City and Borough of Wrangell
BUDGET Work Session Capital Facilities / CIP / MM
AGENDA

Tuesday, May 14, 2019
5:30 PM

Location: Borough Assembly Chambers
City Hall

City and Borough of Wrangell

BUDGET - FY2020 Capital Improvements Projects (CIP) Packet

a. Capital Facilities Department Budget
b. Public Safety Building Department Budget
c. FY2020 Capital Improvements Projects Plan Budget Introduction
d. FY2020 Capital Improvements Projects Plan List
e. FY2020 Wrangell School District Facilities CIP and MM Projects List
f. FY2020 Capital Improvements Projects Plan Details

CAPITAL FACILITIES
CITY AND BOROUGH OF WRANGELL
2019-2020 DRAFT BUDGET

		2017-2018 ACTUAL	2018-2019 APPROVED	2018-2019 ESTIMATED	2019-2020 REQUESTED	2019-2020 MANAGER APPROVED
11000 029 6001	Wages & Salaries	-	226,110	230,632	230,000	230,000
11000 029 6002	Temporary Wages		-	1,500	1,500	1,500
11000 029 6005	Overtime	-	3,000	2,800	3,000	3,000
11000 029 6100	Personnel Benefits	-	155,060	155,060	189,100	189,100
11000 029 7001	Materials & Supplies	-	13,300	13,300	4,500	4,500
11000 029 7002	Facility Maintenance & Repair	-	5,000	5,000	8,000	12,500
11000 029 7010	Vehicle Maintenance & Repair		-	-	5,000	5,000
11000 025 7017	Heating Oil Expense	-	8,000	1,500	1,500	1,500
11000 029 7018	Expendable Tools	-	2,500	2,500	5,000	5,000
11000 029 7100	Clothing Allowance	-	800	600	800	2,800
11000 025 7501	Utilities	-	4,500	1,500	3,000	3,000
11000 029 7503	Information Technology		-	-	4,100	5,600
11000 029 7505	Travel & Training	-	1,000	100	4,590	4,590
11000 029 7505	Phone & Internet	-	6,280	4,000	6,700	6,700
11000 029 7506	Publications		-	571	-	-
11000 029 7519	Professional Services	-	25,000	23,100	-	-
11000 029 7900	Capital Purchases	-	4,500	2,500	4,500	-
			455,050	**444,663**	**471,290**	**474,790**
11000 029 7621	CUSTODIAL ALLOCATED LABOR (100% ALLOCATION FY 19 & 20)				(78,000)	(78,000)
11000 029 7621	MAINTENANCE ALLOCATED LABOR (75% ALLOCATION FY 20)		(350,000)	(388,492)	(190,000)	(190,000)
	PROJECT MANAGEMENT LABOR (25% ALLOCATION FY 20)				(34,000)	(34,000)
	NET CAPITAL FACILITIES		**105,050**	**56,171**	**169,290**	**172,790**

Basis for FY 2020 Capital Facilities Labor Allocation Projections

The following are estimates of where Capital Facilities staff are expected to focus their efforts during FY 2020. Actual labor hours will be charged out as actually worked. These are only estimates/projections, for purposes of developing next year's operating budgets.

	Labor to be Allocated to Other Departments	
11000 029 7621	CUSTODIAL ALLOCATED LABOR (100% allocation)	78,000
11000 029 7621	MAINTENANCE ALLOCATED LABOR (75% ALLOCATION)	156,000
11000 029 7621	PROJECT MANAGEMENT LABOR (25% ALLOCATION)	34,000
		268,000

	Maintenance & Custodial Labor Allocations (estimate)	FY20 Maintenance	FY20 Custodial	Totals
5%	City Hall Building Maintenance	9,500	46,800	56,300
27%	Public Safety Building Maintenance	51,300	31,200	82,500
5%	Fire Substation Building Maintenance	9,500	-	9,500
5%	Public Works Building Maintenance	9,500	-	9,500
5%	Library Building Maintenance	9,500	-	9,500
10%	Swimming Pool Building Maintenance	19,000	-	19,000
9%	Community Center Building Maintenance	17,100	-	17,100
12%	Nolan Center Building Maintenance	22,800	-	22,800
5%	Light & Power Admin Building Maintenance	9,500	-	9,500
5%	Light & Power Generator Building Maintenance	9,500	-	9,500
3%	Water Plant Building Maintenance	5,700	-	5,700
3%	Harbor Master Building Maintenance	5,700	-	5,700
3%	Sewer Plant Building Maintenance	5,700	-	5,700
3%	Solid Waste Building Maintenance	5,700	-	5,700
100%		190,000	78,000	**268,000**

CAPITAL FACILITIES
CITY AND BOROUGH OF WRANGELL
2019-2020 BUDGET

11000 029 7001	**MATERIALS & SUPPLIES**	
	Misc. Materials & Supplies	2,500
	Office Supplies, including large roll paper for plans	2,000
	Total	**4,500**
11000 029 7002	**FACILITY MAINTENANCE & REPAIR**	
	Tool storage and shop space building renovations	5,000
	Parking Lot/Drainage Repairs	3,000
	Senior Center Facility	4,500
	Total	**12,500**
11000 029 7503	**Information Technology**	
	Annual CMMS Subscription (Computerized Maintenance Management System)	4,100
	Office Phone System & Conference Phone	1,500
	Total	**5,600**
11000 029 7010	**Vehicle Maintenance & Repair**	5,000
	Total	**5,000**
11000 025 7017	**HEATING OIL EXPENSE**	
	Heating oil for Armory building	1,500
	Total	**1,500**
11000 029 7018	**Miscellaneous Tools**	
	Misc Small Tools	5,000
	Total	**5,000**
11000 029 7100	**CLOTHING ALLOWANCE & PPE**	
	Safety items for Crew	2,000
	Union clothing allowance x 2 @ $400	800
	Total	**2,800**
11000 029 7501	**UTILITIES EXPENSE**	
	water, sewer, electricity, garbage	3,000
	Total	**3,000**
11000 029 7505	**TRAINING AND SAFETY**	
	Manlift Trainer (for one staff)	1,500
	Energy Losses in Buildings (for one staff)	75
	Flat Roof Maintenance (for three staff)	210
	Air Handling Systems (for three staff)	675
	Basic Pneumatics (for two staff)	525
	Pneumatic Troubleshooting (for two staff)	350
	Boiler Operation, Maintenance & Safety (for one staff)	1,100
	Employee Relations Training (for one staff)	155
	Total	**4,590**
11000 029 7505	**Phone & Internet**	
	Cell Phones (Qty: 3)	2,400
	Phone Expense	2,800
	Internet Expense	1,500
	Total	**6,700**

PUBLIC SAFETY BUILDING
CITY AND BOROUGH OF WRANGELL
2019-2020 BUDGET

		2017-2018 ACTUAL	2018-2019 APPROVED	2018-2019 ESTIMATED	2019-2020 REQUESTED	2019-2020 MANAGER APPROVED
11000 015 7002	Facility Maintenance & Repair	24,858	35,000	35,000	61,000	56,000
11000 015 7003	Custodial Supplies Expense	2,451	3,000	3,000	3,000	3,000
11000 015 7501	Utilities/Heat Expense	120,426	120,000	120,740	120,000	120,000
11000 015 7502	Phone & Internet	537	600	600	600	600
11000 015 7508	Insurance	8,293	10,896	10,896	11,000	11,000
11000 015 7621	Charges From Public Works	46,495	122,500	70,000	5,000	2,500
11000 015 7629	Charges From Capital Facilities	45,656	122,500	70,000	82,500	82,500
11000 000 8990	Transfer To CIP Fund	28,543	363,000	20,000	828,000	628,000
		277,259	**777,496**	**330,236**	**1,111,100**	**903,600**
	RELATED REVENUE:					
	STATE COURT RENTAL	62,400	60,000	62,000	62,000	62,000

PUBLIC SAFETY BUILDING
CITY AND BOROUGH OF WRANGELL
2019-2020 BUDGET

11000 015 7002	Facility Maintenance & Repair	
	Routine and Preventive Building Maintenance	35,000
	Carpet Replacement in Fire Hall	18,000
	Replace one of four hydronic heating pumps	3,000
	Total	**56,000**
11000 015 7003	Custodial Supplies Expense	
	Custodial supplies used by Capital Faciliites janitorial staff for whole buidling	3,000
	Total	**3,000**
11000 015 7501	Utilities/Heat Expense	
	Building utilities (electric, water, sewer, garbage)	120,000
	Total	**120,000**
11000 015 7502	Phone & Internet	
	One phone line not otherwise allocable to Police or Fire	600
	Total	**600**
11000 015 7508	Insurance	
	Allocation of general insurance expense to public safety building	11,000
	Total	**11,000**
11000 015 7621	Charges From Public Works	
	Fully-loaded hourly rate charged based on actual hours coded to PSB by Public Works crew	2,500
	Total	**2,500**
11000 015 7629	Charges From Capital Facilities	
	Fully-loaded hourly rate charged based on actual hours coded to PSB by Public Works crew	82,500
	Total	**82,500**
11000 000 8990	Transfer To CIP Fund	
	See CIP pages/packet for breakdown of projects. This amount transfers from home department operating budget for capital facility improvements	628,000
	Total	**628,000**

CITY AND BOROUGH OF WRANGELL

FY2020
CAPITAL IMPROVEMENTS PROJECTS PLAN

(Supplement to the Fiscal Year 2019-2020 Municipal Budget)

PURPOSE AND BENEFITS

Each year, the City and Borough of Wrangell (CBW) adopts a Capital Improvements Projects (CIP) plan for its capital facilities. Capital facilities are those public facilities and services, including utilities, which are necessary for the CBW to carry out its functions and to provide services to its citizens. Examples of these are our public buildings, school buildings, road system, parks and trails, water, sewer, and electrical systems, sanitation, fire protection, public safety, and library. Often, the entire collection of these facilities is referred to as infrastructure. Capital improvements refer to major capital expenditures needed to purchase, construct, replace, and maintain the infrastructure.

The CIP plan proposes critical projects to address deferred systems, infrastructure maintenance and new construction for the upcoming fiscal year, together with an estimated cost of each improvement and the proposed method of funding them. The CIP is developed by the CBW, with collective input from its administration, staff, boards and commissions, the Borough Assembly, and often the citizens of Wrangell.

The growth scenario projected in Wrangell's Comprehensive Plan, together with the more recent development of the Waterfront Masterplan, the Institute Master Plan and the Mill Property Assessment for further planning, will not become a reality unless it can be shown through CIP development that there will be adequate facilities and services in place to support future development envisioned by the community. It must also be shown that those improvements can be funded and the appropriate funding sources identified.

The goals and policies established through the Wrangell Comprehensive Plan focus on the following:

- Maintaining quality of life for current residents, which also draws potential new business and residents to the community;
- Maintaining current jobs and supporting existing businesses;
- Providing a safe and reliable transportation network to move people and goods within Wrangell, as well as to and from Wrangell;
- Designating and managing land to meet current and future commercial, industrial, residential and recreational needs;
- Providing adequate and cost-effective infrastructure and services to enable residential living and economic opportunity;
- Providing effective public safety to residents and visitors; and
- Maintaining a balanced municipal budget.

The growth anticipated in the Wrangell Comprehensive Plan will place varying pressures on our facilities, roads and utilities infrastructure, and in many cases, will compel modifications or expansions to the existing infrastructure.

EXISTING INFRASTRUCTURE

The current inventory of CBW infrastructure includes approximately 137,000 square feet of government administrative offices, 18 miles of roadway, 16 miles of water distribution, 16 miles of wastewater collection and 34 miles of electrical distribution systems, all approximated, as shown in the table below.

City and Borough of Wrangell Current Facilities Inventory	
Name	**Area or Distance**
City Hall	4,366 square feet
Public Safety Building	21,722 square feet
5-Mile Fire Substation	4,160 square feet
Harbor Office	1,800 square feet
Nolan Center	19,988 square feet
Nolan Center Storage Building	1,600 square feet
Library	5,356 square feet
Public Works/Municipal Light & Power Complex	16,150 square feet
Power Generation Plant	10,705 square feet
Swimming Pool	19,760 square feet
Community Center	16,780 square feet
Capital Facilities Office	1,600 square feet
Wastewater Treatment Plant Building	1,936 square feet
Water Treatment Plant Building	2,816 square feet
Solid Waste Transfer Facility	6,506 square feet
Senior Center	1,700 square feet
Paved Roads	9.9 miles
Gravel Roads	7.65 miles
Mixed Surface Roads	.35 miles
(State of Alaska Maintained Roads)	(15.7 miles)
Water Distribution System	Approx. 16 miles
Wastewater Collection System	Approx. 16 miles
Electrical Distribution System	Approx. 34 miles

Further, the CBW owns the Cold Storage (a 17,000 square foot facility) and the buildings that house the Wrangell School Districts' three schools, which include Wrangell High School, Wrangell Middle School and Evergreen Elementary and Primary School. Pursuant to State of Alaska Statute, AS 14.14.060(f), while the School Board is required to provide routine maintenance for school buildings, the Borough Assembly is required to provide for all major rehabilitation and new construction of borough-owned school buildings. A list of the Wrangell School District's short-term and long-term facility-related CIP needs is included herein, as developed jointly between CBW and School staff.

