

TRANSMITTAL MEMORANDUM

TO: The Honorable Mayor and City Council

FROM: Karl R. Amylon, City Manager

DATE: February 26, 2020

RE: **Public Works Department Project Status Report – February 2020**

Attached for City Council review is the project status report of the Public Works Department for the month of February 2020. Should the City Council have questions regarding the Public Works Director's report, staff can respond accordingly.

PUBLIC WORKS DIRECTOR'S REPORT FEBRUARY 2020

Project:	KETCHIKAN GENERAL HOSPITAL ADDITION & ALTERATION
Project Cost:	\$45,207,269
Completion Date:	2016

PROJECT SUMMARY & BACKGROUND

In October of 2013, Ketchikan voters passed a \$43M Bond Referendum to fund the first phase of the expansion and alteration project. Principal funding will consist of the \$43M in bonds, \$15M from a legislative grant, and \$8M from PeaceHealth. On September 4, 2014, Council action finalized the Phase I Guaranteed Maximum Price of \$45,935,018. NAC Architecture has been issued a contract amendment bringing the total A/E contract to an amount not to exceed \$1,221,616. The DOWL HKM Contract Amendment has been approved for Phase I project management, bringing the contract total to \$1,801,000.

UPDATE

Phase I construction was observed to be substantially complete on June 24, 2016. The contractor continues to work on a short list of lingering items. LDC and the City continue to meet bi-weekly to discuss and work through obstacles to wrapping the work up. Meanwhile, LDC and Marble Construction finished the locker room finishes and temporary door infill (near the ER entrance) on August 17, removing the last outstanding item on the Phase I final Certificate of Occupancy. An issue with an occasional exceedance of the OR relative humidity requirements has been raised by PeaceHealth. The project's mechanical engineer has been tasked with offering HVAC operational suggestions (within the context and cost of the existing professional services agreement). Peace Health has also engaged a mechanical engineer to review the matter at their cost. PeaceHealth's stated goal is to have this resolved for the summer of 2019.

Phase II - T- Phase II-T is substantially complete. The contractor has finished all punch list items. The City is withholding funds to ensure remedy of the final outstanding issues.

Project:	FIRE STATION NO. 2 OVERHEAD DOORS REPLACEMENT
Project Cost:	\$320,000
Completion Date:	August 2019

PROJECT SUMMARY & BACKGROUND

In adopting the 2019 General Government Operating and Capital Budget, the City Council appropriated \$424,150 to repair and renovate various components of Fire Station No. 2. Following a building-wide survey for hazardous materials, the Overhead Doors Replacement project was designed by local architect Tim Whiteley. This project will replace the two failing overhead doors with three fast-acting four-fold doors.

UPDATE

Sealed bids were opened on January 30, 2019 by the City Clerk in City Council Chambers. At its meeting of February 21, 2019, City Council accepted the bid of Island Contractors, Inc. in the amount of \$292,340 with a contingency of \$29,234. Notice to Proceed was issued on March 7, 2019. Doors are completely installed and in operation. There was some damage noted as a result of shipping and money has been withheld from final payment. Staff continues to work through that issue, but in the meantime, the doors are a huge improvement.

Project:	TONGASS AVENUE CROSSWALK IMPROVEMENTS
Project Cost:	\$110,000
Completion Date:	Summer 2019

PROJECT SUMMARY & BACKGROUND

At its meeting of January 18, 2018, City Council approved funding in the amount of \$110,000 to undertake improvements to crosswalk safety. The intersections of Deermount and Stedman, the Ketchikan Medical Center and Tongass, and Heckman and Tongass at the Vigor shipyard were identified as priority projects to improve pedestrian safety. ADOT informed that they need more data and monitoring to add a crosswalk at Heckman.

Staff was informed that ADOT has received a Federal Highway Safety Grant for design of safety upgrades at the Deermount intersection. Included in the design are sidewalk bulb-outs, new markings and signage, and enhanced lighting. Construction is expected to be complete in 2020.

UPDATE

Per City Council's direction, staff is working on a permit submittal to ADOT in order to install a rectangular rapid flashing beacon and remove the existing lighted pedestrian sign. This trial is planned for the Deermount intersection. Staff has also recently become aware of some LED lighting upgrades that have potential to increase conspicuity of pedestrians in crosswalks. Pending more research, it would be envisioned the LED lighting options would be installed at the existing push button actuated signage locations.

Project:	GIS SOFTWARE CONVERSION
Project Cost:	\$100,000
Completion Date:	2020

PROJECT SUMMARY & BACKGROUND

The current Geographic Information System (GIS) software provider is Autodesk. Because Autodesk is leaving the GIS market, the City and KPU are looking to make a unified move to ESRI products from Autodesk products. ESRI is the industry leader for GIS. The functionality of ESRI software exceeds current software and is a better fit for current City needs, due in part to its compatibility with our accounting software, New World. All divisions making the move concurrently will leverage economies of scale in the data conversion and provide consistency across City departments and KPU divisions. Costs will be shared by the following departments and divisions as follows:

PW: Engineering - \$19,000; Wastewater - \$19,000
 KPU: Electric - \$23,000; Telecom - \$18,000; Water - \$19,000

An important component of switching to the GIS software is migrating and converting the existing utility models and data into the new software. This is best done by professionals in the industry, as such; Request For Proposals were publicly solicited. Proposals were received on May 2, 2019 and evaluated by a committee with representatives from each participating Department/Division. The committee unanimously agreed to recommend award of a contract to Ptarmigan Software for a not to exceed cost of \$98,000. The contract was awarded by the City Council on June 6, 2019.

