



# MUNICIPALITY OF SKAGWAY GARDEN CITY R/V PARK

## RESIDENTIAL DEVELOPMENT COST

### PREPARED BY

J. Mark Pusich, PE  
RESPEC  
9109 Mendenhall Mall Road  
Suite 4  
Juneau, Alaska 99801

### PREPARED FOR

Municipality of Skagway  
P.O. Box 415  
Skagway, Alaska 99840

SEPTEMBER 6, 2023

Project Number I104.23010

C-1

# 1.0 INTRODUCTION

The Municipality of Skagway (MOS) has put forth Resolution No. 23-30R expressing the intent to dispose of Blocks 95 and 102 otherwise known as the Garden City R/V Park. MOS owns the property located on Blocks 95 and 102 including the existing Garden City R/V Park infrastructure. Garden City R/V Park is a gravel surfaced R/V park with 30 pull through R/V stalls with 30 AMP electrical services to each site. A water fill station and wastewater dump station exist on site. A wood framed building on concrete foundation is located on site that houses the coin operated laundromat with R/V park restrooms and coin operated showers. Wooden fences and tree/vegetation line the perimeter of the park. The MOS is expressing its intent to dispose of the property for the benefit of the public knowing that there is a need for high-density housing in the community and a need to sell MOS land for residential use. The development concept is to subdivide Blocks 95 and 102 into twenty-four (24) lots with each lot being 50' wide by 100' deep with a 60' wide public right of way representing 16<sup>th</sup> Avenue. 20' wide alley's would be developed for 15.5 and 16.5 Avenues to accommodate utility access and maintenance similar to the rest of the Skagway Townsite platting. RESPEC LLC has been retained to provide a professional opinion of cost for developing the 16<sup>th</sup> Avenue public right of way for purposes of supporting residential development between Main Street and State Street from 15<sup>th</sup> Avenue to 17<sup>th</sup> Avenue.



C-2

Garden City R/V Park Laundromat and Restroom Building

## 2.0 ROUGH ORDER MAGNITUDE COST ESTIMATE

We have estimated rough order magnitude (ROM) preliminary construction costs for developing the existing Garden City R/V park into residential development with lots sized at 50' wide by 100' deep, a total of 24 new lots would be developed with this concept. In preparing this preliminary construction cost estimate the following improvements were assumed within the 60' right of way for 16<sup>th</sup> Avenue and the associated alley ways at 15.5 and 16.5 Avenues.

- **Subdivision Layout** - Twenty four (24) lots sized 50' x 100' (5,000 square feet) in size within MOS Townsite Survey Block 95 and 102 with a 60' wide public right of way for 16<sup>th</sup> Avenue.
- **16<sup>th</sup> Avenue Street Section** -Develop 16<sup>th</sup> Avenue public right of way with a typical street section that includes 12' wide asphalt pavement driving lanes, and 8' wide asphalt paved on street parking areas with concrete curb and gutter on each side of the Avenue with a 5' sidewalk on the north side of the Avenue. All sidewalks to be ADA compliant curb ramps. The roadway typical section would include construction of a new 2.5' deep section of 3" minus subbase material, a 6" depth of base course grading D-1 and a 2-1/2" depth of asphalt pavement.
- **Storm Drain** - Underground storm drain system will include a series of curb inlets with new corrugated plastic piping (CPP) sized 12" and 18" CPP. The underground drainage will flow from east to west and connect to existing underground storm drain system in State Street. Precast concrete storm drain catch basins and storm drain manholes will be located along 16<sup>th</sup> Avenue.
- **Sanitary Sewer** - Residential development of these lots will require expansion of the MOS public wastewater collection system to include new 8" C900 sanitary sewer main collector pipes going down each of the two 20' gravel surfaced alleys (15.5 Alley and 16.5 Alley). Sanitary sewer will be routed to the existing Main Street and State Street sewer lines. 8" sanitary sewer cleanouts will be located at the beginning of each sewer pipe run for maintenance access. New 6" C900 sanitary sewer services with cleanout lids would be installed to each lot.
- **Domestic Water** – To provide public drinking water to each residential lot on 16<sup>th</sup> Avenue, the existing MOS public drinking water system will need to be expanded. Connection to the existing water mains located in Main Street and State Street with new 8" ductile iron water mains with isolation valves at each end of 16<sup>th</sup> Avenue is proposed. New 1" poly water services with curb stops at the property line would be installed to each new lot. Cutting and patching of asphalt pavement and concrete curb and gutter on 15<sup>th</sup> Avenue and 17<sup>th</sup> Avenue will be required for the south and north tier of lots (twelve 1" water services). New fire hydrant assembly with access pad and protection bollards would be installed at each end of 16<sup>th</sup> Avenue.
- **Electrical Power** – New underground primary electrical service would be run down 15.5 Alley and 16.5 Alley from existing above ground poles located on State Street. New transformers would be located in the alley to provide secondary electrical service to each lot.
- **Site Demolition** – Complete decommissioning and removal of existing underground electrical system, underground water system, underground sewer system, on site sani-dump station, potable water fill station, and laundry/restroom facility building including foundations, slabs, propane tanks and heating fuel tanks within the Garden City R/V park would be performed.

