



City of Gustavus
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City of Gustavus Capital Improvement Plan

Version: COG_CIP: 2025-2029

Approved by the Gustavus City Council on XX, 2025

Introduction: The Capital Improvement Program

This is the seventh comprehensive Capital Improvement Plan for the City of Gustavus. The initial completed plan was approved by the Gustavus City Council on May 14, 2018.

The document as a whole will be reviewed by the City Council each winter to reevaluate priorities, update cost estimates, and choose the priorities for submission to the State of Alaska legislature through their CAPSIS online submission form for capital improvement project requests. Resolutions supporting the projects chosen for the state funding request should be passed at the January or February general meeting in advance of submission of capital improvement project requests to the state through the online CAPSIS portal, due by mid-February. The State of Alaska budget came in 1% lower than last fiscal year, although prior to the COVID-19 pandemic, there were indications the state was coming out of its recession. Little to no capital project funding has occurred in recent years, but municipalities have been encouraged to continue submitting project funding requests to show a need still exists.

In-house funding for capital projects will be determined by the City Council, with the appropriate AMLIP accounts being tapped [e.g. AMLIP Capital Improv Current, AMLIP Capital Improv Long-Term, AMLIP Repair & Replacement (R&R)]. Current year capital improvement priorities will be determined with consideration for urgency of need for the project, phases of multi-year projects, availability of project managers, consolidation between departments for projects of similar focus, etc. In FY23 the City's AMLIP account policy was changed to better utilize the accounts and to ensure that the City was getting the most out of its reserves.

A separate policy and procedure exists for project nomination and development, including a short-form and a more extensive form (i.e. scoping). Project development documents must be approved by the Gustavus City Council before projects are funded.

In FY18, a city-wide inventory of assets took place. Repair and replacement (R&R) annual saving amounts were then calculated based on the following formulas, as recommended by the State of Alaska Department of Commerce, Community, and Economic Development (DCCED), Division of Community and Regional Affairs (DCRA), Rural Utility Business Advisor (RUBA) Program.

For replacement of items with a life expectancy of more than one year but not more than 10 years, the city should set aside 100% of the replacement value in order to purchase the item when needed. To calculate the amount to set aside each year, divide the replacement cost by its life expectancy.

For replacement of items with a life expectancy of more than 10 years, the city should set aside 10% of the replacement value of each item. To determine how much to set aside each year, multiply the estimated replacement cost by 10%, then divide that by the life expectancy of the asset. These are typically larger assets that the city would be seeking outside funding for, and the R&R savings could then be used as a down payment for a loan, a match for a grant, etc.

Beginning in FY19, the annual operating budget includes an expense line-item for each department for contributions to the AMLIP Repair & Replacement (R&R) account. The amount for each department is calculated using the formulas above for the assets within that department. See Appendix E for a summary of these assets and the annual amounts to budget.

Integration of the CIP with Strategic Plan Goals

Capital budgets are generally for large infrastructure development and improvement. Capital budgeting is an important public policy and management decision making tool and can affect a municipality's long-term debt and general fund balances. Substantial funding is generally at

stake in capital budget decisions, and the decision that a government makes shapes the future of the community. Capital projects commit resources into the future and affect a community's long-term spending capacity; these decisions can be felt for 30-40 years. Surprisingly, budgeting for capital improvement projects is not included in Gustavus Ordinance nor is it outlined in policy and procedure. Capital projects have been undertaken, of course, despite not having a plan. For instance, City Hall has been remodeled and expanded, two public bathrooms have been built, and a new fire truck has been purchased.

There is strong evidence that capital budgeting and strategic planning are strongly linked (Beckett-Camarata, 2003). Strategic Planning is founded on a vision and continues long after the initial groundwork is set.

In December 2019, an infrastructure survey was distributed to Gustavus citizens, primarily online, for a two-week period. The purpose of the survey was to rank the relative priority of potential infrastructure improvements for City Council attention, based on both importance and urgency. Important tasks were defined as contributing to our long-term mission, values, and goals. Urgent tasks would demand immediate attention. 180 respondents ranked Importance (low, medium, high) and Urgency (within 3-6 months, within 1 year, within 2 or more years), placing highest priority on obtaining adequate and reliable ferry service and lowest on Parks and Recreation facilities. The respondents ranked the 13 infrastructure areas as follows:

1. Ferries,
2. Safe Public Water,
3. the Electrical Intertie Project,
4. Roads,
5. Clean Energy,
6. the Disposal and Recycling Center,
7. Internet,
8. Beach,
9. Gravel Pits,
10. Marine Facilities,
11. Bike routes and trails,
12. City Buildings, and
13. Parks and Recreation facilities.

The Gustavus City Council is currently in the process of revising the City of Gustavus Strategic Plan. The draft Strategic Plan's Appendix A: Infrastructure Data Table, Combined Results, and result graphs has additional details.

Literature Review

Literature Cited:

Beckett-Camarata, J. (2003). An examination of the relationship between the municipal strategic plan and the capital budget and its effect on financial performance. *Journal of Public Budgeting, Accounting & Financial Management*, 15(1), 23-40. doi:10.1108/jpbafm-15-01-2003-b002

DiNapoli, T. P. (2009). *Strategic planning* (New York (State)). Office of the State Comptroller. Division of Local Government & School Accountability. Albany, NY: New York State, Office of the State Comptroller, Division of Local Government and School Accountability.

