firm of Moffatt & Nichol (M&N) was previously awarded a contract to provide the design for the GPIIP Dock when it was envisioned as a fixed pier or bulkhead structure. M&N may assist CBS as technical reviewer during D/B proposal evaluation and construction.

Gary Paxton Industrial Park Dock:

Milestones this Period

- CBS Staff working on Design/Build (D/B) Request for Proposals (RFP) effort with consultants.

Future Milestones

- Finalize D/B RFP scope and formulate RFP documents.
- Advertise RFP June 2016.

Background

The project is funded by a designated Legislative Grant, administered by the State of Alaska, Dept. of Commerce, Community & Economic Development, and Division of Community & Regional Affairs. The total amount of the grant is \$7.5 million. The project is administered by Public Works and the GPIIP Director, Garry White. The firm of Moffatt & Nichol (M&N) was previously awarded a contract to provide the design for the GPIIP Dock when it was envisioned as a fixed pier or bulkhead structure. M&N may assist CBS as technical reviewer during D/B proposal evaluation and construction.

Edgecumbe Drive Street Reconstruction:

Milestones This Period

- none

Future Milestones

- Completion of outstanding punch list items by O'Brien & Sons, L.L.C., in Summer 2016. Substantial completion date is August 1.

Background

The project includes drainage, sidewalk, curb and gutter, road subgrade and pavement improvements on Edgecumbe Drive from Peterson Street to Cascade Creek Road. The total project budget is \$5.46M. The Assembly approved award of a design-build contract to S&S for \$4,636,500 on May 27, 2014.

Jeff Davis Street Reconstruction Project:

Milestones This Period

- Design consultant completed bid-ready engineering drawings for replacement of water main, construction of new sidewalks, curb & gutter, storm drainage structures and limited sanitary sewer work.

Future Milestones

- Advertise for construction bids in May 2016.
- Award construction contract in June 2016.
- Project substantial completion in September 2016.

Background

The project includes replacement of approximately ~50-year old undersized water main with new, large diameter pipe within Jeff Davis Street and replacing the existing storm drainage infrastructure, pavement, curb, gutter and sidewalks. The project will also improve the sewer service to four homes on Jeff Davis Street currently served by a collection main crossing private property. Funding for the project is provided by the following sources; \$644,000 FY2015 ADEC Grant, \$812,000 FY2014 ADEC Water Loan, \$225,000 from 2016 General Fund and \$110,000 from 2017 General Fund (anticipated).

Landfill and Crescent Lift Station Replacement:

Milestones This Period

- Design consultant completed preliminary investigation of lift station locations.

Future Milestones

- Advertise for construction bids August 2016.
- Construction in Fall/Winter 2016.

Background

The project includes replacement the Landfill Lift Station and force main pipe at the end of Tilson Street and the Crescent Lift Station adjacent to the Sitka Sound Science Center. The pumps and components of both lift stations are inefficient, obsolete and, in the case of the Landfill Lift Station, corroded due to the landfill leachate it is pumping to the wastewater treatment plant. There have also been four force main break within the past 2 years. Funding for the project is provided by ADEC loans and from the General Fund.

Eagle Way and Old Harbor Mountain Road Utility and Road Upgrades:

Milestones This Period

- 100% plan review completed.
- Public meeting held May 9, 2016

Future Milestones

- Advertisement for bids in May 2016.
- Construction is anticipated summer 2016.

Background

The project will include a minimum of 24-foot-wide paved road, storm drainage, water main and services, and possible pedestrian amenities within Eagle Way. The project will also include a minimum of 24-foot wide paved road and storm drain improvements within Old Harbor Mountain Road. Funding for the project consists of a \$1,500,000 2013 Commerce Community and Economic Development Grant.

Nelson Logging Road Upgrades:

Milestones This Period

- Phase 2 Final Design authorization.
- Final pre-design survey underway
- Cultural investigation underway

Future Milestones

- Wetlands Investigation begin June 2016
- Preliminary Design (35%) due May 2016.
- Advanced Design (65%) due July 2016.
- Final Design (100%) due October 2016.
- Construction is anticipated in early 2017 to align with Katlian Bay Road (ADOT&PF) project.