An ESRI Small Government Site License has been procured. This type of license allows unlimited users at any license level and costs considerably less than purchasing individual licenses for specific staff members. The ESRI GIS product has been installed throughout the City/KPU.

Laser Fiche has been fully evaluated and is selected as the new document management software (separate but related project). Laser Fiche will integrate seamlessly with ESRI GIS and has user friendly functionality.

UPDATE

Ptarmigan Software has completed the data migration and conversion. The software has been moved from Test mode to Live mode and is currently in use by all participating Departments/Divisions. The contract is 98% complete with only minor refinement tasks to complete.

Project:	NEW AERIAL PHOTOS & TOPO MAPS
Project Cost:	\$240,000
Completion Date:	Summer 2020

PROJECT SUMMARY & BACKGROUND

The aerial orthophotos purchased jointly between the City, KPU, and Ketchikan Gateway Borough in 2008 are out of date. The aerial orthophotos purchased by FEMA in 2014 are also out of date and did not cover some vital facilities and areas, including Ketchikan Lakes, Whitman, Fawn Mountain, and Upper & Lower Silvis Lakes. The aerial maps and topographic maps are used for a variety of in-house purposes and public presentations. The cost of the project will be funded equally between the City and Ketchikan Public Utilities. An RFQ was prepared by Staff and publicly advertised. Numerous proposals were received, and evaluated by a selection committee. The City Council awarded the contract to Lidar America at the April 4, 2019 Council meeting. Prior to contract award, an increased photo resolution was negotiated without increasing the contract cost. This will result in state of the art picture clarity and increase the quality of data that can be obtained from the photo. Staff postponed the data acquisition flight in order to capture the Front, Mill, and Stedman improvements in the photos. Unfortunately, the ADOT project took longer than expected to finish and the weather window to complete the flight has passed. The data acquisition flight has been rescheduled until spring 2020. A Change Order reflecting new contract dates was approved by the Council.

UPDATE

None

BRIDGES & TRESTLES

Project:	SAYLES/GORGE AND WATER STREET TRESTLE #1 REPLACEMENT
Project Cost:	\$4,800,000
Completion Date:	2021

PROJECT SUMMARY & BACKGROUND

The Public Works Department is working in support of the Alaska Department of Transportation and Public Facilities for design and complete replacement of these two structures. The two projects are included in the Statewide Transportation Improvement Plan with Water Street Trestle #1 planned for 2020 replacement and Sayles/Gorge Trestle planned for a 2021 replacement. ADOT permitting and design is ongoing. R&M Engineering from Anchorage was awarded the design by ADOT. Streets Division cleaned the underside of the structure to allow R&M to use scanning technology to survey the structure.

Public Works designed and installed an interim abutment to support the structure until the ADOT construction project begins.

Staff met with the ADOT bridge design team to evaluate design criteria and design concept options. For Water St #1 the design concept recommended is a retaining wall and fill section, eliminating the life-cycle costs of bridge ownership. For Sayles/Gorge, two bridge design concepts were chosen for further vetting. Eliminating the bridge and constructing a fill section for Sayles Gorge was evaluated and ruled out. ADOT & PF's consultant completed a bridge selection report. The consultant evaluated a fill section along with steel and concrete structure. The steel and concrete structure was recommended.

UPDATE

None

Project:	BRIDGE MAINTENANCE & REPAIR (Annual CIP)
Capital Budget:	\$50,000
Completion Date:	Summer 2020

PROJECT SUMMARY & BACKGROUND

Shearer Design, LLC was retained by the City in August of 2007 to undertake a comprehensive inspection of the seventeen municipal bridges and trestles. Based on inspections completed to date, a significant bridge and trestle maintenance/repair program has been undertaken.

During 2019, staff designed a replacement for the pedestrian walkway on the Harris Street Bridge. Staff has postponed construction due to weather and a constructability evaluation related to the replacement/repair of one bent truss member below the walkway.

Staff researched, designed and completed product specifications for spot repairs and overlays of the Park Avenue and Fair Street bridges. Products were vetted through the ADOT and staff spoke with contractors who worked with the product on a similar project in Seward in 2018. All products have been acquired and are in climate controlled storage until construction occurs this summer.

UPDATE

None

STREETS DIVISION (Capital Improvement Projects)

Project:	SAFER STREETS & SIDEWALKS (Annual CIP)
Capital Budget:	\$100,000
Completion Date:	2020

PROJECT SUMMARY & BACKGROUND

The City's curbs and sidewalks are continually in need of repair, maintenance and improvement. These ongoing projects are designed in house and are proposed to correct safety problems associated with settling, icing, drainage and/or cracking problems with curbs and sidewalks. These projects also intend to provide ADA access improvements.

UPDATE

Current projects to be completed in the Spring

Front St Extension-pedestrian ramps

Forest & Schoenbar intersection-pedestrian ramps and new pathway

Park Ave (Ktn Apartments)-rehabilitate broken cantilever sidewalk

Project:	CONCRETE ROAD RECONSTRUCTION & REPAIR (Annual CIP)
Capital Budget:	\$50,000
Completion Date:	2020

PROJECT SUMMARY & BACKGROUND

The City has several concrete roads that have deteriorated and are in need of repair and maintenance. This ongoing project is intended to correct safety issues associated with settling, icing, drainage and/or cracking problems with concrete roads. In 2019 staff designed and obtained quotes to replace deteriorated concrete road panels including upgrades to pedestrian ramps at the intersection of Baranof and Buren; construction is anticipated in summer 2020.

UPDATE

Numerous projects are being evaluated to use the 2020 funding.