COSTS

A capital improvement project is defined as a new, one-time project with a cost of $50,000 or more. As well, major maintenance of an existing infrastructure with a cost of $25,000 or more is considered a CIP project under the CBW's current CIP plan. CIP projects generally require significant engineering design and construction, whereas general maintenance projects are those that require routine upkeep, either annually or every several years. Such routine general maintenance project or those larger maintenance projects that fall under the $25,000 threshold are scheduled under the associated department's Facility Maintenance and Repair account of their operating budget.

Cost estimates included in the CIP are intended to capture the entire project cost, including any applicable land development, engineering design and construction. The total cost for each project is evaluated and prioritized to meet the Borough's needs. Project needs, funding constraints and staff allocation resources were all considered in the development of the FY20 CIP plan to ensure manageable workloads as well as financial sustainability.

FINANCIAL RESOURCES

For many years, the CBW has relied on grant resources from state and federal governments sources as the mainstay of our CIP budgets; however, these resources are becoming increasingly scarce Capital improvements projects are generally budgeted within enterprise departments' funds, from the CBW's General Fund or from other restricted and/or non-restricted special funds that may be established for a specific purpose or project.

Alternative funding sources can be accessed through a number of state and federally funded programs. The following is an example of various financial resources that Wrangell has utilized to help fund projects in the past. These, along with many other funding opportunities, may be considered for funding future capital improvements projects.

Local Taxes:

- Property Tax
- Sales Tax

Local Non-Tax Sources:

- User Fees
- Reserve Funds
- Lease Agreements
- Fines and Forfeitures
- Donations / In-Kind Contributions

Debt Financing:

- Loans
- Revenue Bonds
- Municipal General Obligation Bonds

Grants and Loans:

- Community Development Block Grants (CDBG)
- Housing Urban Development (HUD)
- Economic Development Administration (EDA)
- US Department of Agriculture (USDA)
- Federal Lands Access Program (FLAP)
- Land & Water Conservation Fund (LWCF) – for parks, playgrounds and trails projects
- Recreational Trails Program (RTP) – for trails projects
- Environmental Protection Agency (EPS) – for water and wastewater projects
- Drinking Water Revolving Fund (DWRF)
- Wrangell-Petersburg, Resource Advisory Committee (RAC)
- Denali Commission
- Rasmussen Foundation

- Wrangell Cooperative Association (WCA)
- Federal Highway Administration (FHWA) – for transportation projects
- State Transportation Program (STIP) – for transportation projects
- BUILD Transportation Program (former Transportation Investment Generating Economic Recovery [TIGER] program) – for transportation projects

LONG-TERM CIP PLAN

Funding for capital improvements has become increasingly difficult, and the cost for new projects and the rehabilitation of our older facilities is increasing beyond what Wrangell can afford. Making the most of limited financial resources is a challenge, which will likely continue for Wrangell's foreseeable future, considering especially the reductions in state funding and the unknowns from potential state budget policies. With funding challenges leading what and how projects are pursued, strong, financial planning is essential to developing successful, comprehensive CIP plans in order to maintain the quality of facilities and services that the citizens of Wrangell have come to expect.

Development of a long-term CIP plan may require future policy decisions, with a focus on challenges and opportunities. They may include decisions related to:

- Desired level of services for health, safety and community amenities in terms of balancing financial affordability, sustainability and service expectations.
- Desired balance between capital budgets and operating budgets with Assembly priorities and directives for operating constraints.
- Level of commitment for staffing resources, workload and the complexities of non-local funding sources.
- Setting prioritization and timing of projects to ensure consistency with the long-range comprehensive plan and other area-specific plans.
- Establish if dedicated funding should be earmarked for Equipment and Vehicle Replacement and Capital Reserve.

CLOSING

The CIP plan focuses on infrastructure that provides necessary services to the community of Wrangell. It also includes those projects that help to maintain the high quality of life in Wrangell. Ultimately, these are the initiatives that strengthen our community's foundation and support businesses, workers, and residents alike.

The FY20 CIP Plan is a supplement to the budget and outlines the CIP priorities for fiscal year 2020. It is presented here with a project list that identifies the name of each improvement, the department whose mission is further-achieved by the improvement, and the amount and type of either available outside funding, or CBW-provided funding, as requested by staff and further-recommended for funding by the Borough Manager. The CIP plan is developed and approved through the annual budgeting process and is subject to change with each update.

City and Borough of Wrangell
FY2020 Capital Improvements and Major Maintenance Proposed Projects

Dept.	Project Name	Estimated Project Cost	CBW Contributions: FY19 Authorization	CBW Contributions: Expenditures to Date	CBW Contributions: FY20 New Money Requests	Outside Contributions: Grants and Donations	Outside Contributions: Loans	Outside Contributions: In-Kind Contributions	Total CBW Contribution in FY20 Budget	Manager Recommended FY20 Reauthorization from CBW-Funding in FY19	Manager Recommended FY20 New CBW Money	Return to CBW Fund
	GENERAL FUND											
PSB	Addressable Fire Alarm System Replacement	$ 36,500.00	$ 36,500.00	$ -	$ -	$ -	$ -	$ -	$ 36,500.00	$ 36,500.00	$ -	$ -
PSB	Heating System Piping Repairs	$ 51,500.00	$ 51,500.00	$ -	$ -	$ -	$ -	$ -	$ 51,500.00	$ 51,500.00	$ -	$ -
PSB	Exterior Renovations to Siding and Roofing	$ 570,000.00	$ 540,000.00	$ -	$ -	$ -	$ -	$ -	$ 540,000.00	$ 540,000.00	$ -	$ -
PSB	Replace Pneumatic Temperature Controls with DDC	$ 200,000.00	$ -	$ -	$ 200,000.00	$ -	$ -	$ -	$ 200,000.00	$ -	$ -	$ -
Cemetery	Columbarium	$ 50,000.00	$ -	$ -	$ 50,000.00	$ -	$ -	$ -	$ 50,000.00	$ -	$ 50,000.00	$ -
Nolan Center	Nolan Center HVAC Direct Digital Controls System Upgrades	$ 35,000.00	$ -	$ -	$ 35,000.00	$ -	$ -	$ -	$ 35,000.00	$ -	$ -	$ -
P&R	Swimming Pool's Domestic Hot Water Tank Replacement	$ 50,000.00	$ 50,000.00	$ -	$ -	$ -	$ -	$ -	$ 50,000.00	$ 50,000.00	$ -	$ -
P&R	Swimming Pool's HVAC Upgrades, Phase III	$ 40,000.00	$ 40,000.00	$ -	$ -	$ -	$ -	$ -	$ 40,000.00	$ 40,000.00	$ -	$ -
P&R	Pool Cover Replacement	$ 17,000.00	$ 17,000.00	$ 10,637.60	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 6,362.40
P&R	Kyle Angerman Memorial Playground Replacement	$ 142,000.00	$ 25,000.00	$ -	$ 6,000.00	$ 91,000.00		$ 20,000.00	$ 31,000.00	$ 25,000.00	$ 6,000.00	$ -
P&R	RV Park's Parking Pads Improvements	$ 25,000.00	$ -	$ -	$ 25,000.00	$ -	$ -	$ -	$ 25,000.00	$ -	$ -	$ -
	Total General Fund	**$ 1,217,000.00**	**$ 760,000.00**	**$ 10,637.60**	**$ 316,000.00**	**$ 91,000.00**	**$ -**	**$ 20,000.00**	**$ 1,059,000.00**	**$ 743,000.00**	**$ 56,000.00**	**$ 6,362.40**
	NORTH COUNTRY TRAILHEAD ACCESS ROAD REPAIR FUND											
Streets	North Country Trailhead Access Road Repair	$ 61,790.00	$ -	$ -	$ -	$ 56,190.00	$ -	$ 5,600.00	$ -	$ -	$ -	$ -
	Total North Country Trailhead Access Road Repair	**$ 61,790.00**	**$ -**	**$ -**	**$ -**	**$ 56,190.00**	**$ -**	**$ 5,600.00**	**$ -**	**$ -**	**$ -**	**$ -**
	SALES TAX FUND											
	Area-Wide Sidewalk Replacement Project, includes:											
Streets	- Reid Street to Church Street Sidewalk Corridor Repairs	$ 30,000.00	$ -	$ -	$ 30,000.00	$ -	$ -	$ -	$ 30,000.00	$ -	$ 30,000.00	$ -
Streets	- Sidewalk Repairs at Primary School Entrance	$ 10,000.00	$ -	$ -	$ 10,000.00	$ -	$ -	$ -	$ 10,000.00	$ -	$ 10,000.00	$ -
Streets	- Sidewalk Repairs at High School Parking Lot	$ 25,000.00	$ -	$ -	$ 25,000.00	$ -	$ -	$ -	$ 25,000.00	$ -	$ 25,000.00	$ -
	Total Sales Tax Fund	**$ 65,000.00**	**$ -**	**$ -**	**$ 65,000.00**	**$ -**	**$ -**	**$ -**	**$ 65,000.00**	**$ -**	**$ 65,000.00**	**$ -**

City and Borough of Wrangell
FY2020 Capital Improvements and Major Maintenance Proposed Projects

Dept.	Project Name	Estimated Project Cost	CBW Contributions: FY19 Authorization	CBW Contributions: Expenditures to Date	CBW Contributions: FY20 New Money Requests	Outside Contributions: Grants and Donations	Outside Contributions: Loans	Outside Contributions: In-Kind Contributions	Total CBW Contribution in FY20 Budget	Manager Recommended FY20 Reauthorization from CBW-Funding in FY19	Manager Recommended FY20 New CBW Money	Return to CBW Fund
	COMMERCIAL PASSENGER VESSEL EXCISE TAX FUND											
P&R	Mt Dewey Trail Extension FLAP Grant Match	$ 504,577.00	$ 50,000.00	$ -	$ -	$ 454,577.00	$ -	$ -	$ 50,000.00	$ 50,000.00		$ -
Harbor	Summer Float for City Dock	$ 85,000.00		$ -	$ 85,000.00	$ -	$ -	$ -	$ 85,000.00	$ -	$ 85,000.00	$ -
Harbor	Cruise Ship PAX Covered Staging Area at City Dock	$ 20,000.00	$ -	$ -	$ 20,000.00	$ -	$ -	$ -	$ 20,000.00	$ -	$ 20,000.00	$ -
P&R	Petroglyph Beach Bathroom & Platform Improvements	$ 50,000.00	$ 15,000.00	$ -	$ 35,000.00	$ -	$ -	$ -	$ 50,000.00	$ 15,000.00	$ 35,000.00	$ -
	Total Commercial Passenger Vessel Excise Tax Fund	**$ 659,577.00**	**$ 65,000.00**	**$ -**	**$ 140,000.00**	**$ 454,577.00**	**$ -**	**$ -**	**$ 205,000.00**	**$ 65,000.00**	**$ 140,000.00**	**$ -**
	RESIDENTIAL CONSTRUCTION FUND											
	Borough-Wide Land Survey Project, includes:											
P&Z	- Institute Phase I Subdivision Development Survey	$ 50,000.00	$ 30,000.00	$ -	$ 20,000.00	$ -	$ -	$ -	$ 50,000.00	$ 30,000.00	$ 20,000.00	$ -
P&Z	- 4-Mile Zimovia Highway Property Subdivision Development Survey	$ 12,000.00	$ -	$ -	$ 12,000.00	$ -	$ -	$ -	$ 12,000.00	$ -	$ 12,000.00	$ -
P&Z	- Etolin Street Foreclosed Lots Replat	$ 6,000.00	$ -	$ -	$ 6,000.00	$ -	$ -	$ -	$ 6,000.00	$ -	$ 6,000.00	$ -
	Total Residential Construction Fund	**$ 68,000.00**	**$ 30,000.00**	**$ -**	**$ 38,000.00**	**$ -**	**$ -**	**$ -**	**$ 68,000.00**	**$ 30,000.00**	**$ 38,000.00**	**$ -**
	INDUSTRIAL CONSTRUCTION FUND											
Streets	5th and 6th Avenues Roadway Construction	$ 200,000.00	$ 164,000.00	$ -	$ 71,000.00	$ -	$ -	$ -	$ 200,000.00	$ 164,000.00	$ 71,000.00	$ -
MSC	Marine Service Center Survey and Replat	$ 15,000.00	$ -	$ -	$ 15,000.00	$ -	$ -	$ -	$ 15,000.00	$ -	$ 15,000.00	$ -
	Total Industrial Construction Fund	**$ 200,000.00**	**$ 164,000.00**	**$ -**	**$ 71,000.00**	**$ -**	**$ -**	**$ -**	**$ 215,000.00**	**$ 164,000.00**	**$ 86,000.00**	**$ -**
	ECONOMIC RECOVERY FUND											
ERF	Mill Property Purchase	$ 1,451,799.00	$ 1,451,799.00	$ -	$ -	$ -	$ -	$ -	$ 1,451,799.00	$ 1,451,799.00	$ -	$ -
	Total Economic Recovery Fund	**$ 1,451,799.00**	**$ 1,451,799.00**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 1,451,799.00**	**$ 1,451,799.00**	**$ -**	**$ -**