Ongoing Projects, Funded in Previous Years

- Marine Facilities Vessel (CP22-02)
 - Status: funded with FY23-02NCO
- Disposal & Recycling Center Compost Yard Improvement (CP19-06)
 - Status: in progress; reinitiated design work after 2020 RFQ overbid. Work initially to be completed in 2024; initial funding approved with FY19-22NCO; 2018 design work funded through operating budget; applied for state funds in FY19 Legislative Request; project modified/expanded for 2019 from original Disposal & Recycling Center Composting Facility project and Composting Quonset Replacement project; Applied for SWIFR grant in CY23
- Gustavus Beach Improvements (CP19-03)
 - Status: in progress; funding approved with FY19-19NCO; Hardened Beach Trail funded with FY23-06NCO, completed in CY23
- Good River Bridge Repairs (originally in operating budget)
 - Status: revamped and included in 2021 projects; originally funded in FY19-FY20 operating budgets but work has not begun. This project is upgraded to reflect an engineer inspection and repair estimate. The estimate from two different engineering firms for the evaluation and repair plans (permitting not included) is \$25,000. \$15,000 was allocated through FY22-03NCO for engineering studies. This project is not currently funded
- DRC Main Building Replacement (CP21-05)
 - Status: Phase 1 (Design) funding approved with FY22-08NCO
 - Approved for Congressionally Directed Spending Grant for \$3,027,000.00 in CY24; currently working through the grant process with the EPA
- Salmon River Park Playground Equipment (CP23-03)
 - Status: Phase 1 completed January 2024; Phase 2 started in October 2024
- GVFD Truck with Skid Unit
 - Status: The City received a Legislative Grant through the CAPSIS program in CY24 for \$90,000; currently the City is asking for quotes for the truck and apparatus
- GVFD Water Tender
 - Status: The GVFD received a 2023 Assistance to Firefighters Grant for \$668,095.23 in CY24; currently the City is asking for quotes
- Heat Pump Project
 - Status: In 2024 the City allocated \$36,000 for this project; in 2024 we purchased two heat pumps for the DRC office and the Community Chest; We are currently looking for a heat pump to install in the firehall
- DRC Landfill Mound Expansion Project & Groundwater Monitoring Well Replacement
 - Status: In 2024 the drainage ditch was relocated to make room for the new balefill area and fencing was ordered
- GVFD Boiler Replacement
 - Status: In 2024 the BSC installed a Toyostove downstairs; Phase 2 will consist of installing a heat pump in 2025. \$8387.55 was quoted for heat pump in 2024

See Appendix A for a full narrative for each project.

Completed Projects in FY24

- Salmon River Harbor Clean Up CP18-01
- Refurbish Old PO CP21-02
- GVFD Fire Hall Painting Project CP24-03
- DRC Ditch Relocation CP24-01 (Phase 1)
- Salmon River Park Playground (Phase 1)

Other Community Projects

This is an incomplete list of other capital projects occurring in the City of Gustavus by other organizations, included here for context only.

Part 1: FY25 Legislative Request for State of Alaska Capital Budget

City of Gustavus FY25 State Legislative Priorities

Submitted via CAPSIS on XX/XX/25.

1. Gravel Extraction Improvement Project \$500,000
Approved by the Gustavus City Council via Resolution CY21-03, CY23-01.
Scoping document approved 5/13/19.
2. Glen's Ditch Design, Cleaning, and Bridge Installation \$100,000
Scoping document approved by City Council 01/16/2024.

See Appendix B for a full narrative for each project.

Part 2: FY26 Projects

City of Gustavus – Fund In-House for FY26

- City Road Improvements Phase 2: Road Improvements \$ 50,000
- Library Ventilation Fans Replacement \$ 5,000

Seek Funding for FY26

- Good River Bridge Repairs Phase 2: Construction \$327,000
- GVFD Extrication Equipment
 - Status: continue seeking grant funding
- DRC Refurbish/Repurpose Composting Quonset
 - Status: continue seeking grant funding

Additional Priority for FY26

- FY25 Legislative Request 3, if unfunded by State of Alaska
 - 3. Gravel Extraction Improvement Project adjusted amount pending

See Appendix C for a full narrative for each project.

Part 3: Mid-Range Projects

- Good River Bridge Repairs Phase 2: Construction
- Disposal & Recycling Center Baler Purchase
- Disposal & Recycling Center Refurbish/Repurpose Composting Quonset
- Bank Stabilization Consultation
- Disposal & Recycling Center Glass Pulverizer – Refurbish or Replace
- Purchase Salmon River Boat Harbor Tract
- GVFD Boiler Replacement
- City Hall / Fire Hall Electric Meter

See Appendix D for a full narrative for each project.

Part 4: Long-Range Projects

- Volunteer Fire Dept. Building Expansion & Roof Repair
- City Hall & Fire Hall Energy Audit Repairs
- Gustavus Public Library Building Expansion
- Disposal & Recycling Center Shredder
- Disposal & Recycling Center “Waste to Energy” Equipment
- Disposal & Recycling Center Drive-On/Vehicle Scale
- Disposal & Recycling Center Equipment Garage
- Disposal & Recycling Center Styrofoam Densifier
- City Vehicle
- Salmon River Harbor Waterless Restrooms
- Salmon River Harbor Public Floats
- City Hall Partial Remodel
- Public Water Drinking Source

See Appendix E for a full narrative for each project.

