PROPOSED NEW PROJECT - DRAFT

Proposed New Projects Table of Contents

IT Server Virtualization and WMAN Improvements

Project Description & Benefit: Every transaction performed by City employees in the course of daily duties flow through IT servers and Wireless Metropolitan Area Network (WMAN). The City's servers are on average 6.5 years old. Some parts of the City's WMAN are over 5 years old. This project will economically replace the aging servers through virtualization and consolidation. The City's WMAN will also be upgraded and brought to a consistent hardware platform improving throughput, reliability and security.

Plans & Progress: As computers have gotten faster, often times the smallest server available provides more processor, memory, and network bandwidth (compute resources) than a single server needs. Server Virtualization and Consolidation is the use of software to divide a server into many logical work units. These work units, a virtual server, can be dynamically created as workload and work process demand. These virtual servers allow for increased redundancy, more complete utilization of compute resources, can be backed up more efficiently, and moved/mirrored to a Disaster Recovery Site.

The City has realized significant savings through the replacement of "leased lines" with wireless radio links. The City's WMAN was built over time with several different radio vendors and standards. In most cases the wireless links make use of "unlicensed" radio frequencies. This means that the City does not have exclusive access to these frequencies and is susceptible to interference from Wireless ISPs and other end users of WLAN equipment and access points. As the idea of a City WMAN is now proven, it is time to make the investment into "licensed microwave" for the City WMAN. This will improve WMAN performance and security. The improved performance will allow the city to realize the full benefits of server virtualization. The improved security is becoming a requirement for some departments due to State and Federal mandates.

Total Project Cost: $285,000

Priority Level: 1

Schedule: 2014/2015

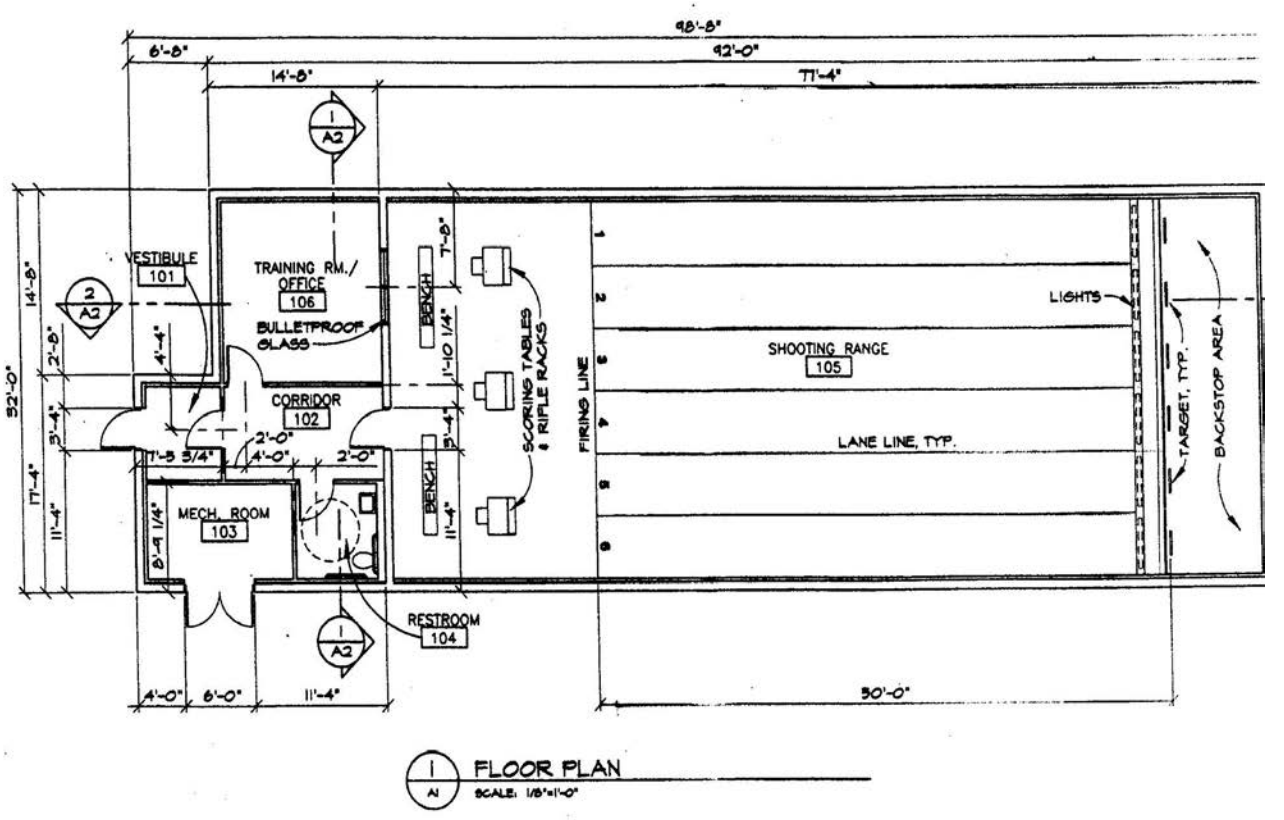
South Peninsula Fire Arms Training Facility

Project Description & Benefit: This project will provide a multi-agency training facility for law enforcement on the lower Kenai Peninsula. Beneficiaries will include the Homer Police Department, local units of the Alaska State Troopers, Alaska State Parks, and various federal law enforcement agencies. Properly managed, the facility could also be used by local gun clubs and sporting groups. The facility, which will include a modern indoor shooting range, will provide a proper and safe environment for firearms training. It will enable local law enforcement personnel to conduct training at any time of day, year-round, regardless of weather.