City and Borough of Wrangell
FY2020 Capital Improvements and Major Maintenance Proposed Projects

Dept.	Project Name	Estimated Project Cost	CBW Contributions: FY19 Authorization	CBW Contributions: Expenditures to Date	CBW Contributions: FY20 New Money Requests	Outside Contributions: Grants and Donations	Outside Contributions: Loans	Outside Contributions: In-Kind Contributions	Total CBW Contribution in FY20 Budget	Manager Recommended FY20 Reauthorization from CBW-Funding in FY19	Manager Recommended FY20 New CBW Money	Return to CBW Fund
WRANGELL MUNICIPAL LIGHT & POWER FUND												
WML&P	Case Avenue Rebuild Survey	$ 100,000.00	$ 100,000.00	$ -	$ -	$ -	$ -	$ -	$ 100,000.00	$ 100,000.00	$ -	$ -
WML&P	Power Generation Solution Project	$ 456,225.00	$ 245,025.00	$ 245,025.00	$ 211,200.00	$ -	$ -	$ -	$ 211,200.00	$ -	$ 211,200.00	$ -
WML&P	3MW Transformers Purchase (Phase I)	$ 100,000.00	$ -	$ -	$ 100,000.00	$ -	$ -	$ -	$ 100,000.00	$ -	$ 100,000.00	$ -
WML&P	Generators' Exhaust Insulation Blankets	$ 100,000.00	$ -	$ -	$ 100,000.00	$ -	$ -	$ -	$ 100,000.00	$ -	$ 100,000.00	$ -
WML&P	Powerhouse Roof Repairs	$ 40,000.00	$ -	$ -	$ 40,000.00	$ -	$ -	$ -	$ 40,000.00	$ -	$ 40,000.00	$ -
WML&P	Church Street Pole Replacement, 2nd Half	$ 65,000.00	$ 65,000.00	$ 2,140.26	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 62,276.27
WML&P	Zimovia Highway Rebuild	$ 150,000.00	$ 150,000.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 150,000.00
	Total Municipal Light & Power Fund	**$ 1,011,225.00**	**$ 560,025.00**	**$ 247,165.26**	**$ 451,200.00**	**$ -**	**$ -**	**$ -**	**$ 551,200.00**	**$ 100,000.00**	**$ 451,200.00**	**$ 212,276.27**
WATER FUND												
Water	Water Plant Bypass Line Valve Reconfiguration	$ 30,000.00	$ -	$ -	$ 30,000.00	$ -	$ -	$ -	$ 30,000.00	$ -	$ 30,000.00	$ -
	Total Water Fund	**$ 30,000.00**	**$ -**	**$ -**	**$ 30,000.00**	**$ -**	**$ -**	**$ -**	**$ 30,000.00**	**$ -**	**$ 30,000.00**	**$ -**
UPPER RESERVOIR BYPASS FUND												
Water	Upper Reservoir Bypass	$ 615,000.00	$ -	$ 50,000.00	$ -	$ 615,000.00	$ -	$ -	$ -	$ -	$ -	$ -
	Total Upper Reservoir Bypass Fund	**$ 615,000.00**	**$ -**	**$ 50,000.00**	**$ -**	**$ 615,000.00**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
WATER MAINS REPLACEMENT FUND												
Water	Water Mains Replacement	$ 1,047,767.00	$ -	$ -	$ -	$ 696,415.00	$ 542,249.00	$ -	$ -	$ -	$ -	$ -
	Total Water Mains Replacement Fund	**$ 1,047,767.00**	**$ -**	**$ -**	**$ -**	**$ 696,415.00**	**$ 542,249.00**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
HARBOR FUND												
Harbor	Shoemaker Bay Harbor Replacement	$ 9,589,330.00	$ 5,199,522.00	$ 9,278,405.00	$ -	$ 4,307,954.00	$ -	$ -	$ -	$ 310,925.00	$ -	$ -
	Total Harbor Fund	**$ 9,589,330.00**	**$ 5,199,522.00**	**$ 9,278,405.00**	**$ -**	**$ 4,307,954.00**	**$ -**	**$ -**	**$ -**	**$ 310,925.00**	**$ -**	**$ -**

City and Borough of Wrangell
FY2020 Capital Improvements and Major Maintenance Proposed Projects

Dept.	Project Name	Estimated Project Cost	CBW Contributions: FY19 Authorization	CBW Contributions: Expenditures to Date	CBW Contributions: FY20 New Money Requests	Outside Contributions: Grants and Donations	Outside Contributions: Loans	Outside Contributions: In-Kind Contributions	Total CBW Contribution in FY20 Budget	Manager Recommended FY20 Reauthorization from CBW-Funding in FY19	Manager Recommended FY20 New CBW Money	Return to CBW Fund
	SEWER FUND											
Sewer	Reroute Node 6 Sewer Pump Station Overflow Pipe	$ 45,000.00	$ 45,000.00	$ -	$ -	$ -	$ -	$ -	$ 45,000.00	$ 45,000.00		$ -
Sewer	Node 8 Sewer Pump Station Rehabilitation	$ 135,000.00	$ 135,000.00	$ -	$ -	$ -	$ -	$ -	$ 135,000.00	$ 135,000.00		$ -
	Total Sewer Fund	**$ 180,000.00**	**$ 180,000.00**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 180,000.00**	**$ 180,000.00**	**$ -**	**$ -**

Notes: 1. Project descriptions are provided in the attached Proposed Project forms

2. Expenditures to date includes estimates of project expenditures through June 30, 2019

Summary of Requested FY20 Capital Improvement Projects by Funding Source:

	FY20 New Money	FY19 Reauthor.	Grants/Loans/ In-Kind	Total
General Fund	$ 56,000.00	$ 743,000.00	$ 111,000.00	$ 910,000.00
North Country Trailhead Access Road Repair Fund	$ -	$ -	$ 61,790.00	$ 61,790.00
Sales Tax Fund	$ 65,000.00	$ -	$ -	$ 65,000.00
Commercial Passenger Vessel Excise Tax Fund	$ 140,000.00	$ 65,000.00	$ 454,577.00	$ 659,577.00
Residential Construction Fund	$ 38,000.00	$ 30,000.00	$ -	$ 68,000.00
Industrial Construction Fund	$ 86,000.00	$ 164,000.00	$ -	$ 250,000.00
Economic Recovery Fund	$ -	$ 1,451,799.00	$ -	$ 1,451,799.00
Municipal Light & Power Department Fund	$ 451,200.00	$ 100,000.00		$ 551,200.00
Water Fund	$ 30,000.00	$ -	$ -	$ 30,000.00
Upper Reservoir Bypass Fund	$ -	$ -	$ 615,000.00	$ 615,000.00
Water Mains Replacement Fund	$ -	$ -	$ 1,238,664.00	$ 1,238,664.00
Harbor Fund	$ -	$ 310,915.00	$ 4,307,954.00	$ 4,618,869.00
Sewer Fund	$ -	$ 180,000.00	$ -	$ 180,000.00
Total Requested FY20 CIP/MM Funding	$ 866,200.00	$ 3,044,714.00	$ 6,788,985.00	$ 10,699,899.00

Elementary and Primary School Projects	Description	Estimated Total Cost for Facility Needs	Requested for FY20 CIP
Sidewalk Repairs at Primary School Entrance	Maintenance staff have identified a portion of the larger area that was identified as an un-funded need in FY19, for a smaller more prioritized sidewalk repairs in FY20. The remaining sidewalk repairs could be considered for a future repair.	$ 10,000.00	$ 10,000.00
Primary School Exterior Doors Replacement	Entryway doors between the Elementary and Primary Schools require replacement. They are old and require constant adjustment to maintain minimum security measures.	$ 50,000.00	
New Entry Key Code System	The school wants to revise the exterior doors' key system by replacing it with a key code system for access control concerns. This would entail replacing the existing exit devices to accommodate the new entry system (6 entrances x $6,000)	$ 36,000.00	
Gym/Lunchroom Flooring Replacement	The carpet in the multi-purpose space, acting as lunchroom, gym, public assembly, etc., is old and repellent. Staff recommend replacing with an institutional grade floor surface, such as VCT, which would be durable and satisfy the multi-purpose uses of this space.	unknown	
Pave North and South Parking Lots	The CBW maintains the parking lots, which become icy and are a safety concern due to the complexities of maintaining large gravel parking lots in the winter.	$ 500,000.00	
Primary School Exterior Windows	The existing windows in the Primary section are old and could stand to be replaced with more energy efficient windows. Until replacement, school staff will continue to maintain as they are able.	$ 140,000.00	
Total Recommended for Elementary and Primary Schools FY20 CIP/MM		$ 736,000.00	**$ 10,000.00**

On-going maintenance for Elementary and Primary Schools	
Lighting Upgrade	The existing T12 fluorescent lights are no longer being manufactured and the school has approached the switch-over to T8 lamps gradually. While the fixture is still available, the ballast has to be changed to accommodate the T8 lamps.
Primary School Roof	This section of roof is a hip and valley style metal roof system, which is in fair condition. Regular maintenance will continue.
Elementary School Roof	This section of roof is a flat EPDM roof system. The roof system itself seems to be in fair condition and requires maintenance

Middle School Projects	Description	Estimated Total Cost for Facility Needs	Requested for FY20 CIP
New Entry Key Code System	The school wants to revise the exterior doors' key system by replacing it with a key code system for access control concerns. This would entail replacing the existing exit devices to accommodate the new entry system (4 entrances x $6,000)	$ 24,000.00	$ -
Fire Alarm System Notification Device	The Middle School's fire alarm system is tied into the High school's fire alarm panel. One notification system, located at the High school's fire alarm panel should suffice to provide notification for the Middle School, once one is in place. See request under High School CIP section.	See High School CIP for cost	
Boiler Replacement	The existing boiler is old and is operational; however, it has to date required replacement of one plate section. School staff plan to have a boiler system inspection and service performed which will also serve to identify existing conditions and future needs.	$ 40,000.00	
Total Recommended for Middle School FY20 CIP/MM		$ 64,000.00	**$** -

On-going maintenance for Middle School			
Lighting Upgrade	The existing T12 fluorescent lights are no longer being manufactured and the school has approached the switch-over to T8 lamps gradually. While the fixture is still available, the ballast has to be changed to accommodate the T8 lamps.		
Middle School Roof	This roof is an EPDM flat roofing system, which appears to be in fair condition. Cleaning and patching is required.		
Middle School Exterior Doors	Entryway doors are the original 1979 doors, and while they could use replacing, certain hardware replacement and general maintenance will extend the life.		

High School Projects	Description	Estimated Total Cost for Facility Needs	Requested for FY20 CIP
Sidewalk Repairs	Reid Street parking lot curb and sidewalk	$ 25,000.00	$ 25,000.00
Fire Alarm System Notification Device	The existing fire alarm system is operational but is old and becoming antiquated, and a full fire alarm system replacement has been on the school's EED CIP list for many years now. Short of having the system replaced, an immediate need is that of providing notification during periods of system trouble. Currently, there is only audible notification within the building, with no outside notification of any type. This condition also applies to the Middle School and the Swimming Pool since both of their fire alarm systems tie back to the High school's fire alarm panel. Engineering design would be required for adding notification to this life and safety system. One notification system, located at the High school's fire alarm panel should suffice to provide notification for the Middle School and the Swimming Pool, once in place.	$ 5,000.00	$ 5,000.00
New Entry Key Code System	The school wants to revise the exterior doors' key system by replacing it with a key code system for access control concerns. This would entail replacing the existing exit devices to accommodate the new entry system (5 entrances x $6,000)	$ 30,000.00	
Courtyard Surfacing Repairs	The High School Courtyard has concrete surfacing sections that have degraded to the point that 62 panel sections are exhibiting exposed concrete aggregate. The positive aspect is that surface water sheds adequately so that the depressions do not hold a significant enough amount of water to cause hazards to pedestrians.	$ 25,000.00	
Gym Bleacher Replacement	The existing gymnasium bleachers are operational but have issues and do not provide for handrails. Until such time as a replacement system is attainable, staff has been and will continue to make modifications and repairs to add support and life to the existing bleachers.		
Underground Fuel Tank Replacement	The existing 10,000 gallon underground fuel tank supplies fuel to the school's back up generator. As far as we can tell, without good product/install data, the tank appears to be a steel tank and has been in the ground for 35 years. While there are no existing external signs of problems with the tank's integrity, an above-ground replacement is recommended (replace with approximate 6,500 gal unit).		
Total Recommended for High School FY20 CIP/MM		$ 85,000.00	**$ 30,000.00**

On-going maintenance for High School

Lighting Upgrade	The existing T12 fluorescent lights are no longer being manufactured and the school has approached the switch-over to T8 lamps gradually. While the fixture is still available, the ballast has to be changed to accommodate the T8 lamps.
Exterior windows	Certain hardware replacement and general maintenance will correct certain issues and extend the life of the windows.
Stairway repairs	The stairway leading from the High School Courtyard to Church Street are in need of maintenance to extend their life, i.e. filing holes between stair treads/risers and adjacent wall, adjusting the metal tread covers and painting.
Exterior Brick Facade Repairs	Staff will be addressing the failing brick façade this summer to determine adequate repairs.
Pneumatic Control Compressor Repairs	Staff plan to address the compressor needs through initial repairs to the compressor head.
Roof Repairs	The EPDM ballasted roof system over the Gymnasium will receive maintenance attention this year as significant cleaning is expected to provide life to the system.