Appendix A

Disposal & Recycling Center Refurbish/Repurpose Composting Quonset

Project Description & Benefit

This project would allow for tarp free storage of outflow recyclables. This project would make it easier to accumulate shipment-ready quantities of materials that take greater lengths of time to build up and are shipped in containers, such as cardboard boxes or fiber supersacks that deteriorate when stored in outdoor conditions.

Once the existing food waste Quonset is replaced with a new structure, the old steel frame of the Quonset is still usable, it just needs:

- 1) a new location
- 2) new pony walls
- 3) new fabric

The metal tubing that makes up the frame of the existing 30' x 48' Quonset structure would be reused, and a new cover fabric would be purchased and mounted on a new ~4' high pony wall made up of concrete ecology blocks. In 2018, this project was estimated at ~\$15,000. This project cannot happen until the new composting facility has been built and the existing Quonset has been disassembled.

The new proposed location is an undeveloped area behind the office beside the composting yard.

This new structure would be for (recyclable) "Outflow" material that is flowing "out" of the main building. This is bales of plastic, aluminum, etc. that need to be stored prior to shipment. Depending on the material, it can take several months to build up a sufficient quantity to make a van load. Currently the DRC has no outflow storage. Tarps and other subpar methods are used that make for more work for the Operator(s) keeping everything covered during wind events. The DRC needs a dedicated, covered area to be able to store a variety of shipment-ready materials. This will reduce labor and improve efficiency.

The new pony walls are proposed to be made up of the concrete blocks like the ones used to create the backwall for the food waste mixing station in the composting yard. It needs to be material that lasts but can also be rearranged in the future if need be. The metal tubing that holds the fabric that makes up the roof of the Quonset would be fastened to the concrete pony wall with a 4" x 8 wooden board that is fastened to the concrete blocks. This is a very similar setup to what the Quonset has now.

For fabric replacement, Clearspan, the maker of the Quonset kit, sells new covers for their old models. The fabric is rated for 10 years but the current fabric has already lasted 12+ years, so it is presumed this could occur again with the new fabric.

Plans & Progress

The project cannot commence until the new composting structure is in place. The 2017-funded project "Disposal & Recycling Center Driveway Improvements" that was completed in 2018

included some rough work on improving the new location for the Quonset. The new composting structure is planned to be built in 2024.

Total Project Cost

Estimated at \$15,000

New fabric (includes ratchets, etc.)	\$5,000
Freight	\$2,000
22 concrete blocks, purchase, & setting on prepared surface \$350 x 22	<u>\$8,800</u>

Good River Bridge Repairs Phase 2: Construction

Project Description & Benefit

This project implements the engineering recommendations completed in a previous project to repair the Good River Bridge.

Plans & Progress

A Request for Quotation (RFQ) is being developed and issued based on the engineering report created to address the Good River Bridge issues.

Total Project Cost

\$327,000 – \$460,000

Disposal & Recycling Center Main Building Replacement

Project Description & Benefit

The proposal provides for a long-term solution to the necessary space of the next 20-years. The DRC is a regional and state example of recycling and solid waste disposal for rural communities because of the years of developing environmental best practices.

To construct a new main building of 6,000SF with at least 4 large doors and 3 man-doors. There will be a concrete floor as well as areas of the building that have concrete push walls.

The existing main building is too small to safely operate the functions of the DRC. The goal of the project is to construct the new building providing adequate, safe space for customers and staff.

In addition to the new building, three phase power is an important foundation to improving the Disposal & Recycling Center (DRC), as most industrial scale equipment, even equipment the DRC is using now, uses three phase power. It provides more power and can power larger

motors than single phase power can. This project would complete the installation of three phase power at the DRC by bringing three phase power from Dock Road to the DRC.

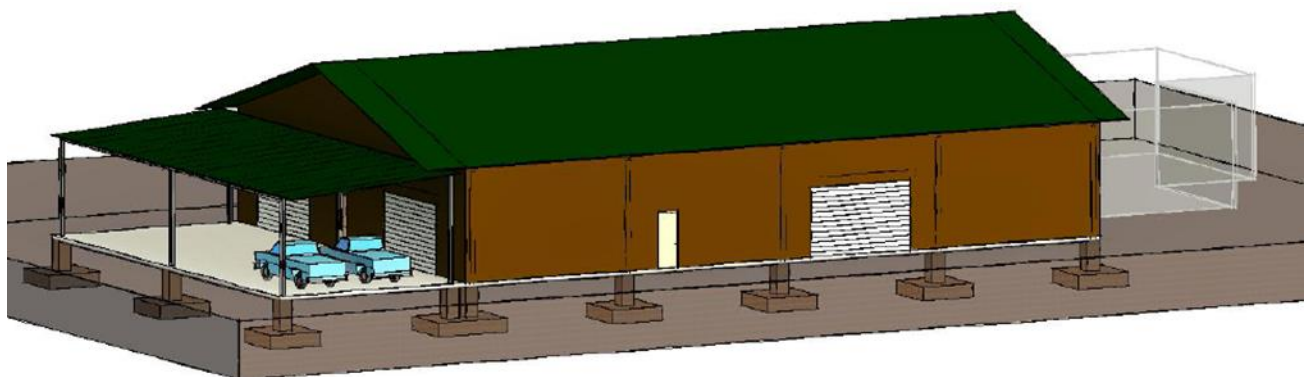
A quote from AP&T was requested for what it would cost to provide three phase power to the DRC. This quote is a part of the planning process for the future of the facility.