Total Project Cost: $750,000 (2005 number)

Schedule:

Priority Level:



Homer Senior Citizens Natural Gas Conversion

Project Description & Benefit: This project would convert the Homer Senior Center (HSC) facilities to natural gas. The project budget includes City of Homer Special Assessment costs, service line and meter costs from Enstar, converting boilers on 6 structures and gas ranges and dryers in senior housing units.

HSC has been the sole non-profit senior services provider for Homer for the past 39 years. HSC relies upon grants, private donations and fees for service to meet budget. With budgets tight and the economy still in recovery, private donations are not at the same level. Expenditures increase annually, while revenue continues to remain at the same level and in some cases declines.

Converting to natural gas as a supplemental energy source will reduce our cost for heating oil. This will save the Center as well as the 85 seniors who pay for electric heating at this time. Currently HSC expends over $100,000 in fuel oil. With natural gas HSC will save $37,000 annually according to projections. HSC will save approximately $10,000 annually due to the replaced appliances. The combined savings represents approximatly $35,000 annually, equating to one full-time employee.

Total Project Cost: $504,898

Schedule:
Preconstruction: 2013
Construction: 2014

Homer Senior Citizen's main building.

South Peninsula Hospital

Site Evaluation & Planning for Hillside Reinforcement

Plans and Progress: South Peninsula Hospital sits on a very steep hillside, with all parking lots and outbuildings being terraced down from the main hospital building. Both the lot the hospital sits on and the lot behind it continue with a very steep elevation incline. The buffer is only 12 feet behind the building cut into the hillside before the terrain continues with the steep incline for as far as 300 yards. The remaining hillside has thick vegetation and is not utilized or developed in anyway at this time.

The facility has had numerous additions and structural work completed in the last ten years which may have impacted and affect the stability of the hillside. The hillside runs continuous from the entrance of parking the entire length of the building and beyond. No part of the main hospital building is out of the risk zone for damages from hillside erosion and sloughing.

A site evaluation is necessary to establish the current condition of the hillside, and make any recommendations to secure it from further erosion and sloughing. Such evaluation would include a survey, soils testing, geologic hazard assessment and mitigation report, landslide evaluation, earthquake assessment and recommendations for options to minimize risk to the facility. The recommended options would include cost estimates.

Plans and Progress: The estimated cost of such a study, evaluation and report is $100,000. This could include work by the Army Corp of Engineers, and/or a private engineering firm.

Total Project Cost: $100,000

Schedule: 2014

Kenai Peninsula Borough
Homer High School Turf Field

Project Description & Benefit: The competitive athletic field at Homer High School would benefit greatly by being upgraded to artificial turf. An artificial turf field would enable the school district community to use the facility for a greater portion of the year by allowing use earlier in the spring, and later in the fall than is currently possible. Additionally, artificial turf fields are able to handle a significantly greater amount of use than natural turf fields without risking damage. Upgrading the existing grass field with synthetic field entails removing the existing sod, excavating and back-filling with structural fill, installing a membrane and drainage tile, and installing the turf field with sand and rubber infill.

The project will provide broad community benefit and address a safety hazard. An artificial turf field would protract the playing season for school and community soccer and football teams, as well as other user groups. It allows gym classes to get outdoors and provides an earlier start to outdoors play for our school sports teams. Homer has a very popular summer program for youth soccer, with 180 participating youths. Currently, the summer community soccer season is shortened by field closures that are required to allow the soil to dry. Closure is also required for field maintenance, including protection of newly planted grass seed. Artificial turf would not only afford earlier and later season use of the field. It will also create a community economic development opportunity by increasing the number of visiting summer soccer teams and the revenue they bring to Homer. There are also potential community health benefits offered by a turf field. Allowing field use between games by students and community addresses current data from DHSS that 36% of students in the KPBSD are overweight or obese. Additionally, depending on the type of artificial turf, there is evidence that impact absorption may be greater than for natural turf (grass), and it is certainly greater than gym floors where pre-season practices currently occur, thus reducing injury. The muddy and uneven field conditions are major safety hazards during the spring sports season, causing sprained ankles, often serious enough to keep players out of the game for weeks.