Project:	WALL & ABUTMENT RECONSTRUCTION & REPAIR (Annual CIP)
Capital Budget:	\$50,000
Completion Date:	2020

PROJECT SUMMARY & BACKGROUND

The City owns numerous retaining walls and bridge abutments that are showing signs of deterioration. This ongoing project is intended to correct safety issues associated with settling, cracking or general failure of this portion of City-owned infrastructure.

UPDATE

2020 projects have not been identified at this time.

Project:	2019 PAVEMENT OVERLAY & SURFACE REPAIR
Project Cost:	\$600,000
Completion Date:	SPRING 2020

PROJECT SUMMARY & BACKGROUND

This project is intended to continue to repair various asphalt streets throughout the City of Ketchikan. Bid documents for the project were compiled and advertised for bid on May 10. Sealed bids were opened on May 24 at 10:00 am by the City Clerk. Contract was awarded to SECON at the June 6 Council meeting and notice to proceed was issued on July 1. Pre-paving concrete work is complete.

The project was completed on time and on budget. Work on Park Avenue has been postponed to Spring 2020.

UPDATE

Staff has negotiated scope and pricing with SECON to install a new underdrain pipe system, new specialized drainage road base and new curb and gutter on Park Avenue prior to paving. Staff is working with SECON on schedule and work is to be completed this spring.

Project:	SCHOENBAR FISH CULVERT REHABILITATION
Project Cost:	\$500,000
Completion Date:	SUMMER 2020

PROJECT SUMMARY & BACKGROUND

This project will rehabilitate and repair an existing 12-foot wide corrugated metal arch culvert located in Schoenbar Creek, adjacent to Schoenbar Road. The majority of the culvert is in good shape, but the bottom is rotted which makes it a good candidate for trenchless rehabilitation as opposed to a traditional dig and replace. Mill Creek Management Technologies, a trenchless rehabilitation specialty firm, performed a condition assessment report with recommendations. The report found that the culvert is salvageable and trenchless rehabilitation of the bottom is feasible. During Phase I of the project in 2019, it was discovered that there is a tremendous amount of groundwater flowing around, under and ultimately into the culvert through its rotted bottom. The groundwater was problematic in the 2019 project area; however, the amount of water intrusion in the remaining sections of culvert will make rehabilitation nearly impossible. As such, staff is trying to determine the source of the groundwater in order to design an appropriate dewater system. Staff has begun work on conceptual designs.

UPDATE

None

TOURISM & ECONOMIC DEVELOPMENT (Capital Improvement Projects)

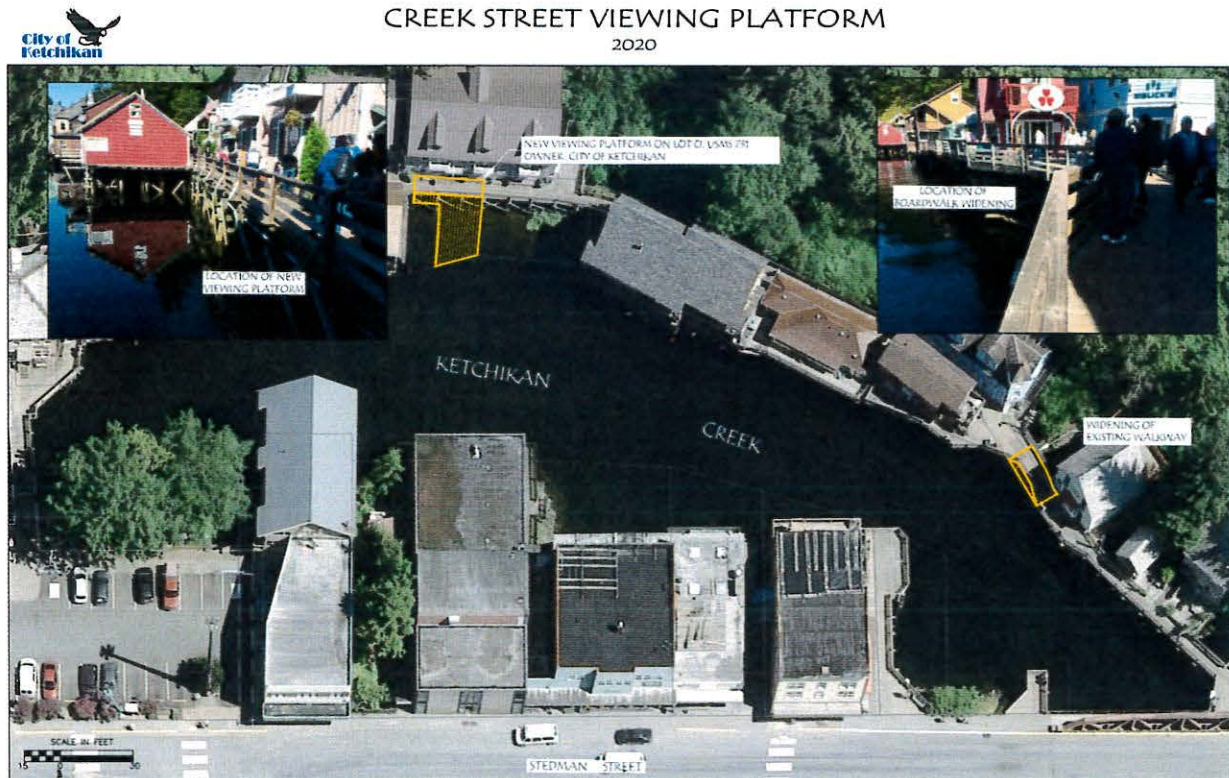
Project:	CREEK STREET VIEWING PLATFORM
Capital Budget:	\$300,000
Completion Date:	2020

PROJECT SUMMARY & BACKGROUND

In adopting the 2020 General Government Operating and Capital Budget, the City Council re-appropriated \$300,000 to complete Phase 1 of boardwalk improvements to Creek Street. Phase 1 includes the construction of an additional viewing platform that will be constructed on City owned property adjacent to #10 Creek street to improve pedestrian access and creek viewing along the boardwalk as well as a widening of existing boardwalk section adjacent to #22 Creek Street.