City of Gustavus Resolution 2009-11 in support of the extension of a three-phase electrical feeder along Dock Road included a whereas as follows:

“Whereas, the Gustavus Disposal and Recycling Center presently has three phase equipment and would benefit from being able to connect to three phase grid power...”

Total Project Cost

\$3,832,560.00



Gustavus Volunteer Fire Department Truck with Skid Unit

Project Description & Benefit

This project originally was intended to replace Engine 27, which is contaminated with PFAS and is no longer useable. The loss of Engine 27 has changed operations in the fire department. Engine 27 was used in two ways. One as a portable fire hydrant staging at the water source to fill water tenders more quickly. The other was to gain access with a pump down tight driveways that Engine 1 cannot maneuver. Replacing Engine 27 will be done with a smaller 4x4 truck equipped with a Skid Unit, Plow Attachment, and possibly a Patient Basket. This would serve many of the GVFD's current needs. This vehicle will also replace GVFD Utility Pick-Up Truck and the Quick Attack/Wildland Firefighting Truck previously requested in this document. There are multiple different used trucks available through the year from various dealers.

This benefits the community by adding another vehicle to respond to fires. It will be smaller making it able to maneuver the roads better and quicker when they are wash boarded. It should be emphasized that the addition of this vehicle significantly increases the GVFD's ability to respond, especially to fires outside the reach of the Engine 1. Rough roads, limited

access, fast response – wouldn't you want this capability if your house was in the path of a fire, or worse yet – on fire?

A skid unit is a 150-200-gallon tank with a pump on board which allows firefighters to have a small portable fire pump and water tank to take to a small wildland fire. This would include a 1-inch rubber hose, intake, and a separate discharge valve(s). There also would be a spot where we could attach a patient basket so if the patient is somewhere the ambulance would not be able to reach, we have a vehicle to transport a patient, aiding responders in transporting the patient from the scene to the ambulance. This also would allow us to take the unit off the truck during the winter to store it inside.

Total Project Cost

\$90,000. An example vehicle is shown below.

GVFD Water Tender/Road Water Truck

Project Description & Benefit

The Gustavus Volunteer Fire Department currently has two water tenders: a 1981 International and a 1987 international. Both tenders carry 1500 gallons of water each. Tender 1 is an automatic transmission, and Tender 2 is a manual transmission, which can be tough for a volunteer to drive. Neither truck was made for tendering water to a fire, but they are functional.

According to NFPA and OSHA, each tender should have two people during operations: one person driving and one person to help the driver operate safely by helping them back up, stopping traffic, and help with tendering operations. When a fire happens, GVFD would prefer to have as many volunteers working on the fire scene as possible and not engaged in driving vehicles.

This project would invest into one larger 4000-gallon water tender that also has road sprayers. Not only would it reduce manpower of the fire department in an operational scene, but the truck could be used in the summer months spraying water on gravel roads, reducing the dust. One of the current tenders does have a road spraying system. With only a 1500-gallon capacity, however, a lot of time is spent filling the truck with water, and it is challenging to get enough water on the roads to make a difference.

Both Tender 1 and Tender 2 could have some sort of resale value. The trucks are not unusable; GVFD could just be more efficient in our operations with one truck that carries more water.

Total Project Cost

Unknown

City Buildings Air-Source Heat Pump Conversion

Project Description & Benefit

This project would perform an evaluation of converting existing oil-based heating systems of city buildings to air-source heat pumps and perform installation as approved. This project would further the City's commitment to make greener building improvements.

Total Project Cost

Approximate cost \$36,000.

Disposal & Recycling Center Mound Expansion & Groundwater Monitoring Well Replacements Project

Project Description & Benefit

Based on data referenced by the 2021 Landfill Development Plan, DRC places approximately 255 cubic yards of baled waste into the waste mound each year. In addition to that is the 80 – 120 cubic yards of uncompressed waste that is added to the DRC's construction/ demolition waste area. While it is not known when exactly the existing waste mound will reach capacity, preparations should be made to expand the mound into area B and northern third of area C as described by the aforementioned plan and should begin well before there is no more capacity on the existing mound. The expanded area should be fenced in by fall of 2024 and bale placement will begin in the new area when current rows of balefill are maximized and square with each other.

Work on the mound expansion project would include tree and brush removal, tree planting along areas visible from State Dock Road or DeBoer subdivision, earthwork to level the area, and removal of sections of the existing fence and construction of new fencing around the periphery of the combined area B and northern third of area C.

The remaining area inside the existing waste mound will remain open for placement of construction/demolition waste due to close proximity of the original gated entrance to the mound.

There are currently four active groundwater monitoring wells that are used to periodically sample the water beneath the 11.9-acre DRC parcel. One of the monitoring wells, originally installed in 1991, has gone dry, and the three remaining wells are sections of thin wall PVC drainpipe that lack sand screens at the bottom of the wells to reduce the infiltration of sand into the well. It is desired to replace each these four wells with new wells that are properly designed ground water monitoring wells.