Removal and disposal of the existing wood perimeter fence and trees where required would be removed.

- **Archeological Excavation** – Costs have been included in the ROM for dealing with roadway and utility excavations that are within the known archaeological area of the site. Excavations in these conditions require more time and sensitivity for operating equipment and need to be reflected in the ROM.

RESPEC has prepared a preliminary construction cost estimate for the development of 16<sup>th</sup> Avenue property into 24 residential lots as outlined herein. The preliminary ROM cost estimate was based upon approximate quantities using the previously prepared mapping and utility information from the State Street Water/Sewer improvement project. Applicable unit cost rates were based on recent public bid results in Skagway and Haines and were then applied to the estimated quantities. The preliminary estimate assumes that the reconstruction work will be constructed as a public project in a one construction season approach. State of Alaska prevailing wage rates and performance and payment bonds are assumed to apply. In addition, the estimate includes “soft costs” for survey, soils, engineering design, permitting, and inspection/construction administration. Finally, the ROM estimate includes a 10% pre-design contingency for unanticipated site conditions and project requirements. In summary the ROM costs are as follows:

Estimated Construction Cost =	\$4,162,780
Survey, Soils, Engineering Design @ 12% =	\$499,534
Permitting, Legal, Skagway Admin @ 5% =	\$208,139
Project Inspection/Administration @ 10% =	\$416,278
Pre-design Cost Estimate Contingency @ 10% =	<u>\$416,278</u>
<b>ESTIMATED PROJECT ROM TOTAL =</b>	<b>\$5,703,009</b>

**MUNICIPALITY OF SKAGWAY  
GARDEN CITY R/V PARK - RESIDENTIAL DEVELOPMENT  
PRELIMINARY COST ESTIMATE  
September 6, 2023**