UPDATE

Design for the viewing platform adjacent to #10 Creek Street and boardwalk widening near #22 Creek Street was completed this spring and permits from KGB Zoning and Army Corps of Engineers have been applied for. ADF&G Fish Habitat Permit has been approved and received. The project was publicly advertised on February 14. Bids will be opened on March 6 at 10am in the City Council Chambers.



Project:	VISITOR AMENITIES IMPROVEMENTS – “SALMON WALK”
Capital Budget:	\$500,000
Completion Date:	2020

PROJECT SUMMARY & BACKGROUND

With the adoption of the 2020 Capital Improvement Program Budget, City Council funded various tourist related improvements under the Tourism and Economic Development, Downtown Visitor Amenities item. A project that Ray Troll conceptualized and collaborated with the Museum Department is called “Salmon Walk”. The Public Works Department developed a CIP to address some of the needs that were identified along the project route and the concept was presented to Council on February 6. At the Council meeting City Council approved the following projects for the Salmon Walk project: Salmon Ladder; Salmon Ladder Viewing Platform; Relocate Crosswalk on Park Avenue; Married Man’s Trail Viewing Platform and Improvements.

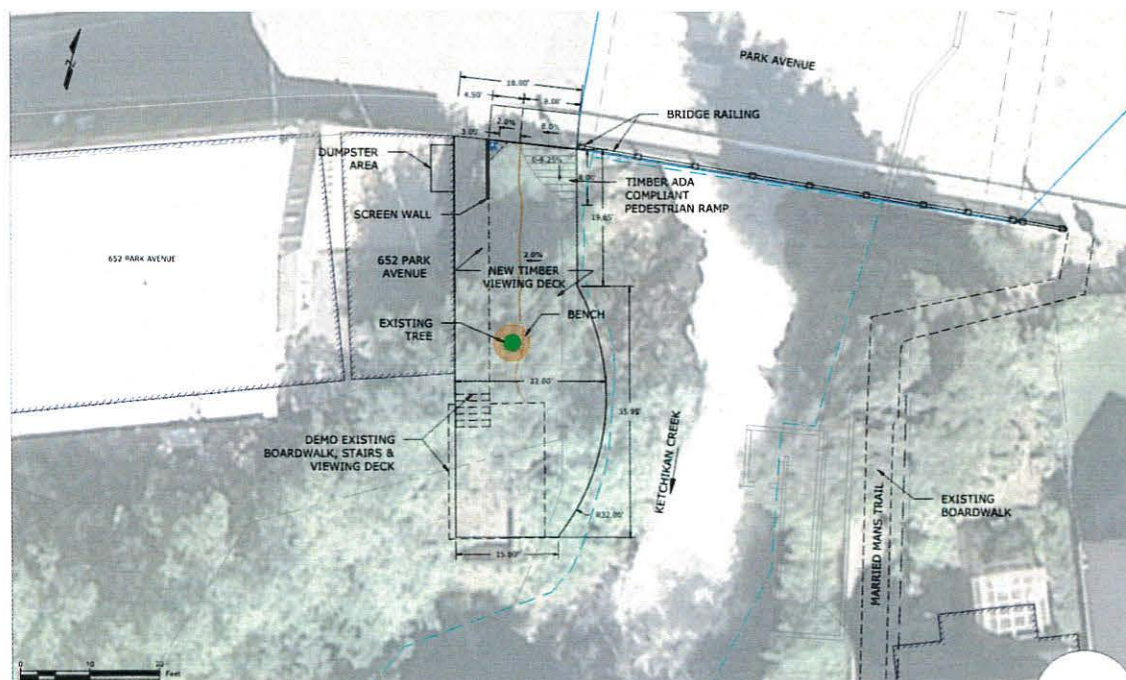
UPDATE

Salmon Ladder: Demolition of the existing wood and metal sections has been completed in-house by the Streets Division (Refer to Streets Division update towards the end of this report). A draft design is being completed and will be reviewed with ADF&G and SSRAA for their buy in prior to getting a contractor on board to build the new concrete sections. It is anticipated that the reconstruction will incorporate some elements that will allow visitors to more readily identify it as the fish ladder. Also, we are focusing on developing a functional fish ladder design while incorporating features that minimize future maintenance.

Salmon Ladder Viewing Platform: Design is being completed in-house and will be advertised by the end of February. Construction is to be completed in early summer.

Relocate Crosswalk on Park Avenue: Design options are being considered with work planned to occur after the tourist season

Married Man’s Trail Viewing Platform and Improvements: Design options are being considered with work planned to occur after the tourist season.



Salmon Ladder Viewing Platform

WASTEWATER DIVISION (Capital Improvement Projects)

Project:	TONGASS AVE SEWER FORCE MAIN REHAB & GRAVITY SEWER REPLACEMENT PHASE II
Project Cost:	\$8,000,000
Completion Date:	2018

PROJECT SUMMARY & BACKGROUND

Phase II involves rehabilitating the City's remaining 2,700-linear feet of sewer force main and 1,700-linear feet of sewer gravity mains. This section of gravity sewer is known to be a major contributor to the sewer system's inflow and infiltration. On June 15, 2017 the City Council approved this project's nomination for the National Infrastructure Program. At the same meeting, the City Council approved an amendment adding funds to a contract with Stephl Engineering to fast track design of this project. The project has been broken into four distinct segments that will each be separate construction projects. These projects are critical in order to reduce the amount of infiltration and inflow coming to the wastewater treatment plant. High peak flows in August and October, during heavy rain events that also corresponded to high tides, resulted in bypassing at pump stations. Based on historical infiltration and inflow studies, it is envisioned that these projects will take a significant step towards muting those peak flows. Value engineering is complete. As such, the project design will incorporate portions of trenchless technology to help mitigate high cost, elevated risk and potential impacts to residents and businesses along the project corridor.