Total Project Cost \$109,000

Appendix B

Priority 1. Gravel Extraction Improvement Project

Project Description & Benefit

The City of Gustavus owns the sole source of gravel for use on city roads and for private and commercial use. All of the city-owned roads are gravel; none are paved. Gravel is currently extracted from the margins of existing gravel ponds by excavators. With this equipment, available material from the gravel ponds likely will be exhausted in the next few years. There is little land left to clear on the city-owned parcel, but informal studies indicate extensive gravel likely exists deeper in the ponds.

This project would extend the usefulness of the existing gravel ponds by creating an operating plan and implementing an alternative extraction system, such as a drag-line or dredge, along with support equipment, a truck scale, and site preparation. An operating plan would evaluate shifting the current gravel operation from multiple contracts to private businesses to a city-run gravel operation, including staffing, training, and storage and selling of gravel. It is estimated a new extraction method could provide enough gravel for approximately 20 years, ensuring a supply of gravel for city road construction and maintenance, private development, and other uses. Ongoing operating/labor costs would be covered by the City of Gustavus.

Alternative sites in the community for gravel extraction have been considered and would require land acquisition and clearing of forest. Barging gravel into town is cost-prohibitive.

Research is ongoing as to the best extraction method for extending the life of the gravel ponds. As soon as funding was secured, an Operating Plan would be finalized, and equipment would be purchased for the new preferred extraction method. The city spent \$13,348 in 2019-2020 to complete a formal land survey of the gravel ponds parcel.

Total Project Cost

\$500,000

Priority 2. Glen's Ditch Design, Cleaning, Bridge Project

Project Description & Benefit

The goal of this project would be to clean vegetative debris from approximately 2,800 ft of Glen's Ditch from Gustavus Road to approximately the Nagoonberry Trail parking area, and to replace undersized culverts at three locations, two of which could be replaced with bridges, to enable the ditch to carry high flows from heavy rain events. From Gustavus Rd to the southern boundary of the old Glen Parker homestead, Glens Ditch and Glens Ditch Road are in a 60-foot-wide easement. The road has been maintained by the City since 2004 within the easement

but the City has not maintained the ditch. From that southern boundary of Glen's homestead south approximately 350 ft to the Nagoonberry Trail parking area, the road and ditch are on the Gustavus Forelands Preserve property of The Nature Conservancy. The City maintains Glen's Ditch Rd and the parking area cooperatively with The Nature Conservancy. For that section the City will seek agreement with The Conservancy local manager for the ditch cleaning work.

Appendix C

Good River Bridge Repairs Phase 2: Construction

Project Description & Benefit

This project implements the engineering recommendations completed in a previous project to repair the Good River Bridge.

Plans & Progress

A Request for Quotation (RFQ) will be developed and issued based on the engineering report created to address the Good River Bridge issues.

Total Project Cost

Repair costs to be determined by engineering evaluation.

City Road Improvements Phase 2: Implementation

Project Description & Benefit

This project would implement the recommendations for improvements as informed by a previous project's work with a road engineer and using the city's LIDAR data. The project continues with improvements that includes specific work as follows:

- a. Ditch stabilization along Wilson Rd and Rink Creek Rd to prevent washouts
- b. Preventive Maintenance Program
- c. Road Material Improvement
- d. Alternate road surface procedures

Plans & Progress

Awaiting results of road engineer analysis.

Total Project Cost

Phase 2, implementation of the engineer's recommendations regarding the topics listed above, is of unknown cost and could include annual costs rotating preventative maintenance by neighborhood.

Gustavus Public Library Ventilation Fans Replacement

Project Description & Benefit

This project would replace the two fans in the library's HVAC system for circulating air. After examination 2/24/21, it was observed there is dirt starting to build up on the fans, and eventually the dirt buildup will likely cause the units to work harder and then fail. These units are old and may not have a lot of life left, and cleaning them would be a major project. The recommendation is to purchase new units within the next 5 years to avoid a situation where the system fails and the library has no air circulation. It is expected the cost for new units would not be much more than the cost to pull the old ones down for cleaning, and that cleaning them would not add enough time onto their lifespan to make the cost of that worth it versus purchasing new ones.

Plans & Progress

The HVAC system is serviced annually, so additional information or timing may be forthcoming at the next servicing.

Total Project Cost \$5000

\$1500 x 2 fan units + freight and installation labor

GVFD Extrication Equipment

Project Description & Benefit

This project would purchase a new set of extrication equipment for the Gustavus Volunteer Fire Department (GVFD). GVFD currently has old extrication equipment that was used by Sitka Fire Department before given to the GVFD pre-1999. The main use for this equipment is to cut people out of cars and other similar situations quickly and safely.

The technology of extrication has changed drastically in the past few years and is now battery operated. They are still just as powerful as the older ones, just easier to use - no cables and less people to operate. A set of extrication equipment includes a spreader, cutter, ram, combitool, and a battery bank with spare batteries.

Right now, GVFD would call DOT for assistance and use their hydraulic equipment, which is newer, lighter, and easier to use than ours.

Plans & Progress

One grant application has been submitted but was not awarded. The fire chief continues to seek funding sources.

Total Project Cost

\$35,000

Gravel Extraction Improvement Project

See Appendix B for full description

Appendix D

Good River Bridge Repairs Phase 2: Construction

See Appendix C for full description.