Project:	Replace Public Safety Building's Pneumatic Temperature Controls with Direct Digital Controls		
Description:	Replace pneumatic temperature controls with direct digital temperature controls (DDC)		
Cost Estimate: **$200,000**		Sched. Complete: **FY2020**	Project Mgmt: **A Al-Haddad**

PROJECT DISCUSSION

The Johnson Controls' pneumatic control system that was originally installed in the Public Safety Building is no longer supported and has failed in multiple locations. This has left much of the building heating and ventilation system in a state that requires manual adjustments by maintenance staff, with no ability to monitor, neither locally nor remotely, the status of the system. This in turn often equates to parts of the system running at full speed when spaces are unoccupied, therefore incurring more energy costs.

Replacing the pneumatic controls with a direct digital control system would allow for monitoring and optimizing the control of the building systems. With the pneumatic temperature control system, there are many independent controls operating on their own. The sensors and controllers for pneumatic systems bleed compressed air through very small orifices to monitor temperatures and make control decisions. These devices loose accuracy and should be recalibrated several times a year to be effective. Since there is no central monitoring of the control processes, the failure is undetected and building performance and occupant comfort suffer from the limitations of the system.

A DDC system allows integration of information for more efficient control. These systems use electronic controllers and sensors and computerized operating systems, which maintain accuracy for years and offer enhanced control options. The central monitoring system often identifies failed components and provides feedback of the control system performance that allows operators to identify problems early and make timely corrections.

DDC systems not only produce energy savings but they also offer improved temperature control, ventilation, and comfort.

This proposed work would require replacement of control valves, control dampers, thermostats and pressure monitoring devices throughout the facility, as well as the addition of VFD control based on pressure differential for certain pumps. This work does not include improvements to the existing air handler units, dampers and rooftop condensing units, all of which would require a thorough evaluation to verify their service life.

An upgrade to a DDC system is recommended to be on par with the DDC system recently installed at the Swimming Pool, which is also the same being recommended for upgrades at the Nolan Center, in FY20. The recommended system is the Honeywell Niagra N4 software and associated controllers, which is a cloud-based system which would allow for support for the remainder of the facility's life.

PROJECT COST ESTIMATE			
BREAKDOWN	**ESTIMATE**	**BUDGET REQUEST**	
Contracted Work: Software, Parts & Labor	$200,000	FY2020 General Fund Request	$200,000
Total Estimate	$200,000	Budget Total	$200,000

Project Cost Estimate Discussion

This estimate is a rough estimate budget number and do not include engineering costs. The recommended action is based on system assessments performed in 2016 by PDC Engineers who indicate the building is running in an inefficient and uncontrolled state that has a high likelihood of failure due to a multitude of system deficiencies, some of which are being addressed through other projects proposed during FY19 and FY20.

FY2020 CIP
Proposed Project

Project:	Columbarium for Sunset Gardens Cemetery		
Description:	Add a second columbarium at Sunset Gardens Cemetery		
Cost Estimate:	**$50,000**	Sched. Complete: **FY19**	Project Mgmt: **R Howell**

PROJECT DISCUSSION

Current, available space in Wrangell's two cemeteries has reached a point where there is need to develop more space. Identifying the proper site, for project development feasibility has been a challenge, and the Public Works Department continues to work toward further identifying alternatives since the last site discussion a couple of years ago. As of the date of this writing, there are 13 usable plots in the Sunset Gardens Cemetery and there are 4 plot available in the Memorial Cemetery. The Borough has been reluctant to sell plots in the Memorial Cemetery since some plots that are shown as reserved or unoccupied are in fact, occupied.

Further to the need for more cemetery plot space, there is also a need for an additional Columbarium space, designed to hold cremation urns, and with a memorial wall on one end. Wrangell's existing Columbarium, located at Sunset Gardens Cemetery, has 25 niches available, and there is no memorial wall space remaining.

The National Funeral Directors Association, in its 2018 Cremation & Burial Report, indicated that the cremation rate was predicted to reach 54% in 2018, with a forecast that the national cremation rate will now reach 80% by 2035. The additional of a second Columbarium is ideal to prepare Wrangell for this growing trend.

PROJECT COST ESTIMATE

BREAKDOWN	ESTIMATE	BUDGET REQUEST	
Columbarium Labor & Equipment to Install	$36,000 $14,000	FY2019 General Fund	$50,000
Total Estimate	$50,000	Budget Total	$50,000

Project Cost Estimate Discussion

Budget is based on a quote from the company from which Wrangell's existing Columbarium was procured.

Existing Columbarium at Sunset Gardens Cemetery (the memorial plaque is shown on the end):

Project:	Nolan Center HVAC Direct Digital Controls System Upgrades		
Description:	Replace DDC (temperature controls) system, which has become obsolete		
Cost Estimate: **$35,000**	Sched. Complete: **FY2020**	Project Mgmt: **A Al-Haddad**	

PROJECT DISCUSSION

The Honeywell Direct Digital Controls (DDC) system, designed and installed in 2003/204, at the time of the building's inception, is obsolete.

Our Honeywell Legacy DDC system is no longer supported by Honeywell; however, our Honeywell Alaska Dealer, Meridian Systems, has the ability to continue to support our existing system through technical system knowledge, as long as they can find viable options for continued operation. Meridian Systems caution that as shelved parts are exhausted, they may not be able to find parts for continued support in that regard. The systems controllers that serve most of the large equipment are no longer supported by Honeywell. Replacement controllers are becoming harder to find but they have been able to locate surplus or used parts left over from others' system upgrades, which come with no warranty. Estimated time for locating replacement controllers at his time have been running three to four months. Currently, we have one air handling unit controller that is inoperable and the proposed replacement is a used part at a parts cost of $1,584.

In addition to the system becoming obsolete, it has no forward compatibility.

An upgrade to the DDC system would include purchasing and implementing the Honeywell Niagra N4 software and associated controllers. Most of the other existing hardware and sensors would be reused and as they fail, they would be able to be replaced with factory-supported parts.

The new system is cloud-based and will allow access without the need for a dedicated computer (as required by the existing DDC system) the existing system, and therefore eliminates a major point of failure through the computer. It is expected that the Honeywell Niagra N4 platform will allow for support for the life of the facility.

PROJECT COST ESTIMATE

BREAKDOWN	ESTIMATE	BUDGET REQUEST	
Contracted Work: Software, Parts & Labor	$35,000	FY2020 General Fund Request	$35,000
Total Estimate	$35,000	Budget Total	$35,000

Small Air Handler Units with DDC controllers face-mounted:

Project:	Swimming Pool's Domestic Hot Water Heater Replacement		
Description:	Replace 1,200-gallon domestic hot water heater with Indirect-Fired Water Heaters		
Cost Estimate: **$50,000**	Sched. Complete: **Fall 2019**	Project Mgmt: **A Al-Haddad**	

PROJECT DISCUSSION

The Swimming Pool's 1,200-gallon domestic hot water heater, installed in 1985, has exceeded its useful life and should have been replaced many years ago. Over the years, the steel tank has deteriorated to the point where two holes have developed completely through the tank's sidewall. Immediate repairs involved plugging the holes with rubber gaskets and screws, and these repairs remain in place today.

Following a 2016 State of Alaska Mechanical Inspection of the CBW's pressure vessels, this tank was identified as being out of compliance and requiring replacement.

This project was provided funding through the CBW's FY19 CIP budget; however, the project has only recently begun with engineering design discussion. Staff requests reauthorization of the $50,000 funding for the Swimming Pool's Domestic Hot Water Heater Replacement with new indirect-fired hot water heaters, with possible heat exchanger to increase hot water availability.

PROJECT COST ESTIMATE

BREAKDOWN	ESTIMATE	FUNDING SOURCES	
Engineering Construction	$10,000 $40,000	FY20 General Fund Request	$50,000
Total Estimate	$50,000	Budget Total	$50,000

Existing 1200 Gallon Domestic Hot water Heater:

Sidewall Hole in Hot Water Tank:

FY2020 CIP
Proposed Project

Project:	Swimming Pool's HVAC Upgrades Phase III		
Description:	Replace mechanical devices associated with the Swimming Pool's HVAC system.		
Cost Estimate: **$40,000**	Sched. Complete: **Fall 2019**	Project Mgmt: **A Al-Haddad**	

PROJECT DISCUSSION

Through Phases I and II projects of the HVAC Upgrades for the Swimming Pool, which are both now complete, it was identified that part of the problem with the heating and cooling system's proper operation was the failed mechanical devices, including dampers, air handler heating coils and a circulation pump, which are original, 1985-installed devices, and have been contributing to the difficulty in managing the Swimming Pool's HVAC system for many years. These devices need to be replaced for proper operation of the HVAC system.

HVAC systems are an important and integral part of maintaining a healthy building with respect to temperature and humidity, using fresh air from outdoors. Dampers, fans and other devices that regulate temperature and humidity inside the building contribute to the proper ventilation, including both the exchange of air to the outside as well as circulation of air within the building. It is one of the most important factors for maintaining acceptable indoor air quality in buildings.

The Swimming Pool's HVAC Upgrades Phase III project was provided funding through the CBW's FY19 CIP budget; however, the project has only recently begun with engineering design discussion. Staff requests reauthorization of the $40,000 funding for this project in the upcoming FY20 CIP budget.

PROJECT COST ESTIMATE

BREAKDOWN	ESTIMATE	FUNDING SOURCES	
Engineering	$8,000	FY20 General Fund Request	$40,000
Construction	$32,000		
Total Estimate	$40,000	Budget Total	$40,000

Project:	Kyle Angerman Memorial Playground Improvements		
Description:	Park and site furnishings' upgrades for Kyle Angerman Memorial Playground		
Cost Estimate:	**CBW Requested Funds: $31,000 / Total Project Cost: $142,000**	Sched. Complete: **Fall 2019**	Project Mgmt: **A Al-Haddad**

PROJECT DISCUSSION

The Kyle Angerman Memorial Playground Improvement project was successful in receiving funding, in the amount of $25,000, through the City and Borough of Wrangell's approved FY2019 CIP budget. Improvements were necessary to replace non-compliant playground equipment. Following receipt of this initial funding, Parks & Recreation (P&R) received a $5,000 donation from the Wrangell Cooperative Association (WCA), as well as a $15,000 donation from the Walker Foundation.

Resolution 11-18-1436 provided for the authorization of the grant application to the National Parks Service (NPS), Land and Water Conservation Fund (LWCF) for the Kyle Angerman Park and Playground Improvement project. This grant offered the opportunity to leverage the $51,000 in available funds for this project, plus in-kind CBW staff time and additional donated in-kind engineering design, to increase the scope of the project, thus making greater improvements to the park. The LWCF grant program is a federally-funded partnership program which provides up to fifty percent matching grants for park and other public outdoor recreation facilities' development, and they have selected Wrangell's Kyle Angerman Memorial Playground Improvement project for a $71,000 grant award (one of seven projects selected for funding in Alaska).

The Parks and Recreation Department has planned the following improvements as project priorities for the larger scoped project: decommission the original wooden structure and play equipment, remove existing wood chip playground surface material, improve site drainage, and replace perimeter fence/gate, signs, playground equipment and safety surfacing, all with new material.

While notified of our successful application in January 2019, due to the nature of the timeline necessary to execute a grant agreement that originates at the federal government level, the CBW is still awaiting the paperwork necessary to move this project forward.

Project design will commence following execution of a grant agreement with the State of Alaska, DNR, who administers the Land and Water Conservation Fund grants for NPS.

Staff requests reauthorization of the FY19 funding for the Kyle Angerman Memorial Playground project, at $25,000, with the additional amount of $6,000, as identified in the Assembly-approved

Resolution 11-18-1436. These funds will act, in conjunction with the combined monetary donations and the combined in-kind time donations, as the CBW's continued match to the LWCF grant.