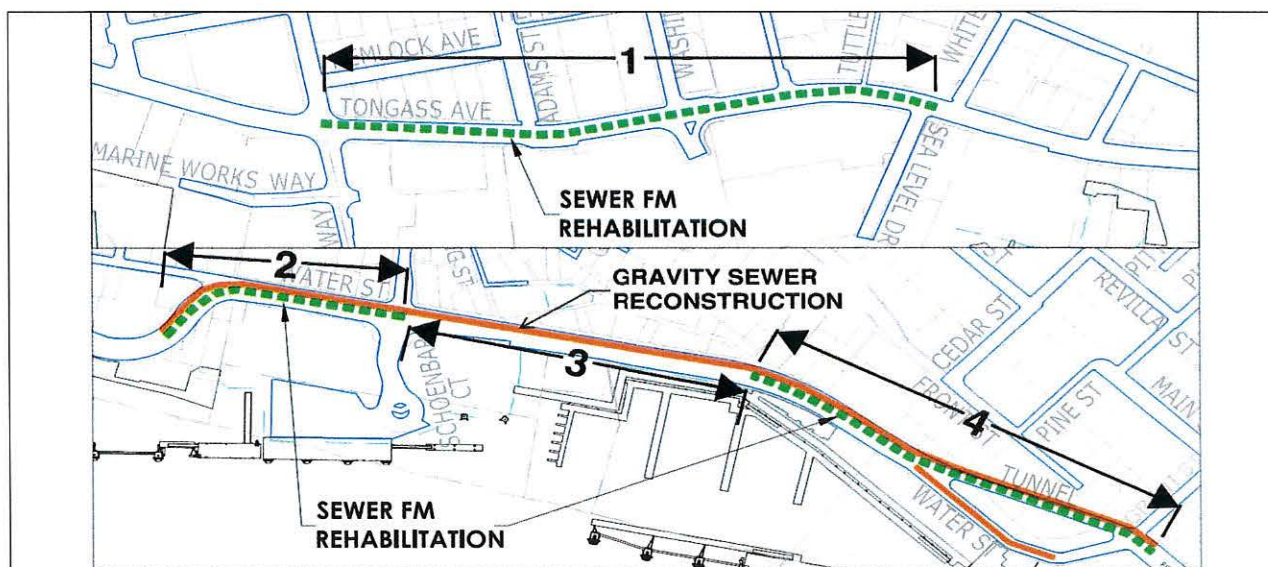
Design Status:

- Segment 1 is complete
- Segment 2 is 65%
- Segment 3 is 80%
- Segment 4 is 90%

Design reviews have been stalled due to Public Works Engineering staff shortages.

UPDATE

None



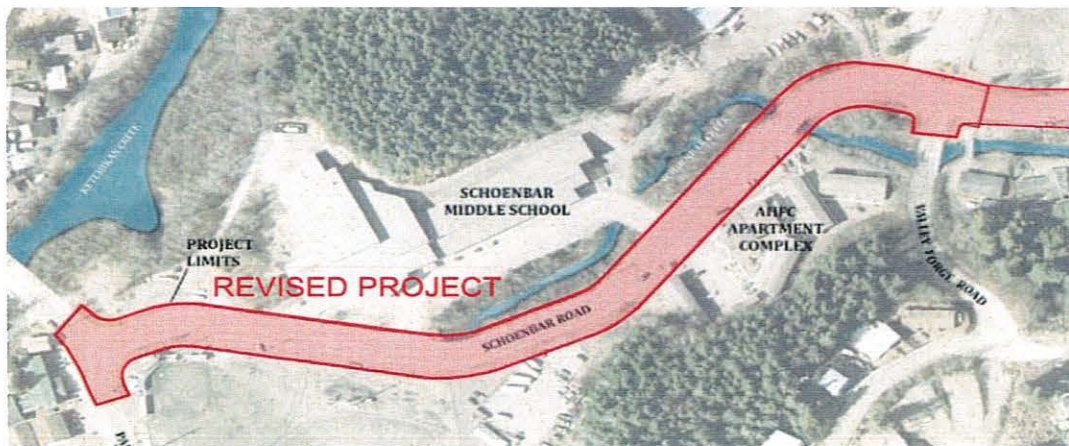
Project:	SCHOENBAR UTILITIES RECONSTRUCTION
Project Cost:	\$11M
Completion Date:	Fall 2021

PROJECT SUMMARY & BACKGROUND

In 2012 Dowl was contracted to design water and wastewater utility replacements within Schoenbar Road from Park Avenue to Valley Forge. The design reached 95% completion and then was shelved due to lack of funding and permitting issues. In 2019, the promise of ADEC loan funding reinvigorated the project. To re-start the project, staff located the original design team with Dowl and agreed on a proposal to complete the design and contract documents. Staff is conducting State and Federal permitting in-house and several permits have been received. Permitting and design work were postponed in mid-2019 due to concerns about the deteriorating 36-inch raw water main which suffered several recent breaks.