Disposal & Recycling Center Baler Purchase

Project Description & Benefit

To address the inefficiencies of the current balers, it is proposed to purchase a new, or high-quality used, horizontal baler such as the American Baler Company's NF 4560 or the Harris Barracuda. These balers are oriented horizontally rather than vertically which allows them to have more steel in their construction, a stronger baling chamber, larger hydraulics, and a larger three phase motor. These improvements give the machine greater compression which improves bale density. Denser bales benefit the operation whether the material being baled is being shipped out or the material is being placed in the mound. With a denser bale, more material can be made to fit in a given area.

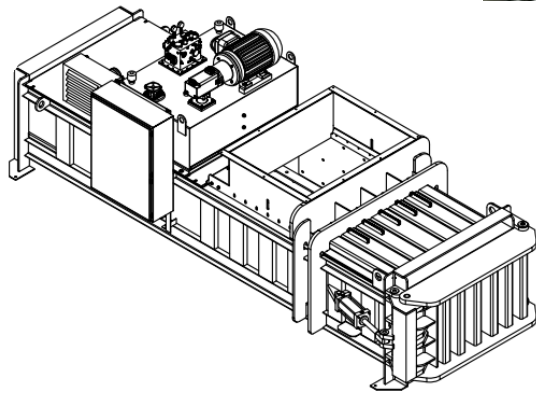
A "closed-door" baler type has been selected which allows for baling a wide variety of materials (independently) such as raw garbage, aluminum cans, cardboard, and scrap metal/white goods. The baler would be fitted with an in-feed hopper to allow greater throughput of material (unlike the current balers which are hand-fed). Both models can also utilize an in-feed conveyor at such a time in the future that a further increase in the amount of material flow requires it. A horizontal layout also allows the baler to use the strength of its large hydraulic ram to push bales out of the baling chamber. This is unlike the DRC's current vertical balers which rely on the less robust dump tray mechanism to remove bales from the baling chamber. Dump tray mechanisms are only able to force bales part way out of the baling chamber which for certain materials (raw waste, metals, and plastics) requires the Operator to use a loader to force the bale the rest of the way out of the baling chamber; this extraction method is difficult and risks damage to the baler.

Plans & Progress

Construction of the new DRC building and installation of three phase power must occur before a new baler can be installed and used.

Total Project Cost \$222,800

American Model NF 4560 Horizontal Baler \$190,000 shipped to Seattle
Freight Seattle to Gustavus - \$7,560
Installation cost - \$5,000
Contingency - \$20,240



Installation would include the hiring of a construction firm to lift the baler off the shipping flat, move it to its designated place of operation, anchoring it into the concrete, installing any attachments that were removed for shipping, connecting all electrical equipment (disconnect and conduit), and installing hydraulic oil if it was removed for shipping. If a new unit is purchased, final electrical connections and training from the sales staff comes with the purchase.

Disposal & Recycling Center Refurbish/Repurpose Composting Quonset

See Appendix A for full description.

City Hall Driveway Relocation or Riverbank Stabilization

Project Description & Benefit

The Salmon River is eroding the driveway that leads to City Hall. It is a slow rate of erosion, but it appears inevitable that the driveway will eventually become unsafe or too narrow to provide access to City Hall. Options that have been considered informally include riverbank stabilization and driveway relocation through some of the existing trees behind the picnic shelter. This driveway is also used by the public to access the old ball field, especially during the Coho salmon run, and by one household to access their home. As part of this access design, the city may want to consider creating an electric vehicle charging station, for use by a city vehicle and possibly the public.

Landscape design consultation is included as a Phase 1 for this project. This would be Phase 2: implementation of the chosen design.

Plans & Progress

State of Alaska visited the Salmon River in April 2018 and took pictures of the erosion by City Hall and its approach to the rock riprap under the Salmon River bridge. The riverbank and driveway are state land. Communication with the state has continued during winter 2020-2021 as additional erosion occurred.

Total Project Cost

Unknown

Disposal & Recycling Center Glass Pulverizer – Refurbish or Replace

Project Description & Benefit

In 2023, the DRC's Glass Aggregate Systems H-100VT glass pulverizer will be 20 years old. The unit will have processed over 800,000 pounds of glass in its work life, and while the numerous smaller, high wear components are continuously replaced, the entire unit will either require extensive refurbishment of its internal glass handling mechanisms or outright replacement. The cost of full replacement is being used for planning purposes.

Total Project Cost

New H-100VT as of 01/2020 \$42,172
Estimated shipping \$7,000



GVFD Boiler Replacement

Project Description & Benefit

The goal of this project is to replace the heating system in the Gustavus Firehall to make the building more efficient and cost effective and to prevent an emergency if the current system fails. The recommendation is to install at least one toyo stove in the garage and a heat pump to heat upstairs. Ideally, it would be best to consider an additional heat pump discharge for the garage in addition to the Toyo. The heat pump would be utilized when it is cold, to ensure adequate heat coverage, and to use as an alternative to the Toyo during less cold temperatures, particularly when work or training needs to be done in the garage.

Plans & Progress

The City is hoping to accomplish this project in two phases. The first phase will be to install a Toyostove downstairs in the garage to use as a backup to the aging boiler. Phase 1 is estimated to cost approximately \$5264.

The second phase would be rolled into the City's larger project of installing heat pumps in all City owned buildings.