PROJECT COST ESTIMATE			
BREAKDOWN	**ESTIMATE**	**FUNDING SOURCES**	
Construction Total for Bid	$64,542.50	**FY20 General Fund Request**	**$31,000**
Engineer/Mgmt./Admin.	$19,500	In-Kind CBW Staff Time	$10,000
Play Equipment and Surfacing	$37,040	In-Kind Engineering Design	$10,000
Project Contingency	$9,432.21	WCA Donation	$5,000
State Indirect Costs	$11,485.29	Walker Foundation	$15,000
		LWCF 50/50 Match	$71,000
Total Project Estimate	$142,000	Budget Total	$142,000
Project Cost Estimate Discussion			

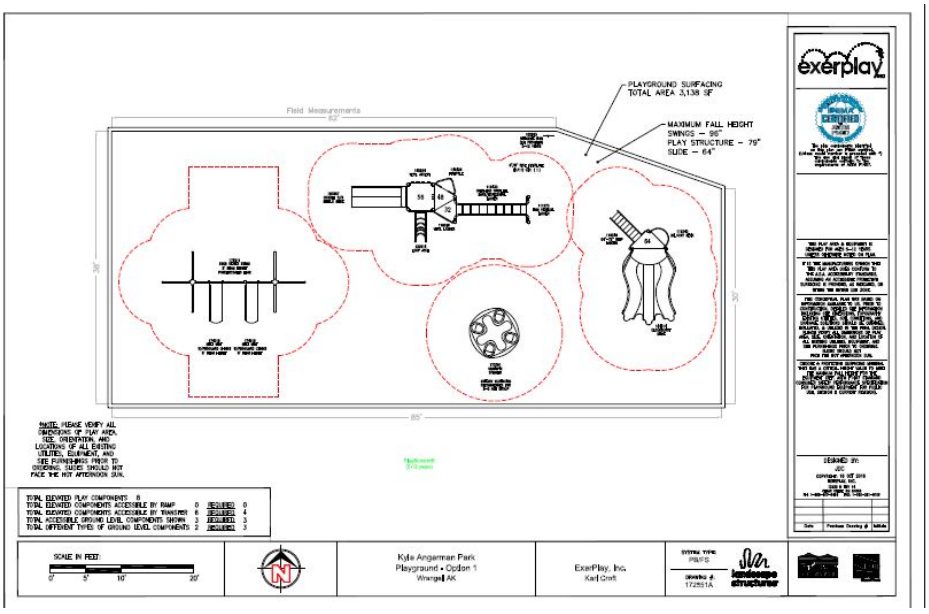
Kyle Angerman Memorial Playground Site:

Kyle Angerman Memorial Playground Sign:

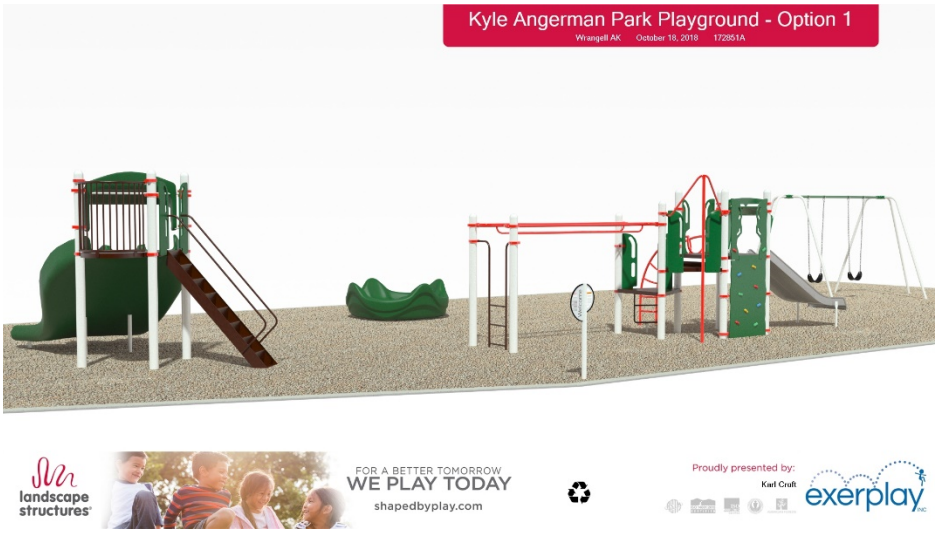
General Playground Equipment:

Wood Playground Equipment Structure:

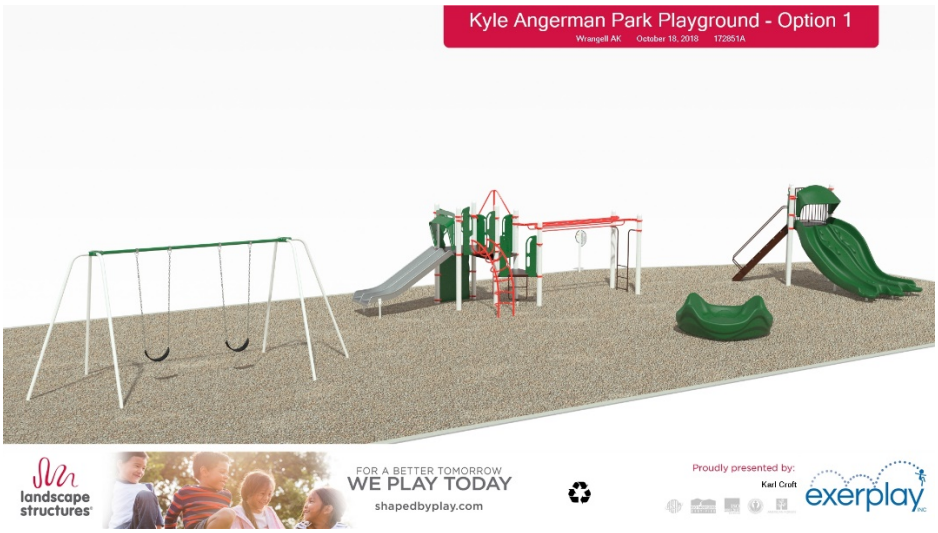
Conceptual Playground Equipment Layout Plan View:



Conceptual Playground Equipment Layout Elevation_1 View:



Conceptual Playground Equipment Layout Elevation_2 View:



Project:	Area-Wide Sidewalk Replacement at Schools		
Description:	Repair portions of sidewalk infrastructure at the Primary School and the High School and the sidewalk corridor from Reid Street to Church Street		
Cost Estimate: **$65,000**		Sched. Complete: **2020**	Project Mgmt: **A Al-Haddad**

PROJECT DISCUSSION

HIGH SCHOOL PARKING LOT and REID STREET TO CHURCH STREET CORRIDOR

At the High School parking lot along Reid Street the inside perimeter sidewalk and curb has been exhibiting a serious problems for many years. The sidewalk was built at the edge of the steep slope, which is the embankment for the parking lot. The soil under the sidewalk is sloughing away and the sidewalk has pulled away from the curb, more than 6" on one end, and is now sloping downhill, sideways. A rough estimate to replace the sidewalk in its current location, without consideration of slope stabilization work is $25,000, as proposed in this budget item. As project development begins, we may find it would better serve the project to perform a slope stabilization review to determine whether a retaining wall would be necessary to replace the sidewalk in its current location.

A second option to replacing the sidewalk in kind is the possibility of shifting the sidewalk further out into the parking lot to:

1. minimize the cost needed to address the slope if reconstructed in its existing location; and
2. address the double-parked parking problem by shifting the parking spaces out to allow for only one vehicle depth of angled parking. With this suggested reconstruction, as with the current situation, drivers pull in forward and reverse out. The reversing part is dangerous because drivers must reverse into the street, often time with other vehicles obscuring the view. Further, most pedestrians do not use the sidewalk inside the parking lot but rather walk the shortest route, which in this case is across the roadside edge of the parking lot, which creates additional risk to the pedestrians.

A third option to replacing the sidewalk in kind is to reconstruct it, not inside the parking lot as it is currently, but rather running parallel and adjacent to the street. This redesign could serve to address several issues:

1. minimize the cost needed to address slope stability concerns if reconstructed in its existing location;
2. address the double-parked parking problem through design of a one-way drive through lot with angled parking; and
3. provide a roadside sidewalk which delineates vehicle and pedestrian routes and provides a design with safety in mind for both vehicular traffic and pedestrian traffic.

The parking lot's asphalt surface and drainage appear to be in good condition. Consideration of either the second or third options listed above would require a determination as to the construction method associated with adding a concrete sidewalk to an asphalt surface.

The sidewalk corridor which acts as a major pedestrian thoroughfare from Reid Street to Church Street, which is also associated with access to/from the High School and its parking lot, the Swimming Pool and the Community Center, is also in need of repair, as the concrete in this area has deteriorated to the point where the concrete aggregate is exposed and the depressions hold water, which creates slip hazards. Certain concrete panel replacement would be a first phase of a full sidewalk corridor replacement project.

Approval of this project will provide staff the means of further project development.

PRIMARY SCHOOL ENTRANCE

At the Primary School entrance, the sidewalk area proposed for repairs is the section of walkway that slopes toward the parking lot with a small ramp. The sidewalk has deteriorated and holds water, which turns icy in winter months. Further there are safety concerns with the design of the sidewalk which warrants the installation of bollards to protect sidewalk pedestrians from vehicular traffic.

PROJECT COST ESTIMATE			
BREAKDOWN	**ESTIMATE**	**BUDGET REQUEST**	
Construction estimate for Demolition and Replacement: • Primary School • High School Parking Lot • Reid St to Church St Corridor (lower landing and Old Gym entrance sections)	 $10,000 $25,000 $30,000	FY20 Sales Tax Fund for Streets	$65,000
Total Estimate	$65,000	Budget Total	$65,000
Project costs are an estimate which will be redefined through the first stages of project development.			

High School Parking Lot Sidewalk and Stairway/Lower Landing Photos:

Primary School Entrance Photos:

FY2020 CIP
Proposed Project

Project:	Mt Dewey Trail Extension FLAP Grant Match		
Description:	The Mt. Dewey Trail extension project is funded by Federal Highways' FLAP grant program and requires a CBW-provided match to the grant funding.		
Cost Estimate:	**$50,000 requested in CBW Funds / Total Project Cost is $504,577**	Sched. Complete: **FY20**	Project Mgmt: **A Al-Haddad**

PROJECT DISCUSSION

In 2014, the City and Borough of Wrangell was successful in being selected as a FHWA FLAP grant program recipient for funding in the amount of $454,577 for the Mt. Dewey Trail Extension project. This program requires a minimum of a 9.03% match. The CBW has approved and accepted the FLAP Mt. Dewey Trail grant and have continued to reauthorize the match funds in the amount of $50,000 from the Commercial Passenger Vessel Excise Tax Fund in previous years, in anticipation of the FHWA funds being released for this project.

Project grant funding was released by the federal government in Fall 2018. Following execution of the Match Agreement and the MOA with the FHWA in 2018, we are preparing to commence project execution, which will see a solicitation for engineering design let first. Once design and permitting is complete, project construction will follow.

Staff requests reauthorization of the FY19 funding for the Mt. Dewey Trail Extension FLAP Grant Match, otherwise known as the FHWA's project titled *Wrangell Non-Motorized Transportation System*, in the amount of $50,000. These funds will act as the CBW's continued match to the FHWA FLAP grant.

PROJECT COST ESTIMATE

BREAKDOWN	ESTIMATE	FUNDING SOURCES	
Design	$40,000	FY20 CIP Commercial Passenger Vessel Excise Tax Funds	$50,000
Permitting/Environmental	$25,000		
Construction	$400,000	FHWA FLAP Grant	$454,577
Contract Admin/Inspection	$24,577		

FHWA's Oversight	$15,000		
Total Project Estimate	$504,577	Project Budget Total	$504,577

Project Cost Estimate Discussion

Project cost estimates were developed by CBW staff when submitting our grant funding application to FHWA in 2014. Due to the potential for cost escalation since 2014, a full cost estimate will be required for development as part of the engineering design portion of the project. FHWA has acknowledged the potential for cost escalation due to their deferred project funding schedule and may be able to included additional funds to cover some realized added costs. The CBW would still be required to provide the 9.03% match for any additional grant funds offered by FWHA, but we can also consider in-kind contributions, i.e. CBW staff time, toward our match. Staff are currently tracking time spent on the project in an effort to reduce our cash match toward the project and/or accommodate potential, added project costs.

Project:	City Dock Summer Float		
Description:	Add one 10' x 120' mixed steel and timber float for use at City Dock during the summer tourism season.		
Cost Estimate: **$85,000**	Sched. Complete: **2020**	Project Mgmt: **A Al-Haddad**	

PROJECT DISCUSSION

The cruise ship and local charter industries have indicated the need for additional mooring capacity at City Dock due to the industries' growth over the last several years. On days where more than two cruise ships are in town, the process of lightering (transferring) the passengers between a ship, anchored off-shore, to the dock is time consuming and a loss of passenger experience in Wrangell.

The Port Department currently has three summer floats that are configured for the north side of City Dock's approach dock, and there is one on hand configured for the south side of the approach dock. The proposed new summer float would be configured to work with the one on the south side and is anticipated to be designed as an approximate 10' (w) x 120' (l) mixed steel and timber floating dock.

PROJECT COST ESTIMATE

BREAKDOWN	ESTIMATE	BUDGET REQUEST	
Pre-fabricated Dock Lumber Package & Hdwre Shipping	$55,000 20,000 10,000	FY20 Commercial Passenger Vessel Excise Tax Fund	$85,000
Total Estimate	$85,000	Budget Total	$85,000

Project Cost Estimate Discussion

The estimate for this proposed project is based on a similar float procurement in 2015 and includes an inflation factor. No hard estimates have been received for this project to date.