UPDATE

In late 2019, Dowl was hired by KPU Water Division to conduct a feasibility study of different options for replacement of the raw water main. The report was received, evaluated and a replacement option chosen. The project is now being re-structured to include replacement of the raw water main within slightly expanded project limits. Staff is also working with ADEC to re-structure the municipal loans and make associated allowances for the additional \$5M bond to fund the additional raw water replacement. New loan questionnaires were submitted to ADEC requesting funding for the increased project scope due to the addition of the raw water main. Design work is underway.



Project:	PUMP STATIONS GENERATOR REPLACEMENT
Project Cost:	\$130,000 per year
Completion Date:	March 2023

PROJECT SUMMARY & BACKGROUND

In adopting the 2018 General Government Operating and Capital Budget, the City Council appropriated money to large and small pump station upgrades for replacement of the aged generators and components at each of the seven pump stations. Electrical engineering company Haight & Associates was hired to design a year by year phased set of construction documents that will go out to bid beginning in 2019.

UPDATE

The Division will be receiving the final specs for the emergency bypass generator in early February. The cord sets that will be used with a mobile generator were delivered and work on the receptacle and electrical should be completed by the end of January.

Project:	WASTEWATER TREATMENT PLANT AND COLLECTION SYSTEM EVALUATION
Project Cost:	\$40,000
Completion Date:	FALL 2019

PROJECT SUMMARY & BACKGROUND

On May 18, 2017, City Council authorized the City Manager to enter into an agreement with CH2M Hill Engineers, Inc. The purpose of the agreement was to conduct an onsite assessment of the Wastewater Division operations, including facilities management and staffing, maintenance, collection system, and laboratory. In July of 2017, CH2M Hill submitted a Final Report, which detailed their findings and recommendations. City Council accepted the Wastewater Treatment Plant and Collection System Evaluation at their meeting of October 12, 2017 and directed the City Manager and Public Works Director to implement the recommendations in the report.

UPDATE

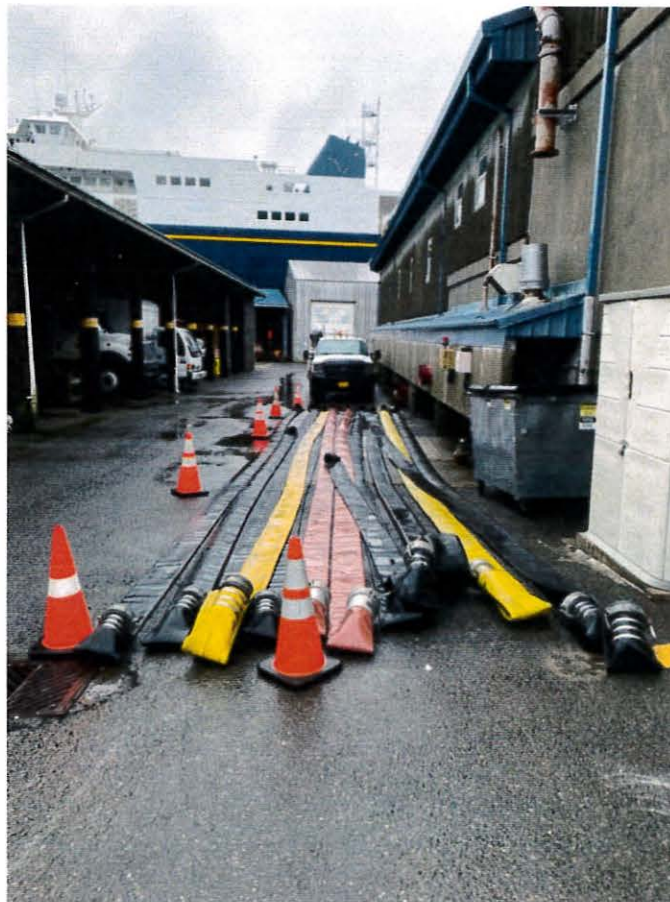
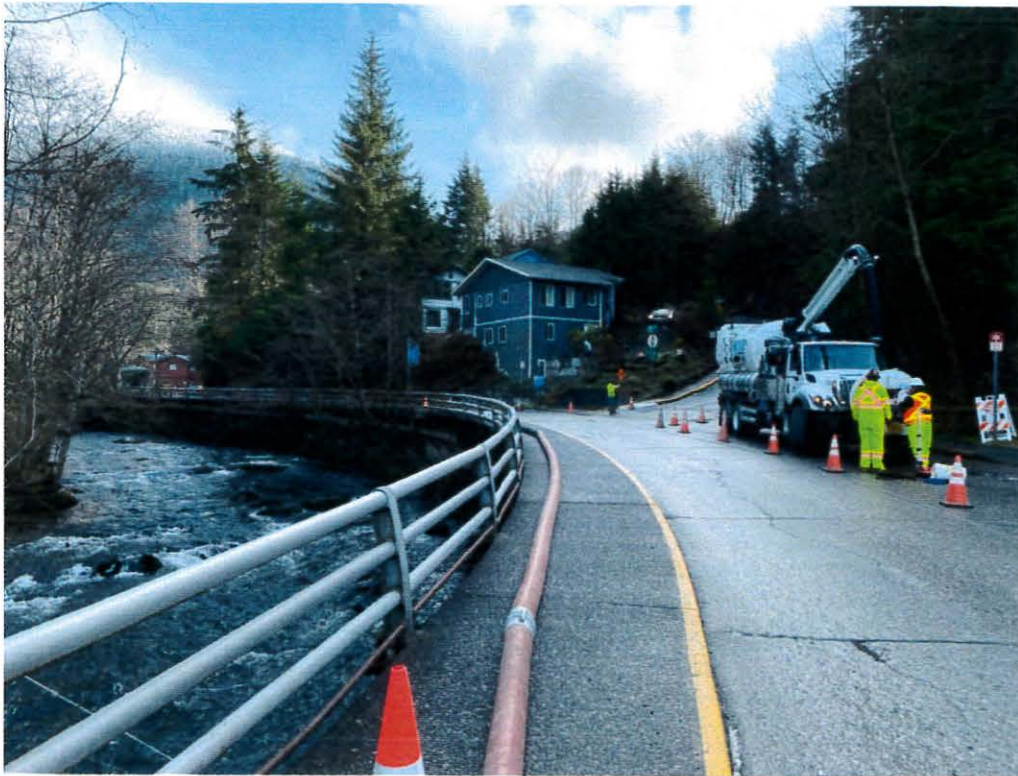
No updates to report at this time.