Total Project Cost \$21,600

GVFD Electric Meter Installation

Project Description & Benefit

City Hall currently shares its electric meter with the firehall. This project would install a separate electric meter at the firehall to better track power usage at both buildings and provide independent power supplies.

Total Project Cost

Total cost unknown at this time.

Appendix E

Volunteer Fire Department Building Expansion and Roof Repair

Project Description & Benefit

The main structure of the Gustavus Volunteer Fire Department (GVFD) building was built by volunteers around 1981. In the early 1990's, it was expanded to include a third bay. Since, then, the needs of the fire department have continued to grow. This project would expand the fire hall garage, which will create more storage space, bring the building into safety compliance, and provide overnight living quarters. The living quarters will allow for a Firehall live-in program which will reduce response times during non-business hours.

GVFD has a full-time Fire Chief, hired by the City of Gustavus in July 2016, and a non-profit organization coordinating 30 volunteers for fire and EMS response and dispatch services. Skill training is conducted one night every week, with CPR, EMT, and ETT classes offered every year. In August 2017, the City of Gustavus purchased a 2003 Pierce International fire engine for \$113,800 plus shipping. The city also continues to successfully receive multiple annual grants for training and equipment. The GVFD is a thriving and growing organization.

This expansion would create a kitchen and full bathroom upstairs along with bunk rooms. It would also create a larger classroom/training room. It would update the building's aging electrical and lighting in hopes of making the building more energy efficient. Safety improvements would include an additional second story exit and a vehicle exhaust system for the garage. In the garage, it would create separate rooms for storage of EMS supplies and Fire Equipment. It also would create some much-needed space in the garage to be able to work on various equipment without having to remove vehicles into the elements. A bigger garage space also will allow us to store equipment that is currently outside.

The Gustavus Citizens will benefit by having a larger and more organized department, which will ultimately make the operation run more efficiently. The direct beneficiaries are the volunteers at the fire department. Expanded space will also result in longer life for GVFD equipment which is currently stored outside.

In 2016, a local construction company working on the roof noticed lots of roofing materials that were tacked down inadequately and believed there could be damage underneath some of the roof on the main building due to water leakage. This is a hot roof, which is sealed and does not allow air to circulate. If a hot roof gets condensation inside, mold can spread rapidly.

The project would include two phases, Design is Phase 1 (included in FY20 legislative request and the list of Mid-Range Projects) and Build is Phase 2. Both are contingent on funding. As soon as Phase 1 is complete, funding would be sought for Phase 2.

Total Project Cost

\$700,000

City Hall & Fire Hall Energy Audit Repairs

Project Description & Benefit

These projects will be informed by a to-be-scheduled energy audit and engineering plan.

Gustavus Public Library Building Expansion

Project Description & Benefit

The Gustavus Public Library was built by volunteers, grants and donations. When the blueprints were drawn the building was designed for an expansion at some future date. As the population of Gustavus has grown significantly since the late 80's and early 90's, we find that we need more space to better serve the public. As librarians, we are taught to constantly and methodically weed out books to keep things moving and pertinent to the public. However, even with these efforts, we receive comments of the library being "too cluttered".

During the Spring, Summer and Fall months, we are a hub for visitors. Many come to learn about Alaska or Gustavus and its history itself. As a part of this expansion, we would like to see a small portion sectioned off as the "Alaska Room" where those interested can go spend some quiet closed off time (if desired) browsing the bookshelves for the exact local topic they are looking for or one would be able to sit at a small table with some friends and have a small meeting.

The other part of the expansion would serve children, specifically teens. We desperately need a space that tweens and teens *want* to be in, semi-secluded and surrounded by fun and informational books and magazines. The existing "kid's room" space would stay roughly the same but move into the new expansion, leaving more room in the main circulation area for adult and juvenile books.

Plans & Progress

Original blueprints detail a possible expansion. The project would include two phases, Design is Phase 1 (included in FY20 legislative request and the list of Mid-Range Projects) and Build is Phase 2. Both are contingent on funding. As soon as Phase 1 is complete, funding would be sought for Phase 2.

Total Project Cost

Unknown

Disposal & Recycling Center Shredder

Project Description & Benefit

This project is for the purchase and installation of a shredder at the DRC. A shredder is a volume-reduction tool used to reduce the size of large, bulky wastes such as mattresses, bulky rigid plastics, or tires, into small uniform pieces that can either be landfilled or shipped as a recyclable, depending on the item. A shredder can also be used to shred wood waste and cardboard for use in the composting or the waste-to-energy operation (mentioned below). The shredder would be hopper fed similar to the proposed horizontal baler. The



DRC's new building has included the necessary space for the installation of a shredder.

Total Project Cost

Approximate cost for a smaller shredder such as the SSI M50 would be \$55,000 plus shipping and installation. Total costs would be around \$85,000.

Disposal & Recycling Center “Waste to Energy” Equipment

Project Description & Benefit

The DRC is proposing the purchase of equipment to be used to compress wood waste, cardboard, and other clean burning wastes into products such as heating bricks that can be burned in local wood stoves for heat.



Total Project Cost

Costs for basic briquette devices range from \$5,500 to more than \$50,000.