Background

The project includes replacing both inadequate bridges and upgrading Nelson Logging Road as funding allows. The scope may also include road realignment(s) and widening to accommodate two-way traffic. Funding for the project is provided by \$2,343,000 2013 Commerce Community and Economic Development Grant.

Ultra Violet (UV) Disinfection Facility:

Milestones This Period

- Dehumidifier installed.
- Gate warranty repair and security fence upgrades.

- Assembly walkthrough and Public Open House May 19, 2016.
- SCADA upgrades by Boreal Controls, Inc. and flow controls valves for final system upgrade to address the UV Disinfection Facility and the new higher dam elevation.

Future Milestones

- Final Completion June 2016.

Background

The Blue Lake drinking water system is a surface water system, which must comply with the EPA Enhanced Surface Water Treatment Rules (ESWTRs). The UV Disinfection Facility will provide the additional microbial and disinfection controls required under the ESWTRs. The current total project cost estimate is \$8,966,000. Funding for this project is provided by State of Alaska Department of Environmental Conservation (ADEC) loans and grants:

\$4,000,000 FY 2011 ADEC Loan (Includes \$2,500,000 financed with \$1,500,000 subsidized)

\$2,550,000 FY 2012 ADEC Loan

\$3,500,000 FY 2012 ADEC Grant (30% local match requirement).

\$2,061,000 FY 2013 ADEC Grant (30% local match requirement).

\$12,111,000 Total Project Funding

Sitka 2016-17 Paving Project:

Milestones This Period

- Design proposals received April 25, 2016.
- Selection of design consultant & scope/fee negotiation May 2016

Future Milestones

- Advertisement for bids November 2016.
- Construction is anticipated in spring 2017.

Background

The project includes new pavement and ADA required improvements with curb and gutter, storm drain improvements and sidewalk as applicable. Funding for the project is provided by the following sources:

\$ 500,000 CBS Capital Improvement Lincoln Street – Jeff Davis to SNHP FY16

\$1,130,000 CBS Capital Improvement Katlian Avenue FY16

\$ 310,000 CBS Capital Improvement Gavin Street – Brady to Cascade FY15 & FY16

\$1,940,000 Total Project Funding

North Kramer Debris Removal and Repair:

Milestones This Period

- Plans and specification complete
- Advertisement for bids May 20, 2016

Future Milestones

- Construction beginning June 2016

Background

The Assembly passed Ordinance 15-44 on August 21, 2015 which declared a local government disaster declaration as a result of the slides of August 18, 2015, authorized the expenditure of local emergency funds, and requested the Governor declare a Disaster Emergency to exist as described in AS 26.23 and provide State assistance to the CBS. Governor Walker authorized up to \$1,000,000 from State Disaster Relief Funds to assist with the cleanup and recovery. These funds can be utilized to remove the debris from the right-of-way and restore municipal infrastructure to its pre-disaster condition. On October

27, 2015 the Assembly approved a total authorized budget of \$1,500,000 for all costs related to the disaster declaration and authorized the Administrator to award all bids and execute all

Federal Land Access Program (FLAP) Grant: Phases 4&5:

Milestones This Period

- The construction crew has completed construction of the new trail. New trail marking signage has been created and installed.
- As-built surveying of new trail is complete.
- MHLT is reviewing the final as-built surveys for the portions of the trail that are on their property.

Background

The City and Borough of Sitka has been awarded a \$916,897 MAP-21 Federal Lands Access Program (FLAP) Grant for Phase 5 Cross Trail multimodal pathway (Cross TMP), Baranof Street and Yaw Drive connectors, by Western Federal Lands (WFL). The Assembly approved submission of the grant in Resolution 2013-03 in February 2013. Phase 4 of the project, a \$926,000 STIP Grant for a multimodal pathway reconstruction and re-routing from Yaw Drive to the CBS property was funded by the Department of Transportation in the 2009 STIP. DOT planners, with the concurrence of Western Federal Lands (WFL) and CBS, initiated action to combine the two projects as a single \$1.8 million grant and have the project managed by Western Federal Lands for greater efficiency and cost savings.

Federal Land Access Program (FLAP) Grant: Phase 6:

Milestones This Period

- Memorandum of agreement between The City and Borough of Sitka and Western Federal Lands has been executed.

Future Milestones

- Hire a consulting company for planning, design, and complete environmental and permitting sometime in June 2016.
- The completion date is estimated around October 2016.