Plans & Progress: A related project, the Homer High School Track Renovation, was included in the 2012-2017 Homer CIP and was funded through a legislative appropriation of $1,100,000 in FY 2013. Approximately $150,000 from the track renovation project was expended to address field drainage in anticipation of the turf field project. With the drainage already in place for a turf field, a significant cost driver for the current project is eliminated. In addition to this major cost savings for the project, there is already a completed design study report, field application and cost estimate in place. The Kenai Peninsula Borough Capital Projects Director has expended considerable time and effort in preparing detailed study, design and engineering materials to support the project. The Borough has applied to the Department of Education and Early Development for bond reimbursement (70%), should the measure pass in Fall 2013. The City of Homer has also supported fundraising efforts through resolution 13-025. No project funds have been secured to date.

Total Project Cost: $ $1,991,737
Preconstruction: $95,851
Construction: $1,895,886

Schedule: 2014

Kachemak Ski Club

Ohlson Mountain Rope Tow Safety Equipment Upgrade

Project Description & Benefit: The Kachemak Ski Club (non-profit operators of the Ohlson Mountain Rope Tow) needs winter safety equipment for the continued safe operation of its ski hill. The KSC ski tow is located over a quarter mile off the Ohlson Mountain Road. All skiers and volunteers must currently walk a snow covered right of way to access the base of the ski hill.

This project would purchase snow machine capable of evacuating an injured skier uphill to the parking lot (where local club first aid responders would transfer care to local EMS providers), as well as for use packing both the access right of way and the tow path of the rope tow itself. Both of the latter are weekly maintenance tasks that must be done to open the hill to the skiing public. A covered open sled capable of being towed by a snowmachine to evacuate an injured skier would be part of this initial purchase.

A four wheel drive ATV is the second major capital item in this request, which would be used for pre-season maintenance of the right of way path, brush clearing on the hill for hauling firewood to maintain the heating needs of the woodstove-equipped ski lodge.

The final phase of the project would include construction or purchase of secure covered storage for the protection of the purchased equipment from the elements as well as a grooming device to break up icy or rutted conditions on the access trail or ski hill itself.

Total Project Cost: $30,000

Schedule: 2015

Map depicts the location of the Ohlson Mountain Rope Tow in relation to Ohlson Mountain Road.

Kachemak Shellfish Growers Association
Kachemak Shellfish Hatchery

Project Description and Benefit: For the last two years the Kachemak Shellfish Growers Association (KSGA) has assisted the growers of the area (Kachemak Shellfish Maricutlure Assocation (KSMA), a co-op formed to market and distribute mussels and oysters) in efforts to build an experimental nursery in a small section of the existing Kachemak Mariculture Center on the Homer Spit for raising local oyster seed. KSMA has great difficulty getting healthy seed oysters from hatcheries in the Lower 48 because of ocean acidification, among other factors.

Even though KSMA operates on a very frugal budget, in January of 2013 the process of "setting seed" was attempted by two co-op employees at the Kachemak Mariculture Center. Staff had to monitor the bubbling algae beakers and tanks 7 days a week for 5 months straight to successfully set 1.3 million oyster seed. Experts in the field gave the experimental nursery only a 10% chance of success. However, thanks to the nutrient rich waters of Kachemak Bay and the dedication and expertise of Co-op staff the seed thrived at the Homer Spit facility. No other facility in Alaska has had this type of success.

KSMA members are hopeful that future sets will be successful, however additional funding is needed for the success of this project. KSMA has much of the equipment, including an expensive salt water well, buta bigger lab is needed. Any viable successful seed will be sold first to growers in Kachemak Bay. Excess seed can easily be sold to other growers in the state who are anxious for a reliable supplier.

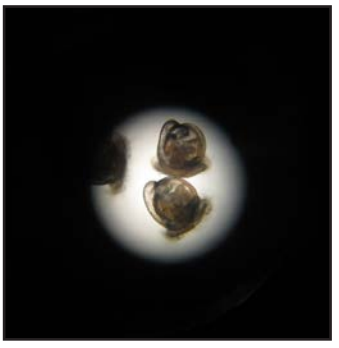
The benefit of a thriving oyster farming industry in Homer is huge. Oyster production in Kachemak Bay is currently in its 21st year. Oysters have become a sparkling year-round addition to the seafood options available to residents and tourists in Homer. Every cooler of oyster delivered to the dock represents approximately $150 to the grower. By the time the end user has received those oysters, the economic ripple effect becomes approximately $725. Oysters clearly benefit the community and economy.

A local nursery can also provide a great learning lab for high school and university students who currently have to travel to the hatchery in Seward for their studies (the Seward hatchery hatches opilio crab, however the waters of Resurrection Bay are less conducive to oyster seed). A course in mariculture could easily be developed in conjunction with aspects of oyster seed development, culturing and marketing.

Plans and Progress: The design of a shellfish hatchery is boiler plate. KSMA's Hatchery consultant has many designs from hatcheries he has assisted. Final design for the Homer Spit Facility would occur in conjunction with permitting.

Total Project Cost: $300,000
- **Preconstruction**: $50,000
- **Construction**: $250,000

Schedule: 2014



Microscopic view of two teensy oysters who have developed their shells

One tank of four that grew algae to feed the 1.3 million oyster spat.