Disposal & Recycling Center Drive-On/Vehicle Scale

Project Description & Benefit

This project is for the purchase of a drive-on/vehicle scale at the DRC. The purpose of a drive-on scale is to facilitate large deliveries of waste to the DRC. A customer would drive on the scale, the gross weight would be determined, the customer would unload their waste into the appropriate area, and then the vehicle re-weighed with the customer charged for the difference or net weight of the waste. A drive-on scale could also be used by the City to charge for gravel coming from the City owned gravel pit. The scale can be operated remotely, similar to the Dray’s fuel pumps, or could be attended by reconfiguring the DRC office.



Total Project Cost

Approximate cost for a new scale, shipping and installation is estimated to be around \$45,000.

Disposal & Recycling Center Equipment Garage

Project Description & Benefit

This project would construct an equipment garage for loaders, attachments, and fuel storage. The DRC needs an enclosed garage with a cement slab to properly house its diesel-powered equipment such as the Bobcat A770 and 763 loaders and provide an area for routine and unexpected maintenance. The DRC also needs proper fuel dispensing equipment for its equipment to reduce spilling and water contamination.



Total Project Cost

Project cost is estimated to be \$20,000 to \$60,000.

Disposal & Recycling Center Styrofoam Densifier

Project Description & Benefit

In an effort to reduce how much material is locally landfilled, the DRC would like to purchase a Styrofoam densifier. This piece of equipment compacts extruded polystyrene foam (EPS). The DRC currently landfills a significant amount of EPS. This material is easily windblown when exposed, creating a litter concern. EPS is also fully recyclable. A Styrofoam densifier would save the City disposal volume and allow this recyclable material to be shipped out of the community.

Total Project Cost

Approximate cost \$15,000.





City Vehicle

Project Description & Benefit

The City of Gustavus has a need for a shared vehicle to accomplish city business. City Hall, Marine Facilities, the Library, and the Disposal and Recycling Center (DRC) all require regular or occasional use of vehicle transport. Currently, employees use personal vehicles, with some employees requesting mileage reimbursement and others not. The City Hall employees use their personal vehicles several times per week for trips to the Post Office and library for mail and for posting announcements. The harbormaster uses his personal vehicle to haul trash to the DRC, to clean the waterless restrooms at the beach and Salmon River Park, and to monitor activities at the dock and harbor. The DRC operator uses his personal vehicle to pick-up solid waste from City Hall and the Community Chest once per week and for hauling jerry jugs of fuel for equipment at the DRC. The fire chief uses his personal vehicle to respond to emergencies and uses the ambulance to haul non-offensive trash and recyclables. The Gustavus Volunteer Fire Department may purchase a utility pick-up truck, which would satisfy their needs.

While this system has worked for a number of years, a city-owned vehicle will allow a more professional appearance (especially important for the marine facilities position), and an electric vehicle will encourage and highlight the city's renewable energy source. Electric vehicles are relatively inexpensive (~\$10,000) to purchase.

Plans & Progress

Ideas for a vehicle include an electric vehicle and/or an open small pick-up truck that could easily haul trash.

Total Project Cost

\$ 10,000 for vehicle, \$2-4,000 for charging station at City Hall.

Salmon River Harbor Waterless Restrooms

Project Description & Benefit

This project would construct waterless restrooms at the Salmon River Harbor, using the same or similar kit as the waterless restrooms at the beach and at Salmon River Park.

Plans & Progress

None.

Total Project Cost

\$40,000 for ROMTEC SST Traditional Double Restroom Kit plus shipping to Gustavus

\$30,000-\$50,000 for site preparation and installation

Salmon River Harbor Public Floats

Project Description & Benefit

This project would install public floats at the Salmon River Harbor.

Plans & Progress

Wooden floats formerly used at the Gustavus Multi-Modal Dock facility may be available for use.

Total Project Cost

Unknown.

City Hall Partial Building Remodel

Project Description & Benefit

The City Hall original building is in need of a facelift. An addition was built 2012-2015, and this part of the building does not need further work. The front room, however, has not been remodeled in some time. The walls have been painted and a new dais has been acquired. However, new carpet should be installed at least in the Chambers, the three windows on the east side of the building should be replaced, and updated lighting (LED) fixtures should be installed.

Plans & Progress

As part of this remodel, the City may want to consider creating an electric vehicle charging station, for use by a City vehicle and possibly the public.

The improvements will benefit the Gustavus community by providing a comfortable, safe, and professional space to conduct City business. The recent improvements (paint, dais, staining the ramp, new City Hall sign, podium, wireless projector, etc.) have already made a difference. These improvements project the pride and professionalism our local government.

Total Project Cost

\$15,000

Public Drinking Water Point-Source Project Development

Project Description & Benefit

This project would contract with a company to produce a report that will identify a water source(s) to create a point-source for public drinking water access, a method of treatment that meets the applicable Alaska Department of Environmental Conservation regulations for standards to provide drinking water, and a proposed system for operating the water utility.

This project would also contract for the installation of a water program that provides for the installation of the necessary equipment to operate a water utility.

Based on the Council's determination on the implementation of the water utility, this project could also facilitate the operation of the water utility.

Plans & Progress

The preferred project plan will be to apply for a Village Safe Water (VSW) grant for a study to determine the need and best approach to create and operate a water utility.

Total Project Cost

Unknown at this time. However, other communities that have used a point-source for a water utility for a community similar in size to Gustavus have spent approximately \$100,000. If a VSW grant is received, the study should provide estimated costs.