WASTEWATER DIVISION (Operations)

In addition to the routine work performed on a regular basis, the Wastewater Division performed the following work during the past month:

- A scum pump-off system is being reincorporated to reduce BOD loading of the effluent and eliminate the need to degrease the BFP (Belt Filter Press) once a week. This entails using the existing Penn Valley Pumps to pump into the debris body of the Vactor 2100i for Landfill disposal.
- The Wastewater crew responded to a plugged pump at Pump Station 4 caused by a buildup of rags. This included a confined space entry to set the pump into place once cleared.
- The crew cleaned a large section of the Schoenbar Road wastewater gravity line to determine the condition of the pipe in advance of potential replacement.
- The Wastewater crew successfully performed a large pump around, cleaning and CCTV inspection of the Park Ave. wastewater main. Close to 600' of 6" hose was used to pump around 3 manholes to reduce the flow within the pipe that was inspected. A local contractor assisted with Traffic Control.





STREETS DIVISION (Operations)

In addition to the routine work performed on a regular basis, the Streets Division performed the following work during the past month:

- Streets Division was busy with a snow event the first week of February.
- Work continued on the new shed for the Vactor machine.
- We repaired the fence on Ketchikan Lakes Road that was damaged by a vehicle.
- The crew built 12 custom planter boxes that will be used on the Port to pedestrian pathways, and eliminate the orange construction barricades.
- The entire crew worked very hard in marginal weather to complete the demolition of the wood and steel portions of the fish ladder on Park Avenue.
- Another snow storm delayed the start of the he Bawden Street Reconstruction Project for a day. This work will continue for 3-4 weeks and will be the same scope of the first phase of the project that was completed before ADOT reconstructed Mill Street.

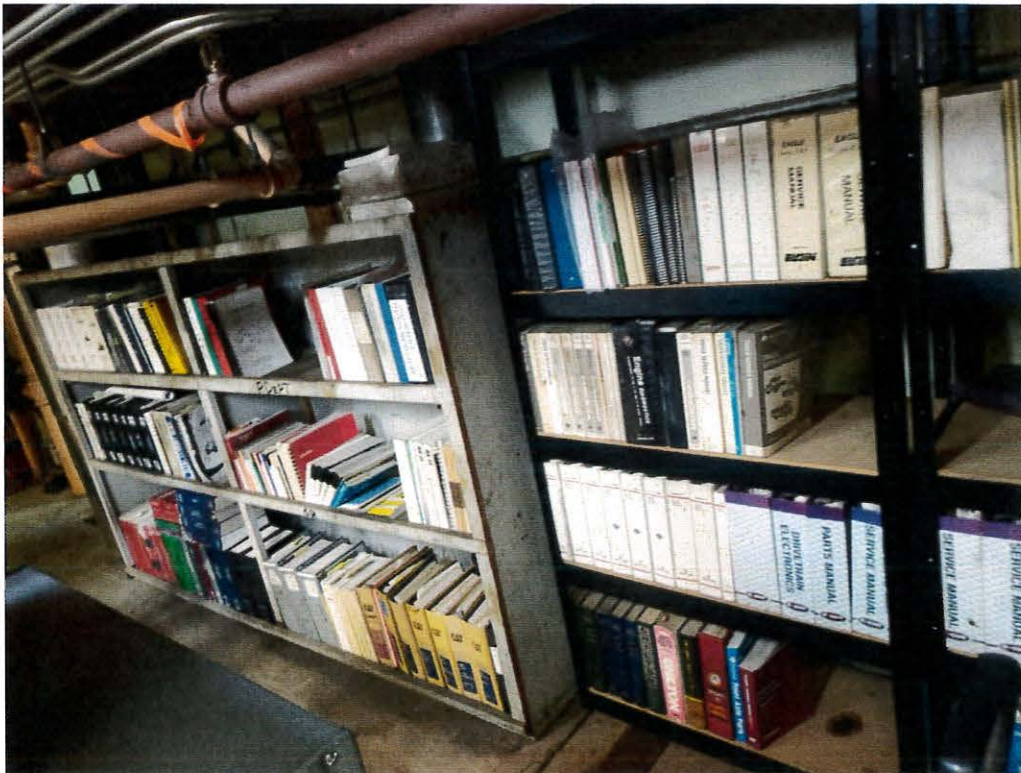
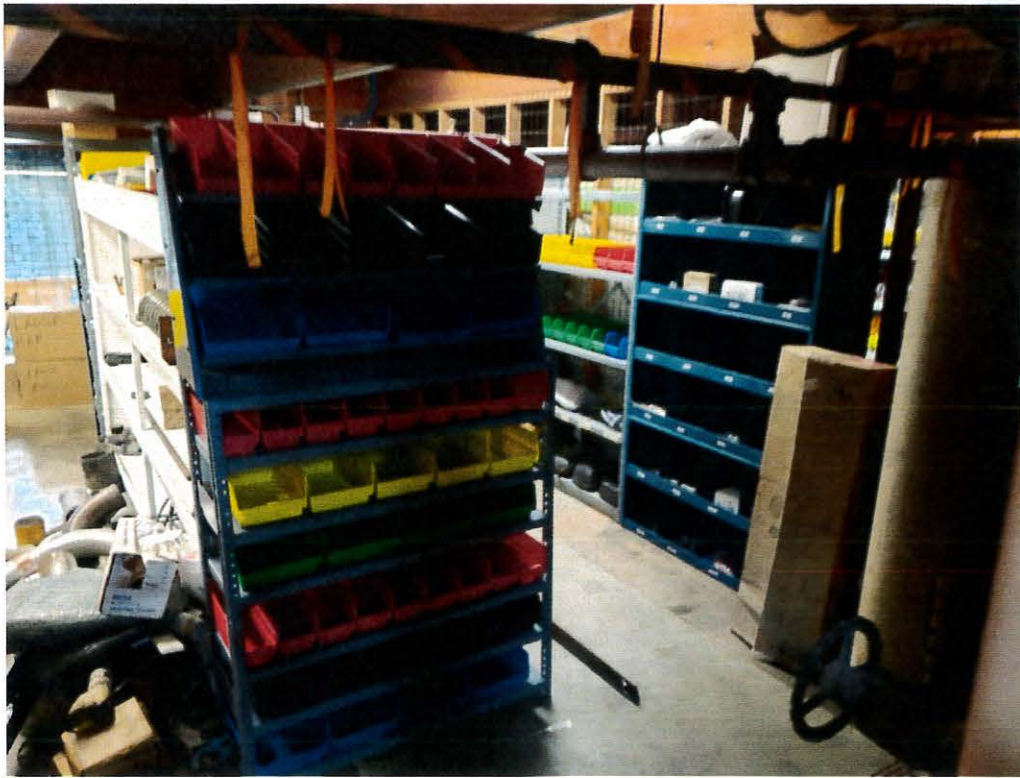