PAY ITEM NO.	PAY ITEM DESCRIPTION	PAY UNIT	APPROX. QUANTITY	UNIT PRICE		AMOUNT	
				DOLLARS	CENTS	DOLLARS	CENTS
1505.1	Mobilization	Lump Sum	All Req'd	Lump	Sum	\$ 500,000	00
1560.1	Traffic Control and Maintenance	Lump Sum	All Req'd	Lump	Sum	\$ 50,000	00
1570.1	Erosion and Sediment Control/SWPPP	Lump Sum	All Req'd	Lump	Sum	\$ 60,000	00
2000.1	Dewatering/Shoring/Bracing of Trench	Lump Sum	All Req'd	Lump	Sum	\$ 50,000	00
2201.1	Clearing and Grubbing	Lump Sum	All Req'd	Lump	Sum	\$ 25,000	00
2202.1	Excavation	CY	3,795	\$ 40	00	\$ 151,800	00
2202.2	Archaeological Excavation	Lump Sum	All Req'd	Lump	Sum	\$ 1,000,000	00
2202.2	Select Borrow, 3" Minus Select	CY	3,255	\$ 85	00	\$ 276,675	00
2202.3	Shoulder/Slope Grading	Lump Sum	All Req'd	Lump	Sum	\$ 15,000	00
2202.4	Imported Trench Backfill	CY	1,150	\$ 80	00	\$ 92,000	00
2204.1	Base Course, Grading D-1	CY	705	\$ 150	00	\$ 105,750	00
2401.1	8-Inch C900 Sewer Pipe	LF	300	\$ 175	00	\$ 52,500	00
2401.2	6-Inch C900 Sewer Service Laterals w/ Cleanouts	Each	24	\$ 5,500	00	\$ 132,000	00
2401.3	Connect to Existing Sewer Pipe	Each	2	\$ 3,500	00	\$ 7,000	00
2402.1	8-Inch Sanitary Sewer Mainline Cleanouts	Each	4	\$ 4,000	00	\$ 16,000	00
2501.1	12-Inch Pipe Culvert	LF	166	\$ 200	00	\$ 33,200	00
2501.2	18-Inch Pipe Culvert	LF	160	\$ 250	00	\$ 40,000	00
2501.3	6-Inch Underdrain	LF	126	\$ 200	00	\$ 25,200	00
2502.1	Storm Drain Manhole, Type I	Each	3	\$ 10,000	00	\$ 30,000	00
2502.2	Catch Basin, Type IV	Each	4	\$ 7,000	00	\$ 28,000	00
2502.3	Connect to Existing Storm Drain Pipe	Each	2	\$ 4,000	00	\$ 8,000	00
2601.1	8-Inch D.I. Water Pipe	LF	356	\$ 180	00	\$ 64,080	00
2601.2	Connect to Existing Water Pipe	Each	2	\$ 5,000	00	\$ 10,000	00
2602.1	8-Inch Gate Valve	Each	2	\$ 7,500	00	\$ 15,000	00
2603.1	Fire Hydrant Assembly w/Guard Posts	Each	2	\$ 21,000	00	\$ 42,000	00
2605.1	1-Inch Water Service	Each	24	\$ 5,500	00	\$ 132,000	00
2607.1	Pipe Insulation	Board	100	\$ 110	00	\$ 11,000	00
2702.1	Construction Surveying	Lump Sum	All Req'd	Lump	Sum	\$ 100,000	00
2709.1	Topsoil	CY	60	\$ 400	00	\$ 24,000	00
2710.1	Seeding, Hydraulic Method, Type III	SU	1	\$ 5,000	00	\$ 5,000	00
2716.1	Remove and Dispose of Laundromat/Restroom Building and Foundatoin	Lump Sum	All Req'd	Lump	Sum	\$ 130,000	00

**MUNICIPALITY OF SKAGWAY  
GARDEN CITY R/V PARK - RESIDENTIAL DEVELOPMENT  
PRELIMINARY COST ESTIMATE  
September 6, 2023**

PAY ITEM NO.	PAY ITEM DESCRIPTION	PAY UNIT	APPROX. QUANTITY	UNIT PRICE		AMOUNT	
				DOLLARS	CENTS	DOLLARS	CENTS
2716.2	Remove and Dispose of R/V Park Underground Systems (Electrical, Water and Sewer)	Lump Sum	All Req'd	Lump	Sum	\$ 175,000	00
2718.1	Sign Assembly	Each	4	\$ 1,200	00	\$ 4,800	00
2722.1	Remove and Dispose Wood Perimeter Fence	LF	1,600	\$ 15	00	\$ 24,000	00
2801.1	A.C. Pavement, Type II-A, Class B	Ton	330	\$ 750	00	\$ 247,500	00
2806.1	Remove and Dispose Existing Asphalt	SY	445	\$ 35	00	\$ 15,575	00
3302.1	Concrete Curb and Gutter	LF	1,070	\$ 115	00	\$ 123,050	00
3302.2	Concrete Sidewalk, 4-Inches Thick	SY	295	\$ 250	00	\$ 73,750	00
3304.1	Removal of Curb and Gutter	LF	390	\$ 30	00	\$ 11,700	00
3304.2	Removal of Concrete Sidewalk	SY	155	\$ 40	00	\$ 6,200	00
16000.1	Underground Electrical Service/Transformers	Lump Sum	All Req'd	Lump	Sum	\$ 250,000	00

**ESTIMATED CONSTRUCTION SUBTOTAL = \$ 4,162,780 .00**

SURVEY, ENGINEERING DESIGN 12% \$ 499,534 .00

PERMITTING / LEGAL/MOS ADMIN 5% \$ 208,139 .00

PROJECT INSPECTION/ADMINISTRATION 10% \$ 416,278 .00

PRE-DESIGN COST ESTIMATE CONTINGENCY 10% \$ 416,278 .00

**ESTIMATED CONSTRUCTION TOTAL = \$ 5,703,009 .00**