Project:	Cruise Shop PAX Covered Staging Area for City Dock		
Description:	Provide a covered space at City Dock for cruise ship passengers to gather while organizing with jet boat association and local tour operators		
Cost Estimate:	**$40,000**	Sched. Complete: **2020**	Project Mgmt: **G Meissner**

PROJECT DISCUSSION

The Stikine River Jet Boat Association discussed the needs of the expanding tourism industry with the CBW, indicating that the immediate need of Wrangell's tourism industry is added infrastructure. One of the larger needs proposed by the jet boat association is a covered shelter for cruise ship passengers, at City Dock. The former vendor shelter, which was on CBW property purchased by the Stikine Inn, was historically used as a covered space for this purpose.

A new shelter would provide a dry space for the cruise ship passengers to congregate with the jet boat tour operators in order to organize for their tours.

The Port Department has considered locations that would be appropriate for a shelter and have identified an approximate 12' x 25' area near the cul-de-sac adjacent to City Dock.

PROJECT COST ESTIMATE

BREAKDOWN	ESTIMATE	BUDGET REQUEST	
Prefabricated Shelter & Freight Foundation and Erection	$10,000 $10,000	FY20 Commercial passenger Vessel Excise Tax Fund	$20,000
Total Estimate	$20,000	Budget Total	$20,000

Project Cost Estimate Discussion

Price is based on a 12'x25' steel-framed structure with fabric enclosure.

Example of Proposed Covered Shelter Style:

FY2020 CIP
Proposed Project

Project:	Petroglyph Beach Bathroom and Platform Improvements		
Description:	Install a permanent bathroom and make repairs to wooden platform structure		
Cost Estimate: **$50,000**	Sched. Complete: **2020**	Project Mgmt: **A Al-Haddad**	

PROJECT DISCUSSION

Petroglyph Beach State Park is a heavily visited attraction in Wrangell, both by residents and visitors alike. Historically, the CBW has installed two port-a-johns at the site's trailhead during the summer months. The CBW is proposing to construct a year-round, permanent bathroom, which would also be accessible, for this location.

This project was authorized in FY19 at $35,000; however, $20,000 of that funding was redirected to another project, leaving the balance of project funds in FY19 at $15,000. Due to identifying the need for anticipated added costs for materials and freight, as well as the need to make some deferred maintenance repairs to the wooden platform structure at the State Park, an additional $35,000 has been added to the reauthorization request for FY20, bringing the total project request to $50,000.

Note: Although the Petroglyph Beach Park is a State of Alaska Park site, the CBW entered into an agreement with the Alaska State Parks in the late 1990s for maintaining the infrastructure at the park. The CBW has in recent years requested funding from the State of Alaska, State Parks division, for assistance in maintain this structure, and to date, little to no funding has been received.

PROJECT COST ESTIMATE

BREAKDOWN	ESTIMATE	FUNDING SOURCES	
Pre-Fabricated Structure & Freight	$32,000	FY20 Commercial Passenger Vessel Excise Tax Fund Request	$50,000
Labor to Install	$10,000		
Repairs of Beach Overlook Platform	$8,000		
Total Estimate	$50,000	Budget Total	$50,000

Project Cost Estimate Discussion

Cost estimate for the bathroom is based on a quote from Romtec for the type of bathroom shown in the photo below. Staff will analyze the project further for potential cost savings for a standard construction structure in lieu of the proposed pre-engineered packaged structure.

Example of Pre-Fabricated Bathroom Style:

FY2020 CIP
Proposed Project

Project:	Institute Property Phase I Survey and Subdivision		
Description:	Survey proposed Phase I of the approved Institute Master Plan		
Cost Estimate:	**$50,000**	Sched. Completion: **JUNE 2020**	Project Mgmt: C Rushmore

PROJECT DISCUSSION

The Wrangell Institute Master Plan provided an Alternative 1 that was approved by the Assembly, which included constructing approximately 14 lots on the north side of the property closest to Institute Creek. This development option minimizes utility costs necessary for property development. The project will involve a survey and subdivision developing buildable lots utilizing topography, ROW creation, and utility easements. Lot sizes, based on the schematic from the Master Plan range in size from 14,000 square feet to 28,000 square feet.

PROJECT COST ESTIMATE

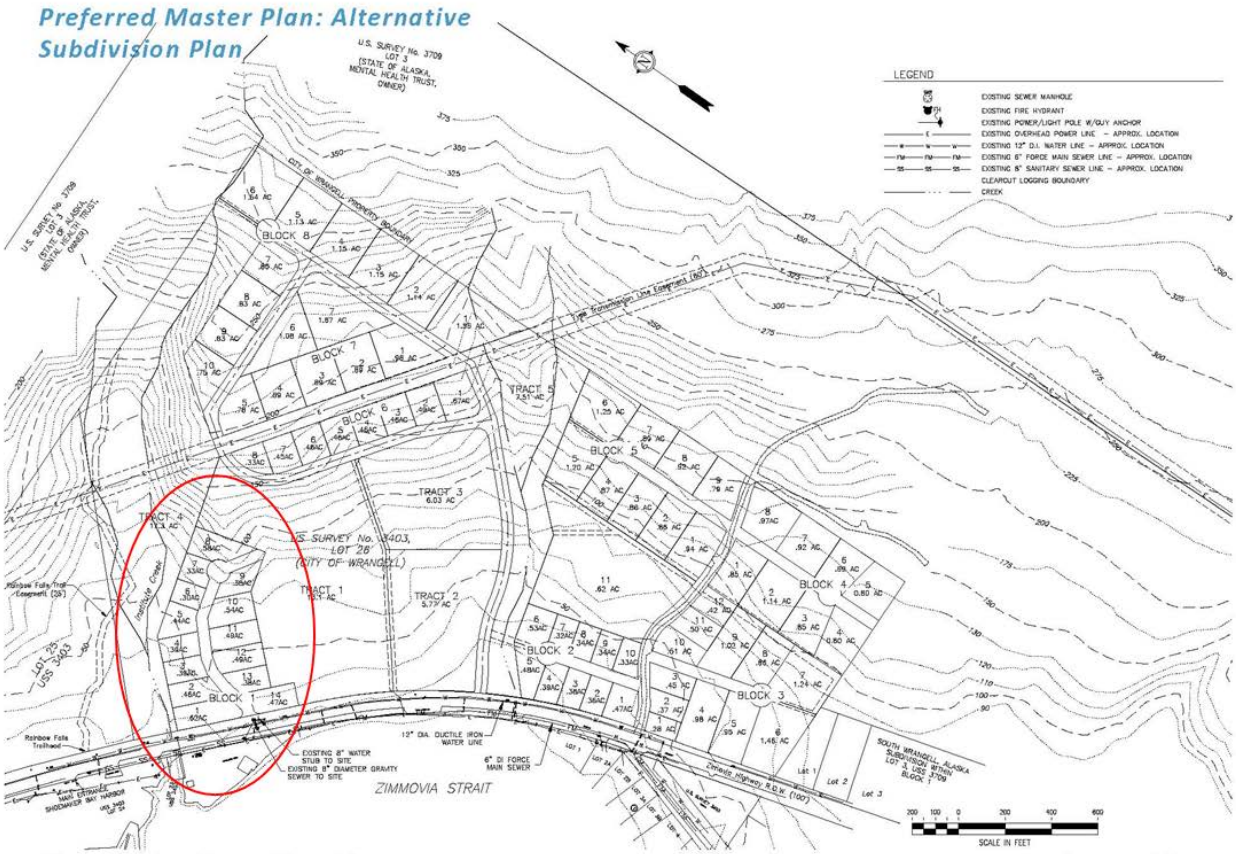
BREAKDOWN	ESTIMATE	BUDGET	
Professional Services for Land Survey	$50,000	FY2020 General Fund	$50,000
Total	$50,000		$50,000

Project Cost Estimate Discussion

It is unknown the exact cost of the survey for this property. The estimate is based on a survey bid for a similar project on POW. This project is being combined with other survey needs in order to minimize overhead and mobilization costs.

Institute Master Plan, Phase I Residential Subdivision:

(the subject subdivision is highlighted by a red circle draw around it)



FY2020 CIP
Proposed Project

Project:	4-Mile Property Survey and Subdivision		
Description:	Survey for development of cleaned and vacant property at 4-mile Zimovia Hwy		
Cost Estimate:	**$12,000**	Sched. Completion: **JUNE 2020**	Project Mgmt: C Rushmore

PROJECT DISCUSSION

The subject lot is the former Byford Junkyard that was recently environmentally cleaned by the State of Alaska, ADEC. The clean-up level was performed to residential standards. The lot is currently zoned Light Industrial and is 2.5 acres. Staff had previously presented several subdivision alternatives for the property, which offered subdivision options creating two to five separate new lots. If subdivided, the estimate to run utilities to the back lots was approximately $250,000. Staff are discussing and proposing recommended subdivision alternatives based on current adjacent property owner requests, topography, and final site design and fill as left by ADEC's contractor. The project will involve a survey and subdivision developing buildable lots utilizing topography, ROW or access easement creation, and utility easements.

PROJECT COST ESTIMATE

BREAKDOWN	ESTIMATE	BUDGET	
Professional Services for Land Survey	$12,000	FY2020 General Fund	$12,000
Total	$12,000		$12,000

Project Cost Estimate Discussion

It is unknown the exact cost of the survey for this property, in part because the number of lots for any subdivision has not yet been determined. The estimate is based on a survey bid for other City-owned lots on Etolin Avenue. This project is being combined with other survey needs in order to minimize overhead and mobilization costs.

City and Borough of Wrangell, Alaska

Date: April 16, 2019

To: Lisa Von Bargen, Borough Manager

From: Carol Rushmore, Economic Development Director

Re: Former Junk Yard Site

Background:

- The property was cleaned to the highest standard so Residential development is permitted.
- Zoning is Light Industrial
- Lot size is 2.51 acres or 109,355 square feet
- Bob Molinek continues to voice an interest in purchasing the land directly behind their property, and presented a letter. This would equate to just over 15,000 square feet.
- Bill Byford has voiced an interest in resolving an encroachment issue. A corner of his greenhouse attached to his house encroaches into the property a few feet. He is interested in buying a sliver of land, or getting an encroachment easement where the corner of his greenhouse encroaches onto the subject lot. An easement would be good as long as the greenhouse structure remains as is, but would not be able to be expanded on and if removed, the encroachment easement would no longer be valid. He would also like to be able to continue to use any access easement that might be created to access the back portion of his lot.
- Electrical pole on Zimovia was moved in 2018 to allow for a 30' easement to access lots that might be subdivided in the back of the property.

Several options or many, with maps as to how the Borough could dispose of the property:

Option 1) Subdivide the property There would be 3 rear flag lots in the back (maximum allowed) and one lot in the front with the easement adjacent to Byford lot. The City should put in the sewer and water for each of the lots, and a utility/access agreement that would be recorded with subdivision will spell out how landowners will maintain in the future. See Option 1 map as an example. The lots could be configured in numerous ways. An easement would be required for access and utilities.

Option 2) Subdivide the property into a flag lot subdivision, creating the maximum of 4 lots (3 back, 1 fronting Zimovia) and sell for residential. This Option differs from Option 1 only in the configuration of the lots. One of the rear lots would be configured in such away as to

allow Molinek to purchase the area behind him directly or as part of a bid process. Option 2A just shows a different configuration and there are other lot configuration options as well.

Option 3) Sell the entire parcel as a single sale for residential development and let someone else subdivide or not. A requirement to the sale would be that any further subdivision must provide city sewer and water since the area was cleaned down to clay and filled with rock.

Option 4) Create a 60' wide ROW through the parcel to connect with Mental Health Trust lands to provide an additional access point for future development on their lots. This could create a few different type of subdivided lot configuration, although a variance to the 100' highway frontage for the front lot would be required. The City would be required to construct the road and install utilities.

Option 5) Change the zone to Rural Residential for only residential development.

Byford Junkyard: Option 1

Byford Junkyard: Option 2

Byford Junkyard: Option 2A

Byford Junkyard: Option 4

Byford Junkyard: Option 4A

FY2020 CIP
Proposed Project

Project:	Etolin Avenue Foreclosed Lot Survey and Subdivision		
Description:	Survey for development of Lot 1, Block 35, Etolin Avenue		
Cost Estimate: **$6,000**	Sched. Completion: **JUNE 2020**	Project Mgmt: C Rushmore	

PROJECT DISCUSSION

The subject lot is located on the corner of Etolin Ave and Pine Street. It was sold 15 years ago and then foreclosed. An IRS lien that expired in 2018, according to a Title Report, handicapped the Borough from selling the lot earlier. The lot is currently zoned Multi-Family Residential and is approximately 61,000 square feet. In 2017, the Assembly approved use of the southern half of the lot to Wrangell Medical Center (WMC) for construction of a 4-unit housing complex, if a housing grant application that the WMC was pursuing were to have been successful. Some survey work has been performed on the property by R&M Engineering – Ketchikan as part of the WMC project development. Utilities are accessible from Etolin Avenue. If more than two lots were to be created, depending on the final subdivision, utilities may need to be run to a third or fourth lot. The project will involve a survey and subdivision developing buildable lots utilizing topography, ROW or access easement creation, and utility easements. Lot 2, directly behind Lot 1 was also part of the original sale, but is not included in this survey project.