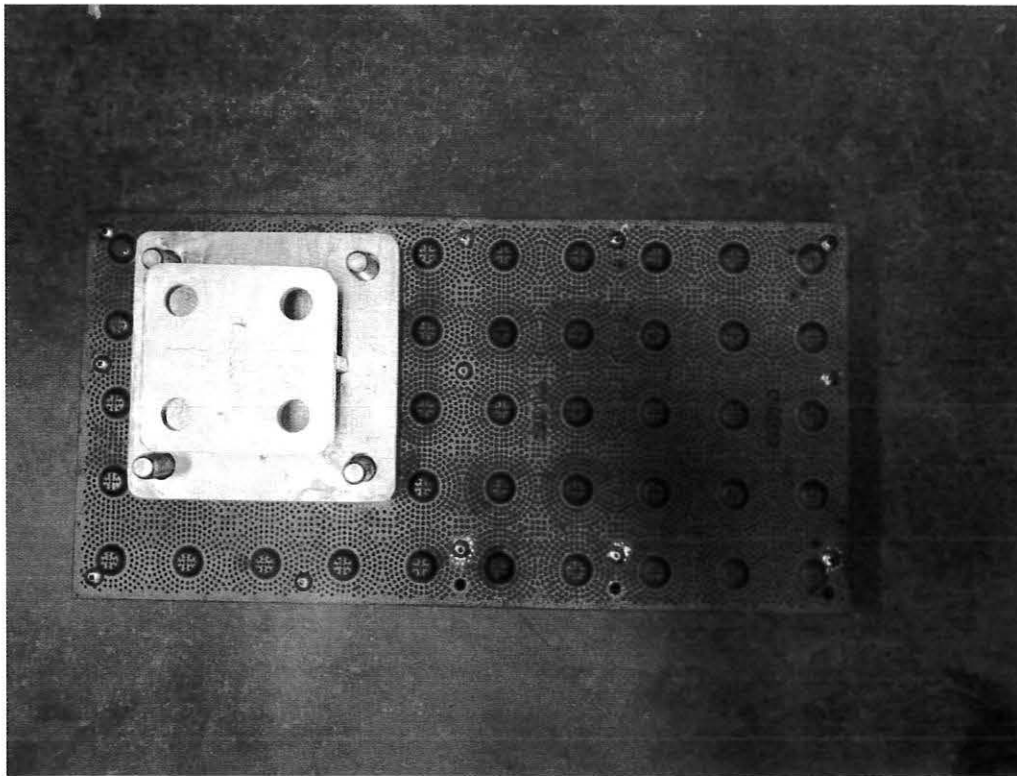


GARAGE DIVISION (Operations)

In addition to the routine work performed on a regular basis, the Garage Division performed the following work during the past month:

- We are continuing the process of cleaning and organizing the upstairs of the shop for parts, manuals, etc.
- The crew has finished modifying the detectable warning surface plates for the Front Street extended sidewalk and ADA ramp project.
- We are working on determining the feasibility of renovating the existing black trash receptacles by repairing worn out hardware, removing rust, and then shipping them for new powder coating. Once we have received our trial can back from the powder coater we will be able to make a determination of the financial feasibility of such an approach. If it is not financially feasible we will try painting them in house.
- The waypoint sign bases in the downtown area are in need of a facelift. We are currently evaluating whether it would be more cost efficient to repaint them, or work with a local sign company to fabricate a wrap for the bases.
- The crew is busy keeping up with programmed maintenance of the fleet, as well as unexpected repairs.





PERMITS

PERMITS ISSUED	SINCE LAST REPORTING PERIOD	YEAR-TO-DATE
Traffic Control Permits:	5	5
Permits to Excavate:	6	6
Side Sewer Permits:	4	4
Site Development Permits:	1	1
Building Permits:	5	9
UPDATED: 02/18/2020		