Background

The City and Borough of Sitka has been awarded a \$250,000 MAP-21 Federal Lands Access Program (FLAP) Grant for Phase 6 Cross Trail multimodal pathway (Cross TMP), connector from Kramer Drive to Alaska Marine Ferry Terminal, by Western Federal Lands (WFL). The Assembly approved submission of the grant in Resolution 2014-06 in April 2014. The Western Federal Lands Access Program application was submitted in April 2014, and then awarded on July 26, 2014. This is listed as a FY16 budgeted project with Western Federal Lands Access Program.

Water

The annual Consumer Confidence Report has been prepared. This report is required by DEC to be mailed to each resident before July 1st each year.

A ribbon cutting and open house was held at the UV disinfection facility. In 2006 the EPA modified drinking water regulations to require utilities to treat for or remove cryptosporidium. UV was the method CBS chose to meet these regulations.

Crews provided water locates at various locations around town.

Maintenance staff are working on installing new chlorine pumps at the Blue Lake Water Treatment Facility. These new pumps are needed to handle the higher pressure caused by the dam being raised.

Water staff have begun the annual spring/summer fire hydrant weed whacking, pressure washing, and painting project. Two of the water storage tanks are in the process of getting pressure washing and intrusive alders are being cut down.

Water and wastewater staff attended fire extinguisher training provided by the Fire Department.

Wastewater

Manholes near Thompson Harbor that were found to have tide-influenced infiltration were repaired with a hydro foam grout. This grout comes in a tube similar to a caulking gun. A hole is drilled near the areas of infiltration and the grout is placed in the hole where it expands behind the structure and stops the infiltration. This is a quick and relatively cheap repair.

Routine maintenance on the lift station drywells has commenced. This includes cleaning and painting of equipment and floors.

The Spring Household Hazardous Waste Event was a success. This year's event netted an average amount of waste compared with previous years.

Crews provided sewer locates at various locations around town.

Wastewater crews have begun to televise sewer mains in an effort to determine the integrity of the CBS sewer infrastructure. This data is critical for master planning and budgeting.

UV Disinfection Facility Public Open House

Overview & Project Need

Provide ultraviolet disinfection to produce high quality drinking water without installing costly filtration equipment and protect public health by meeting new water treatment regulations.

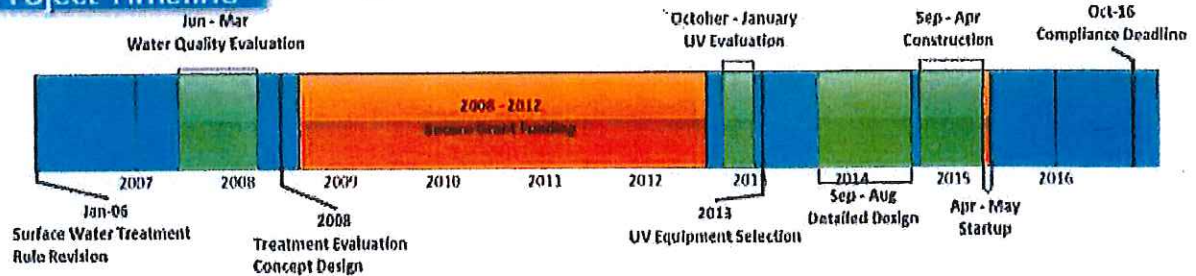
In 2006 the EPA modified drinking water regulations to require utilities to treat for or remove *Cryptosporidium*, a disease causing organism that is resistant to chlorine. The City and Borough of Sitka's high quality Blue Lake source does not require filtration.

New Treatment Process Selection

Five treatment options for the removal or inactivation of *Cryptosporidium* were evaluated for Sitka:

	Ultraviolet Light	Ozone	Chlorine Dioxide	Granular Media Filtration	Membrane Filtration
Overview	Ultraviolet light damages microbial DNA, inhibiting reproduction	Strong oxidant kills and damages microbes	Strong oxidant kills and damages microbes	Granular media excludes microbes	Plastic membranes with small pores remove microbes
Advantages	Small footprint Ease of operation No disinfection byproducts	Taste and odor control Ease of operation Effective at treating emerging contaminants	Taste and odor control Easy on-site generation Controls algae	Robust treatment Proven technology	Very effective removal High reliability for high quality treated water
Disadvantages	Impacted by turbidity and other water quality changes No measurable residual to confirm disinfection was successful	Highly toxic Expensive to produce on site Can produce disinfection byproducts Can increase distribution system corrosion	Extremely long reaction times Increases disinfection byproducts High cost chemical Complex monitoring requirements	Requires chemical pre-treatment Large footprint Backwash stream must be disposed of	Ease of operation Chemical membrane cleaning required Produces backwash which must be treated and disposed of
Capital Cost	\$5,500,000	27,300,000	\$34,900,000	\$24,100,000	\$46,600,000
Annual Op \$	\$360,000	\$1,270,000	\$1,420,000	\$1,090,000	\$2,220,000

Project Timeline



Project Cost

Total Project Cost: \$8,060,000
Grant and Subsidy: \$6,440,000

Loan (1.5% for 20 years): \$1,600,000
City Funds: \$20,000



UV Disinfection: Filtration Avoidance and Cost Effective Public Health



Overview & Project Need

Pre-tide advanced disinfection to produce high quality drinking water without installing costly filtration equipment and protect public health by meeting a new water treatment regulation. In 2006 the EPA modified drink by water regulations to require utilities to treat for or remove Cryptosporidium, a disease causing organism that is resistant to chlorine. The City and Borough of Sitka's high quality Blue Lake source does not require filtration.

New Treatment Process Selection

Five treatment options for the removal or inactivation of Cryptosporidium were evaluated for SIDA:

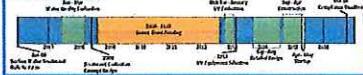
Option	Process	Cost (\$/MGD)	Residual	Operational	Notes
1	Ultraviolet light disinfection	1.5	None	Low	Requires no chemicals, no taste or odor, no disinfection byproducts, and no residual.
2	Chlorination	1.5	Yes	Low	Requires no chemicals, no taste or odor, no disinfection byproducts, and no residual.
3	Chloramination	1.5	Yes	Low	Requires no chemicals, no taste or odor, no disinfection byproducts, and no residual.
4	UV + Chlorination	2.5	Yes	Low	Requires no chemicals, no taste or odor, no disinfection byproducts, and no residual.
5	UV + Chloramination	2.5	Yes	Low	Requires no chemicals, no taste or odor, no disinfection byproducts, and no residual.

UV Disinfection

Ultraviolet (UV) disinfection has been used extensively in Europe and the United States. UV light disinfects water by making pathogenic microorganisms incapable of reproducing by altering the genetic material in their cells. The amount of energy required to damage a cell is much less than the energy to destroy a cell, but the effect is the same. Since without viable DNA, the microorganisms cannot reproduce.



Project Timeline



Project Cost

Estimated project cost: \$15,000,000. Includes design, construction, and equipment.

Sitka's Water Treatment System

Corrosion Control Facility

Sitka will be located at the corrosion control facility (built in 1993) to increase the pH of the treated water to approximately 8.2. By raising the water's pH, lead and copper that are used in plumbing in homes and businesses throughout Sitka are likely to dissolve in the water, keeping lead and copper levels safe for the community.



Blue Lake WTP

The Blue Lake WTP was built in 1974, and until the UV Disinfection Facility was completed, was the primary component of Sitka's water treatment system. At the Blue Lake WTP, chlorine is added to the water to provide disinfection for chlorine and viruses.



UV Disinfection Facility

Completed in 2011, the UV facility houses UV disinfection equipment, fluoride feed equipment, and a laboratory/control room. The UV Facility controls the flow through the water treatment system and maintains the water system to ensure that high quality water is delivered at all times. The facility has space to house disinfection equipment for the future the Blue Lake WTP is removed from service.



Fluoride Feed Equipment

Adds a small amount of fluoride to the water to improve dental health.

UV Reactors

These reactors provide standby capacity and capacity to meet future needs for Sitka's growth. The reactor operates automatically to supply the amount of water needed each day, and waiting to meet the required disinfection volume.

Blue Lake

Blue Lake collects and stores pristine rainwater and snowmelt to be used for drinking water, hydroelectric power generation, and fish passage. Blue Lake was created when the original Blue Lake Dam was constructed in 1958. The dam is upstream of a natural fish-harrier waterfall, making it a salmon-friendly facility.