PROJECT COST ESTIMATE

BREAKDOWN	ESTIMATE	BUDGET	
Professional Services for Land Survey	$6,000	FY2020 General Fund	$6,000
Total	$6,000		$6,000

Project Cost Estimate Discussion

It is unknown the exact cost of the survey for this property. The estimate is based on a survey bid for other City-owned lots on Etolin Avenue. This project is being combined with other survey needs in order to minimize overhead and mobilization costs.

Aerial of Etolin Avenue Lot to be Surveyed and Subdivided:

(The perimeter of the subject lot is highlighted in blue)

Project:	5th and 6th Avenues Roadway Construction in Industrial Subdivision		
Description:	Construct portions of the 5th Ave. and 6th Ave roadways in the Industrial Subdivision as a means to make additional industrial lots available to the public		
Cost Estimate: **$235,000**	Sched. Complete: **2020**	Project Mgmt: **A Al-Haddad**	

PROJECT DISCUSSION

Community input suggests that significant growth has created a substantial and immediate need for making available new industrial lots in Wrangell's Industrial Subdivision.

This project anticipates a two lane, gravel-surface roadway, for in both the 5th Avenue ROW and the 6th Avenue ROW, which would provide local road connections needed to address increased development and growth.

- 5th Avenue roadway is proposed at approximately 300', offering access to four lots
- 6th Avenue roadway is proposed at approximately 550', offering access to five lots

The project scope would allow for light industrial traffic loads and would include a separated pedestrian corridor within the right of way, sufficient for the Mt Dewey Trail Extension project.

This project was authorized in FY19 at $164,000. Due to redefining the design criteria, staff have modified the cost estimate, requesting an additional $71,000, bringing the total project request to $235,000.

PROJECT COST ESTIMATE

BREAKDOWN	ESTIMATE	BUDGET REQUEST	
Engineering Design Survey Construction	$21,000 $6,500 $207,500	FY20 Industrial Construction Fund Request	$235,000
Total Estimate	$235,000	Budget Total	$235,000

Project costs are an estimate which will be redefined through the first stages of project development, through the design process.


Sixth Avenue
Fifth Avenu
St Michael's St
Fourth Avenue

FY2020 CIP
Proposed Project

Project:	Marine Service Center Survey and Replat				
Description:					
Cost Estimate:	**$15,000**	Sched. Completion:	**JUNE 2020**	Project Mgmt:	C Rushmore

PROJECT DISCUSSION

Several years ago the Assembly approved the sale of Port property, outside of the Marine Service Center's (MSC) fenced area, to the Bay Company. As part of that initial request, the Planning and Zoning Commission worked with the Port Commission on the yard area to vacate the platted ROW and establish an access easement where the driving access is actually located. The Assembly approved the ROW vacation. Now that the Bay Company replat is complete, which reflects the area purchased from the Borough, the Borough needs to move forward with the replat of the MSC to vacate the ROW. As part of the survey, the Cold Storage building also needs to be established on its own lot since it creates issues annually with assessments and the lease agreement with Trident Seafoods. In the future, the Borough might also be able to sell the Cold Storage, and at that time, the structure would need to have its own legal property description.

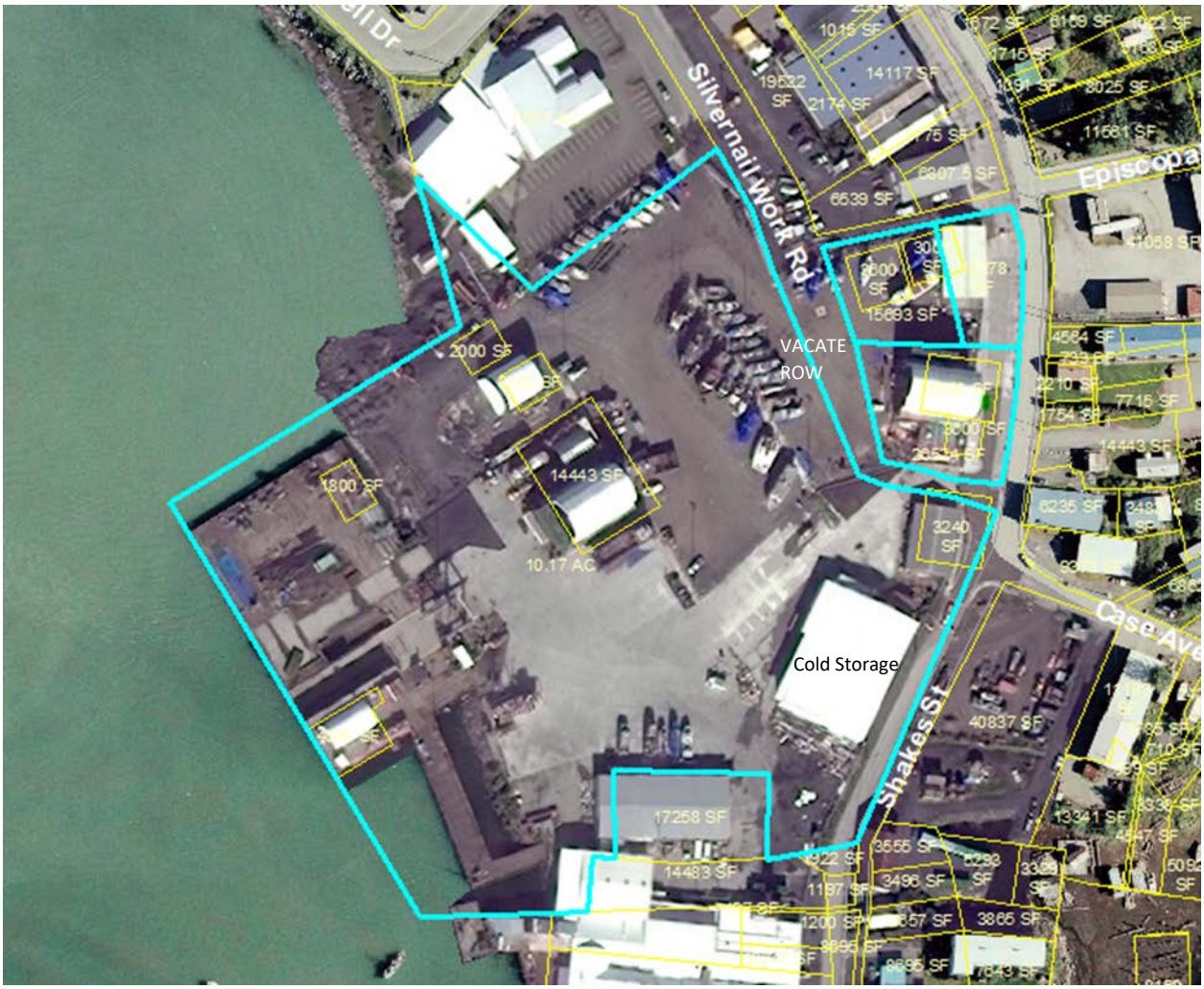
PROJECT COST ESTIMATE

BREAKDOWN	ESTIMATE	BUDGET	
Professional Services for Land Survey	$15,000	FY2020 Industrial Construction Fund Request	$15,000
Total	$15,000		$15,000

Project Cost Estimate Discussion

It is unknown the exact cost of the survey for this property. The MSC has been surveyed several times, so monuments should be existing. This project is being combined with other survey needs in order to minimize overhead and mobilization costs.

Aerial of Marine Service Center Parcel:



FY2020 CIP
Proposed Project

Project:	6-mile Former Mill Property Purchase				
Description:	Purchase of the former mill property located at 6-mile Zimovia Highway				
Cost Estimate:	**$1,453,799**	Sched. Completion:	**JUNE 2020**	Project Mgmt:	Von Bargen

PROJECT DISCUSSION

The Borough has been in negotiations to purchase the 6-mile waterfront industrial property (the former mill property) for the last couple of years. Certain tasks had been presented to the owner, Mrs. Buhler, for completion prior to the Borough's further negotiations. Most of those tasks have been completed, including the survey of the property that was sold to Dianna Larsson by a contract deed for sale rather than survey; crane removal; environmental cleanup; removal of scrap equipment, etc.

All documents from the Waterfront Industrial Property Assessment and Feasibility Study completed in 2016 are available for review at: http://www.wrangell.com/economicdevelopment/waterfront-industrial-property-assessment-and-feasibility-study

PROJECT COST ESTIMATE

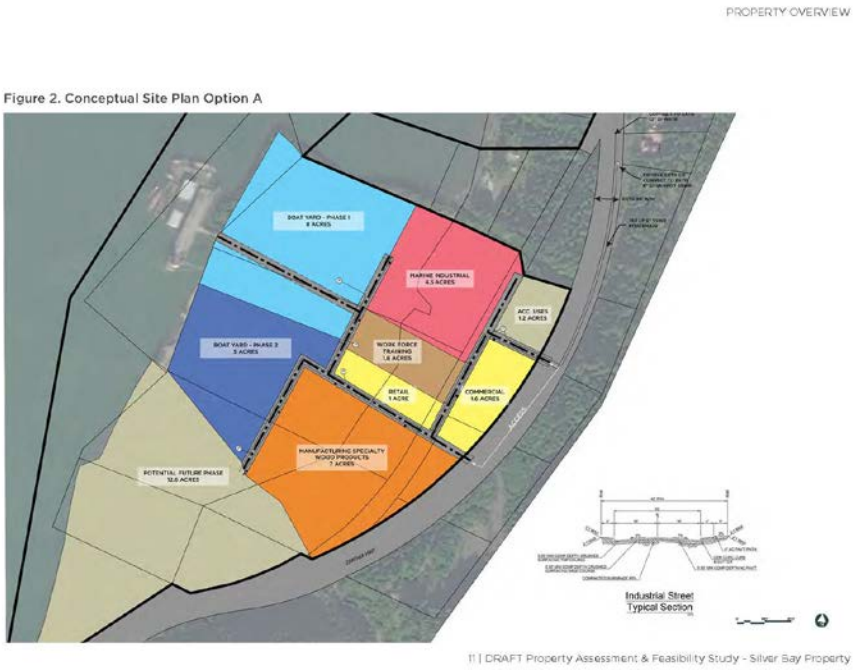
BREAKDOWN	ESTIMATE	BUDGET	
Land Purchase	$1,453,799	FY2020 Economic Recovery Fund	$1,453,799
Total	$1,453,799		$1,453,799

Project Cost Estimate Discussion

Negotiations are ongoing between the property Owner and Borough Manager and Borough Assembly.

Aerial of Property:

Conceptual Site Development Alternative A from 2016 Assessment



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FY2020 CIP Proposed Project
6-mile Former Mill Property Purchase

Project:	Case Avenue Rebuild Survey		
Description:	Professional services for the Survey of Case Avenue's electrical distribution line for future rebuild		
Cost Estimate:	**FY20 Requested Funds $100,000 / Total Project Cost $600,000**	Sched. Complete: **2021**	Project Mgmt: **A Al-Haddad**

PROJECT DISCUSSION

Problem Statement: The Electrical Utility Poles (EUP) along Case Avenue (20 each) have reached the end of their Service Life (SL).

Solutions Statement: The purpose of the Case Avenue Rebuild project is to prepare Case Avenue for electrical utility maintenance thorough replacement of the EUPs, in order to extend their useful SL.

Case Avenue has no known Electrical Utility Easements. The first phase of this project is a survey of Case Ave. to establish the Case Ave. right-of-way, identify where the existing EUPs are in relationship to the right-of-way, and identify necessary utility easement acquisitions in advance the construction project. A decision, post-survey results, will guide WML&P in how best to approach replacing the Case Avenue EUPs.

The intent of this project is to do a 'replacement-in-kind', with consideration of upgrades that will expand the service life of each of the poles replaced.

PROJECT COST ESTIMATE

BREAKDOWN	ESTIMATE	BUDGET REQUEST	
Total Rebuild Project: Survey Pole Replacement Parts Pole Replacement Labor	 $100,000 $200,000 $300,000	Survey phase only: Reauthorization of FY2019 funding from the WML&P Reserves	 $100,000
Total Project Estimate	$600,000	FY20 Budget Total	$100,000

Project Cost Estimate Discussion

The estimate for both the Survey work and the Pole Replacement work is a rough order of magnitude estimate based upon industrial knowledge. No estimates of this work have been received.

$100,000 is being request for the required Survey of Case Avenue for which the competitive solicitation will be included in the *Borough-Wide Land Survey Project*, as reflected in Planning &

Zoning's multi-parcel land survey project, for which funding in FY20 is also being sought for other parcel-specific surveys.

This $500,000 construction estimate can be refined once the results of the survey are in.

Existing Power Distribution Line along Case Avenue:

Project:	Power Generation Solution Project		
Description:	Acquisition and implementation of two used generators and a used container for developing a self-contained, mobile power generation unit.		
Cost Estimate: **$211,200**		Sched. Complete: 10/2019	Project Mgmt: **A Al-Haddad**

PROJECT DISCUSSION

PROBLEM STATEMENT:

At present, if called upon to do so, the City and Borough of Wrangell will be required to run 100% of their generating capability at 100% of the time, with an expected 100% reliability to meet the electrical power needs of the City and Borough of Wrangell. This puts the City and Borough of Wrangell in a very risky and untenable position.

BACKGROUND STATEMENT:

Two EMD Generators are being removed from the City of Nome's inventory of generators. These two generators can be had for the cost of moving them out of Nome.

One generator is a 12-cylinder generator, putting out 1.5 MWs of power.

One generator is a 20-cylinder generator, putting out 2.5 MWs of power.

Both generators have been examined for expected life-service by the City and Borough of Wrangell's Powerhouse Lead Mechanic and found to be in good, to excellent condition. The 1.5 MW generator underwent a major rebuild about 11,000 run-hours ago. This is nearly new. The 2.5 MW generator underwent a major rebuild about 50,000 run-hours ago. All checks indicate that wear is fully within recommended tolerances. Both units match up well with the City of Wrangell's existing EMD generators.

Additionally, the City of Nome will 'give' the City and Borough of Wrangell their complete inventory of EMD spare parts and all their EMD specialty tools, most of which we do not have. This additional 'gift' is estimated to have a value of around $120,000.

EXECUTION STATEMENT:

To accomplish the movement of and installation of the two Nome Generators many pieces must come together.

The City and Borough of Wrangell will need to send two people to Nome for a period of about 10 days to move the Generators to the Port of Nome in time to have them loaded on to the first barge scheduled to leave Nome. This is expected at the end of May or early June. The two Generators are scheduled to come directly to Wrangell. The labor and shipping costs estimated to be incurred in FY19, in order to accommodate this work, is $74,250.

Concurrent to the shipping of the two generators, WML&P must undertake efforts to prepare the Powerhouse for the installation of the 20-cylinder generator. This will require the installation of conduit and conductors for the inter connection. A pad will also have to be prepared of enough size and mass to hold the 20-cylinder generator in place while running. It is estimated that all this work can be done in-house. Finally, both generators will have to be commissioned and functionally tested.

Preparations must also be made to receive the 12-cylinder generator.

The acquisition of the 12-cylinder generator is for the purpose of Mobile Emergency Electrical Generation, thus it must be self-contained, or "containerized."

Early searches for a container proved to be difficult. All containers were found to be stripped out, and costly. The least expensive one that we could find was going to cost $150,000, without anything in it. An appropriate container was found on Ebay for $75,000 and located in Barstow, California. This container also has the benefit of already having installed the Radiator, Exhaust Muffler, Switchgear, Air-start System, and all Control Systems. It also has a 12-cylinder generator in it as well. The condition of the generator is reported as "unknown." It was reconfigured to be a dual-fuel unit, that is to say, it has been modified to run on natural gas as well as on diesel. All pieces of this generator are compatible with our existing generators, except the fuel-delivery system and the cylinders.

The unknown reliability condition and fuel-delivery system of the generator in Barstow has led WML&P to look at the Ebay purchase as a plug-n-play container, leaving the possibly of parting out the incidental generator, or selling it.

The cost of shipping and handling has been estimated to be $60,000 (Note: The exhaust muffler is available, but has been removed for shipping, and will have to be shipped separately).

The combined cost of $135,000 to procure and ship the container to Wrangell will be incurred in FY19, and the work is expected to be complete by June 30, 2019.

The Mobile Emergency Electrical Generator will also need a 2 MW Transformer to complete its ability to be used in its capacity as an emergency generator. WML&P's present distribution system has, in part, 4 each 2MW Transformers that serve to choke, or restrict, the amount of load that can be pushed out to the City as a whole. Another WML&P electrical infrastructure FY2020 CIP project entitled 3*MW Transformer Purchase* will provide for the replacement of one of the existing four 2MW Transformers with a 3MW Transformer. The one existing 2MW Transformer that is replaced in the *3MW Transformer Purchase* project will then be used to complete the Mobile Emergency Electrical Generator under this subject proposed *Power Generation Solution* project.

SUMMARY STATEMENT:

1. Move two (2) EMD Generators from the City of Nome Alaska, by barge, to Wrangell, Alaska (this work and expenditure is scheduled during FY19)
    a. 1 each 20 Cylinder Generator
    b. 1 each 12 Cylinder Generator
2. Purchase of a used container. This includes shipping to Wrangell and transport to the Power Plant (this work and expenditure is scheduled during FY19)
3. Setup and install the two generators at City and Borough of Wrangell's Power Plant.
    a. The 20 Cylinder Generator will be installed within the confines of the Power Plant proper as a permeant asset.
    b. The 12 Cylinder will be "containerized" to provide mobile emergency-response capabilities.
4. Commissioning of, and Functional Check-out of the two generators.

PROJECT COST ESTIMATE			
BREAKDOWN	**ESTIMATE**	**BUDGET REQUEST**	
Full Project Cost $456,225 Project Funding in FY19 Parts & Shipping Labor Engineering Service	Cost Breakdown: ($245,025) $80,850 $80,850 $49,500	FY2020 funding from the WML&P Reserves	$**211,200**
Total Estimate	$**211,200**	Budget Total	**$211,200**

FY2020 CIP
Proposed Project

Project:	3MW TRANSFORMER PURCHASE		
Description:	Purchase one 3MW Transformer to replace one of the existing 2MW Transformers at the Powerhouse		
Cost Estimate:	**$ 100,000**	Sched. Complete: **FY20**	Project Mgmt: **R Rhoades**

PROJECT DISCUSSION

Problem Statement:

At present, WML&P's distribution system is supported by 4 each 2MW Transformers. These Transformers represent a bottle-neck to WML&P's distribution system and serve to restrict the amount of load that can be pushed out to the City as a whole. Special circumstances, such as colder weather spells, has allowed the 2 MW Transformers to operate above their rated capacities. As load demands grow above 8MWs, the likelihood of component failure increases.

The need exists to upgrade the 4 each 2MW transformers to 3 each 3MW transformers for added capacity. Preliminary engineering indicates that the general installation of the 3 each 3MW Transformers will be largely "plug-n-play", eliminating the need to upgrade the existing infrastructure (breakers, wire and conduit).

While costs for a full upgrade of all of the existing transformers is still being worked, the need for a 2MW transformer, to accommodate the incoming Mobile Emergency Electrical Generator, dictates that one of the existing 2MW Transformers be utilized for this purpose, thus necessitating an immediate replacement of one of the four transformers which currently support the electrical distribution system.

Solutions Statement:

Replace one of four of WML&P's 2MW Transformers with a 3MW Transformers as a first step toward a full transformers upgrade project and as a means of providing the 2MW transformer currently needed for the Mobile Emergency Electrical Generator.

PROJECT COST ESTIMATE

BREAKDOWN	ESTIMATE	BUDGET REQUEST	
Transformer	$100,000	FY2020 funding from the WML&P Reserves	$ 100,000
Total Estimate	$100,000	Budget Total	$ 100,000

Project Cost Estimate Discussion
Basis of cost estimate is from a transformer vendor quote.

Existing Four 2MW Transformers:

Project:	Generators' Exhaust Insulation Blankets		
Description:	Purchase and install insulation blankets on four Generators' Exhaust Manifolds		
Cost Estimate: **$ 100,000**		Sched. Complete: End of FY 2019	Project Mgmt: **A Al-Haddad**

PROJECT DISCUSSION

Problem Statement:

Running multiple diesel generators generate temperatures inside the Power Plant in the 3-digit Fahrenheit range. This is considered a Worker Safety Concern.

Solutions Statement:

Install Insulation Blankets on the exhaust manifold of each of the four generators. Note that this count is for 3 each existing generators, and 1 each to-be-installed generator.

PROJECT COST ESTIMATE

BREAKDOWN	ESTIMATE	BUDGET REQUEST	
Parts Labor Shipping	$ 100,000 $ In-house $ TBD	FY2020 funding from the WML&P Reserves	$ 100,000
Total Estimate	$ 100,000 +/- 15%	Budget Total	$ 100,000

Project Cost Estimate Discussion

WML&P has a $75,000 estimate from one vendor for insulation blankets to cover 3 each Generators' Exhausts. Given four generators' exhaust to insulate, including the Nome-provided unit, funding is requested to insulate all four, at $25,000 per generator. One other vendor has supplied an estimate for less, however, the products offered between the two vendors are not equal to one another.

Three Existing Diesel Power Generators' Interior Exhaust Manifold View:

Three Existing Diesel Power Generators' Exterior Exhaust View:

Project:	Powerhouse Roof Repairs		
Description:	Repair leaks in the Powerhouse's tarred roof		
Cost Estimate: **$ 40,000**		Sched. Complete: FY2019	Project Mgmt: **A Al-Haddad**

PROJECT DISCUSSION

Problem Statement:

The Powerhouse's tarred section of roof leaks in multiple places. The leaking has gone on for quite some time and is now causing further damage to the roof infrastructure and needs to be repaired in an effort to salvage the existing structure.

Solutions Statement:

Repair the roof as quickly as possible to prevent further damage to the rafters.

PROJECT COST ESTIMATE

BREAKDOWN	ESTIMATE	BUDGET REQUEST	
Roof Repairs	$40,000	FY2020 Funding from WML&P Reserves	$ 40,000
Total Estimate	$ 40,000	Budget Total	$ 40,000

Project Cost Estimate Discussion

The estimate is based on other roofing projects recently bid. A fully-developed estimate can be made pending further structural assessment of this building, which is scheduled to occur in FY19.

Existing Powerhouse Tarred Roof:

Project:	Water Plant Bypass Line Valve Reconfiguration		
Description:	Reconfigure valve cluster, which poses a cross-contamination threat to Wrangell's drinking water system		
Cost Estimate: **$30,000**		Sched. Complete: **2020**	Project Mgmt: **R Howell**

PROJECT DISCUSSION

There is a cluster of valves between the water plant and the storage tanks that includes a water treatment bypass in the piping system, which could allow untreated water, from our raw water source, into the distribution line to town (there is only one valve separating the raw, untreated water from the treated distribution line). This bypass was installed as a safety for emergency firefighting adequacy. This valve cluster isn't configured whereby we can easily add another valve; therefore, it appears that we would have to reconfigure piping around the valve cluster. It's not a cheap endeavor, but more important is the concern of doing it without having to shut water off to town.

As a requirement of ADEC, engineering plan approval is required to address this matter which was identified in Wrangell's last several Sanitary Survey as a significant deficiency. Sanitary Surveys are required to be performed for our water system every three years according to Alaska Drinking Water Regulations.

PROJECT COST ESTIMATE

BREAKDOWN	ESTIMATE	BUDGET REQUEST	
Water Valve's Configuration (Parts & Labor) Engineering Assistance	$20,000 $10,000	FY20 Water Department Reserves	$30,000
Total Estimate	$30,000	Budget Total	$30,000

Project:	Reroute Node 6 Sewer Pump Station Overflow Pipe		
Description:	Reroute the overflow pipe from the pump station and daylight at the end of the ramp in the harbor basin		
Cost Estimate: **$45,000**	Sched. Complete: **2020**	Project Mgmt: **R Howell**	

PROJECT DISCUSSION

The overflow pipe from the pump station at Node 6 at the Case Avenue, Inner Harbor boat ramp was originally installed with the end of the pipe daylighting on the northeast side of the boat ramp, across a private tidelands property line. This pipe needs to be realigned to discharge wastewater overflow (when necessary) into the waters directly at the bottom of the ramp.

This sewer pipe reroute project was authorized in FY19 at $45,000 and is requested to be reauthorized in the FY20 CIP Budget for the Sewer Department.

PROJECT COST ESTIMATE

BREAKDOWN	ESTIMATE	BUDGET REQUEST	
Ramp Demolition Sewer Line Realignment Engineering Assistance	$10,000 $30,000 $5,000	FY20 Sewer Department Reserves	$45,000
Total Estimate	$45,000	Budget Total	$45,000

Inner Harbor Ramp where Overflow Pipe exits from underneath the side of the ramp and daylights adjacent to private property:

Current Sewer Route down the ramp and over to daylight at toe of ramp's slope:

Project:	Node 8 Sewer Pump Station Rehabilitation		
Description:	Replace Node 8 pump station on Zimovia HIghway		
Cost Estimate:	**$132,000**	Sched. Complete: **2020**	Project Mgmt: **A Al-Haddad**

PROJECT DISCUSSION

Node 8 Pump Station, located on Zimovia Highway near Sea Level Seafoods, is in need of replacement. This sewer pump station was installed in 1977 and has experienced significant deterioration.

This project was authorized in FY19 at $120,000. Due to identifying the need for some engineering assistance and anticipated added cost for materials and their freight, an additional $15,000 has been added to the reauthorization request for FY20, bringing the total project request to $135,000.

PROJECT COST ESTIMATE

BREAKDOWN	ESTIMATE	BUDGET REQUEST	
Sewer Pump Station & Control Panel Electrical Installation Engineering Assistance	$98,000 10,000 15,000 12,000	FY20 Sewer Department Reserves	$135,000
Total Estimate	$135,000	Budget Total	$135,000

Existing Node 8 Sewer Pump Station and Electrical/Controls Panels: