

INCINERATOR EVALUATION AND REPLACEMENT ANALYSIS

SOLID WASTE TRANSFER CONCEPT

November 2020



Prepared for:

Municipality of Skagway
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INTRODUCTION

The Municipality of Skagway (MOS) currently utilizes an incinerator as part of its solid waste management program. The incinerator site serves as the collection point for waste for the community. Both the incinerator and the associated ashfill are nearing the end of their functional utility. The ashfill is approaching capacity, and viable options for expansion are not available at the current site. The Municipality is interested in taking a holistic look at its solid waste program to identify options for developing a solid waste transfer station and potentially develop a waste stream approach that maximizes use of existing and available infrastructure while providing a more sustainable solid waste program for the Municipality.

The MOS has recently acquired 15 acres of land near the Klondike Hwy./Dyea Rd. intersection. Part of this land has been earmarked for a centrally located transfer site. A composting facility has recently been built near the proposed location of the transfer site. The transfer site would serve as the collection point for all solid waste within the municipality. It would allow for waste drop-off by MOS residents as well as municipal garbage trucks that collect waste throughout the community.

In combination, the desire for a solid waste transfer site and composting facility and the need to address an aging incinerator and an ashfill nearing capacity provide incentives and opportunities for exploring new and more efficient waste disposal options.

SKAGWAY SOLID WASTE STREAM

The solid waste stream in Skagway is made up of recyclable material, compostable material, and some construction and demolition (C&D) waste. In 2012, SCS Engineers completed a Solid Waste and Recycling Management Plan for the MOS. The breakdown of the waste composition presented in that study was projected to the design year for this project, 2040. The population was projected using 2019 data collected as part of an evaluation for the MOS wastewater treatment plant. Additional seasonal output was added to account for tourist activities and increased C&D waste production during the summer months. A summary of the projected 2040 waste stream composition is presented below.

Table 1: 2040 Annual MOS Waste Totals

Material	Tons/Week	Tons/Year
Paper	8.68	451
Plastic	6.09	317
Metal	1.71	89
Organics	11.49	597
Glass	1.79	93
Yard Waste	0.45	24
Electronics	0.08	4
Paint	0.03	1.3
Other MSW	8.19	426
C&D Waste	3.00	156
Household Hazardous Waste	0.96	50
Medical Waste	0.16	8.5
Wastewater Sludge	3.50	181
Total	46.79	2432.8

TRANSFER SITE

The proposed transfer site will be located adjacent to the newly constructed composting facility. Most of the waste storage will be housed inside a large prefabricated metal building. The building will have drop-off access for both the general public and MOS staff. Members of the public will be encouraged to park outside the building, transport their waste into the building using a rolling hand cart, and then weigh their waste on one of several floor scales. Waste will then be sorted into six- or eight-yard dumpsters by category or placed directly in the compactor hopper and processed accordingly. Recyclable items will be separated out for processing. Large bay doors may also allow public access for larger items that can be placed directly into dumpsters. Bay doors also allow MOS staff to dump the contents of collection trucks on the facility floor for sorting. This waste can then be loaded directly into the compactor via skid-steer or forklift.

Residents will be charged per pound for waste that can be weighed on the floor scales. Waste that gets placed directly into dumpsters will be paid for based on an estimated volume determined by transfer site staff. In order to promote and encourage recycling, the MOS will not charge for disposal of glass, paper, plastic, metal, and electronics.

Yard waste and organic waste will be taken directly to the composting facility for drop-off. Household hazardous waste, electronics, and glass will get placed into appropriate containers and then packaged for shipment by MOS staff.

A 6-foot grade-separated area with a 4-foot tipping wall separating the high side from the low side will be located in one portion of the building. The lower area will house a general-use compacting unit, a recycling baler, and a scrap metal compactor. The compactors will be fitted with receiving hoppers to allow for loading from the high side of the tipping wall. The baler will be used for recyclable paper and plastics. Multiple large roll-off dumpsters will also be placed at the lower elevation to allow for direct dumping of large waste items. A sloped ramp will allow for truck access to the lower area for compactor maintenance and for roll-off dumpster removal.

A preliminary site plan of the Transfer Site is attached in Appendix A.

DISPOSAL OPTIONS

Once the waste is sorted and stored at the transfer site facility, it must then be disposed of. Below are several options for permanent disposal.

Option 1 – New Incinerator

Under this option the current incinerator will be replaced with a new incinerator that has roughly the same burn capacity as the current one. This new incinerator will deal with the medical waste, the general municipal solid waste, the C&D waste that can be burned, and the wastewater sludge. Because the wastewater sludge must be mixed with other solid waste at an 80/20 ratio in order to achieve an efficient burn, all incoming the paper waste will also be incinerated.

The wastewater sludge must be dewatered to a minimum of 25-30% solid content before incineration. Sharps from the medical waste must be separated out and processed with the other metals.

Option 1: New Incinerator	
Material	Disposal Method
Paper	Will get sent to the new incinerator
Plastic	Will get sent to the new incinerator
Metal	Will get compacted/package up at the new transfer site and shipped out of Skagway
Organics	All organics will be directed to Skagway's local composting facility
Glass	Will get compacted/package up at the new transfer site and shipped out of Skagway
Yard Waste	All yard waste will be directed to Skagway's local composting facility
Electronics	Will get packaged up at the new transfer site and shipped out of Skagway
Paint	Will get packaged up at the new transfer site and shipped out of Skagway
Other MSW	Will get sent to the new incinerator
C&D Waste	Will get sent to the new incinerator
Household Hazardous Waste	Will get packaged up at the new transfer site and shipped out of Skagway
Medical Waste	Will get sent to the new incinerator
Wastewater Sludge	Will get sent to the new incinerator

A Process Flow Diagram for this disposal option is attached in Appendix B.

Option 2 – Smaller Incinerator

Under this option the current incinerator will be replaced with a smaller incinerator that has roughly half the burn capacity of the current one. This smaller incinerator will deal with the medical waste, the general municipal solid waste, the C&D waste that can be burned, and the wastewater sludge. Because the wastewater sludge must be mixed with other solid waste at an 80/20 ratio in order to achieve an efficient burn, roughly 50% of the paper waste will also be incinerated.

The wastewater sludge must be dewatered to a minimum of 25-30% solid content prior to incineration. Sharps from the medical waste must be separated out and processed with the other metals.

Option 2: Smaller Incinerator	
Material	Disposal Method
Paper	50% Will get compacted/package up at the new transfer site and shipped out of Skagway. The other 50% will be burned in the new smaller incinerator.
Plastic	Will get compacted/package up at the new transfer site and shipped out of Skagway
Metal	Will get compacted/package up at the new transfer site and shipped out of Skagway
Organics	All organics will be directed to Skagway's local composting facility
Glass	Will get compacted/package up at the new transfer site and shipped out of Skagway
Yard Waste	All yard waste will be directed to Skagway's local composting facility
Electronics	Will get packaged up at the new transfer site and shipped out of Skagway
Paint	Will get packaged up at the new transfer site and shipped out of Skagway

Option 2: Smaller Incinerator	
Material	Disposal Method
Other MSW	Will get sent to the smaller incinerator
C&D Waste	Will get sent to the smaller incinerator
Household Hazardous Waste	Will get packaged up at the new transfer site and shipped out of Skagway
Medical Waste	Will get incinerated in new smaller incinerator
Wastewater Sludge	Will get incinerated in new smaller incinerator

A Process Flow Diagram for this disposal option is attached in Appendix B.

Option 3 – No Incinerator

Under this option the existing incinerator will be abandoned, and no incinerator option will be implemented. All waste will either go to the composting facility or be shipped out of Skagway.

Option 3: No Incinerator	
Material	Disposal Method
Paper	Will get compacted/package up at the new transfer site and shipped out of Skagway
Plastic	Will get compacted/package up at the new transfer site and shipped out of Skagway
Metal	Will get compacted/package up at the new transfer site and shipped out of Skagway
Organics	All organics will be directed to Skagway's local composting facility
Glass	Will get compacted/package up at the new transfer site and shipped out of Skagway
Yard Waste	All yard waste will be directed to Skagway's local composting facility
Electronics	Will get packaged up at the new transfer site and shipped out of Skagway
Paint	Will get packaged up at the new transfer site and shipped out of Skagway
Other MSW	Will get packaged up at the new transfer site and shipped out of Skagway
C&D Waste	Will get packaged up at the new transfer site and shipped out of Skagway
Household Hazardous Waste	Will get packaged up at the new transfer site and shipped out of Skagway
Medical Waste	Will get packaged up at the new transfer site and shipped out of Skagway
Wastewater Sludge	Will get packaged up at the new transfer site and shipped out of Skagway

A Process Flow Diagram for this disposal option is attached in Appendix B.

ASHFILL CAPACITY AND ASH DISPOSAL

As part of the incinerator evaluation, PDC assessed the current ashfill site to determine its viability for future dumping if the current incinerator is to either remain as-is, be replaced with a new, similarly sized incinerator, or be replaced with a smaller incinerator.

The goal of this assessment was to find out how much of the ashfill's volume capacity has already been used up and how much remains for development and usage. Based on estimated ash output, the number of remaining years of use was estimated.

An ashfill permit renewal was prepared by Carson Dorn, Inc. in 2009. The two-phase ashfill expansion outlined in that document was based on a 2009 topographic survey done by R&M Engineering Inc. This 2009 survey was compared with the most recent topographic surface data obtained as part of this project and resulting volumes were determined.

The horizontal extents of Phase I and Phase II were based on those shown in the ashfill expansion PDF. See Appendix C for a combined figure showing the latest drone aerial imagery along with the ashfill expansion PDF.

The maximum capacity of Phase I and Phase II was based on the volumes shown in the 2009 permit renewal document. The annual rate of ash production for the existing incinerator is assumed to be the rate shown in the 2009 permit renewal document: 400 CY/YR. However, the annual rate of ash production for a new similarly sized incinerator is 270 CY/YR. The annual rate of ash production for a new smaller incinerator is 165 CY/YR. The annual ash production rates for the new incinerators are based on the expected waste volumes to be burned and an expected ash yield of no more than 10% of the incoming waste by weight. The sizable difference in expected ash volumes between the existing and proposed systems is most likely due to the new incinerator ash not containing non-combustible debris such as glass or metals.

Below is a summary for each incinerator option:

Existing Incinerator:

Phase I Area:

Total Capacity = 4,074 CY

Current Filled Capacity = 2,650 CY

Remaining Capacity = 1,424 CY

Remaining Years = **3.56 years**

Phase II Area:

Total Capacity = 2,370 CY

Current Filled Capacity = 0 CY

Remaining Capacity = 2,370 CY

Remaining Years = **5.93 years**

Total Remaining Years: 9.5 years

**New Similarly
Sized Incinerator:**

Phase I Area:

Total Capacity = 4,074 CY
Current Filled Capacity = 2,650 CY
Remaining Capacity = 1,424 CY
Remaining Years = **5.27 years**

Phase II Area:

Total Capacity = 2,370 CY
Current Filled Capacity = 0 CY
Remaining Capacity = 2,370 CY
Remaining Years = **8.78 years**
Total Remaining Years: 14.0 years

**New Smaller
Incinerator:**

Phase I Area:

Total Capacity = 4,074 CY
Current Filled Capacity = 2,650 CY
Remaining Capacity = 1,424 CY
Remaining Years = **8.63 years**

Phase II Area:

Total Capacity = 2,370 CY
Current Filled Capacity = 0 CY
Remaining Capacity = 2,370 CY
Remaining Years = **14.36 years**
Total Remaining Years: 23.0 years

In addition to the existing ashfill, alternate ash disposal methods were investigated. At this time the only other viable long-term disposal option is to ship the ash out of Skagway to another community where it can be used as inert filler material in a landfill.

It may be possible to use some ash as fill material in local road or site/parking lot construction; however, given the inconsistent frequency of large construction projects in Skagway, this is not a long-term solution.

ENVIRONMENTAL CONSIDERATIONS

Communication with ADEC's Solid Waste Program determined that replacement or upgrade of the existing incinerator will not affect the existing ADEC Class III landfill permit. This permit is for the ash disposal site. Specifically, this permit allows disposal of "thermally-oxidized ash" and "non-combustible residue of thermal oxidation." If changes to the incineration process also changes the end-product, then the permit would require modification.

A review of ADEC's approved onsite wastewater systems and current permitted discharges confirmed that this facility is not currently permitted. Per 18 AAC 72.990(23) *Definitions*, domestic wastewater includes graywater from dwellings or commercial buildings. Since this facility is in operation for more than 90 days of the year, ADEC's *Graywater Treatment and Disposal Systems for*

Temporary & Remote Camps guidance document would not apply. Discharging graywater or process water to the ground surface will require ADEC's review and approval of an engineered plan.

This facility is currently exempt from an EPA's Title V permit, due to its Class III landfill status. Under 40 CFR 60.2887(g), "use of incinerators and air curtain incinerators in isolated areas of Alaska" are exempt if it is used at a solid waste disposal site, classified as Class II or Class III municipal solid waste landfill. This facility would need an ADEC air quality permit if an incinerator with a rated capacity of 1,000 pounds or more per hour is installed, according to 18 AAC 502(b)(4), or if emissions exceed the thresholds listed in 18 AAC 50.502(c)(4).

COST CONSIDERATIONS

The total cost of each option will play a significant role in determining which option is best for the Municipality. It is important to understand that the capital cost to construct and the operating cost to dispose of each waste stream factor into the total cost of an option. It is also worth noting that some operating costs for each option can be recouped through tipping fees to the public at the transfer facility. Those fees have not been included in this analysis, but the facility is intended to be capable of generating fee income based on waste material and quantity.

Capital construction cost estimates for each option will be provided with the 35% submittal package. The cost for incinerator equipment and work will be different for each option, but the transfer site facility is common to all options. The design team generated a rough order-of-magnitude cost for the transfer site facility based on size and similar construction—that estimate came in at roughly \$5,000,000. This estimate will be refined in the 35% submittal but is included here (as Appendix D) to provide an awareness of what the transfer facility could cost as described in this submittal.

Waste Disposal Cost Comparison

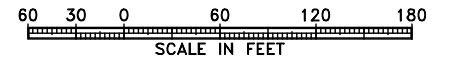
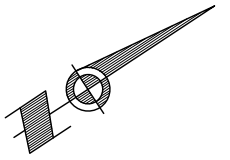
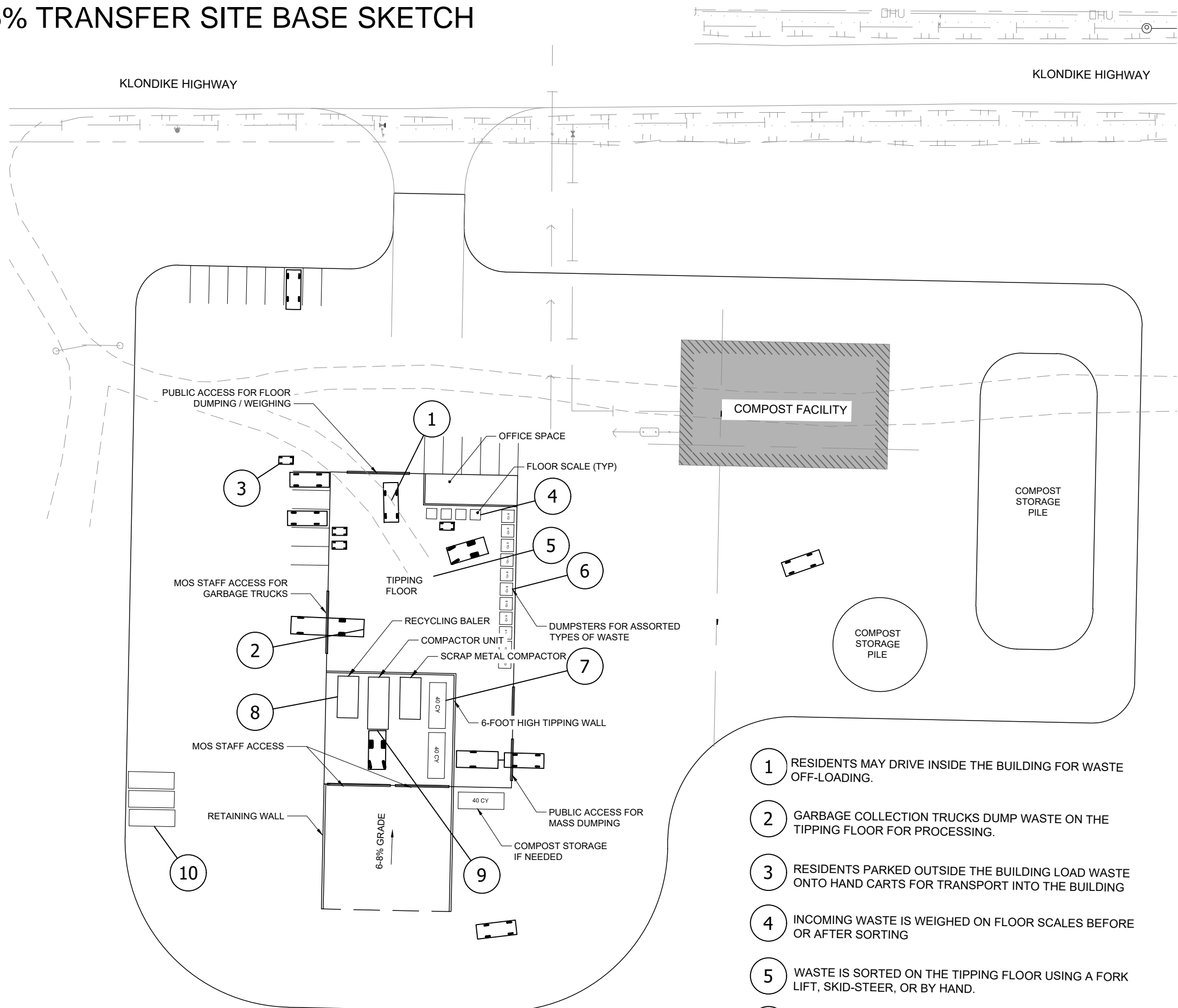
Waste disposal cost comparisons are shown in Appendix E and are separated into main waste stream categories. Disposal by incineration or shipping correspond to the disposal options outlined above. To simplify comparison between options the anticipated waste volume in 2040 was used for all categories. There are a number of assumptions that are required to estimate disposal costs, but wherever possible the same assumptions are applied to each option (waste volume, shipping costs, incinerator fuel price, etc.). This provides a way to compare the options, but it should be understood that the actual costs to dispose of waste will likely be different than what is shown in this report.

Recycling commodity values are rough estimates based on current market conditions. The design team is working to obtain more accurate price estimates for each material to refine the comparison, but the rough estimates are provided to indicate that recycling may have a net-positive income rather than just offsetting the cost to incinerate. The profit shown includes the value of the material and the cost to ship it to a recycling center.

APPENDIX A

BASE SKETCH

15% TRANSFER SITE BASE SKETCH

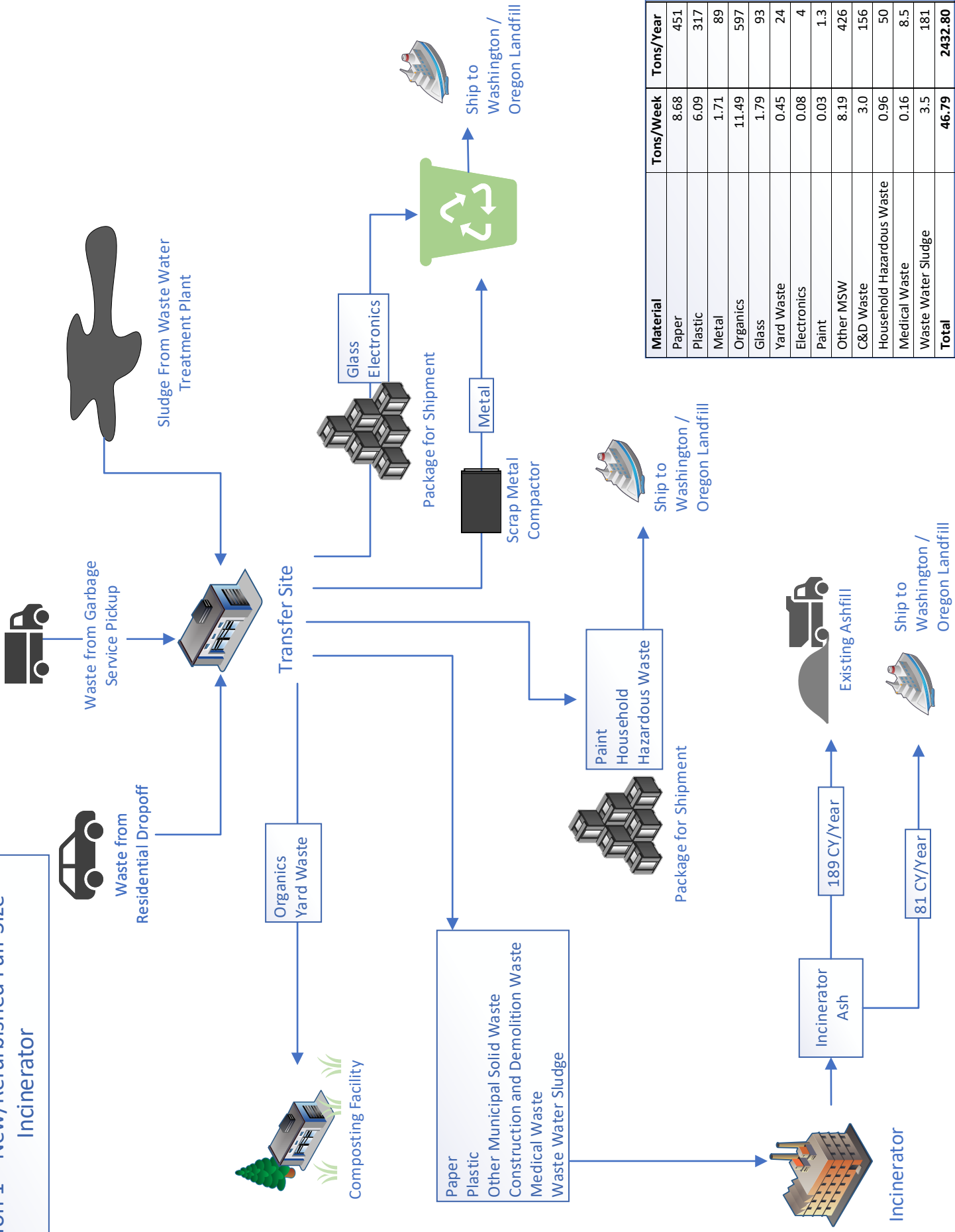


- 1 RESIDENTS MAY DRIVE INSIDE THE BUILDING FOR WASTE OFF-LOADING.
- 2 GARBAGE COLLECTION TRUCKS DUMP WASTE ON THE TIPPING FLOOR FOR PROCESSING.
- 3 RESIDENTS PARKED OUTSIDE THE BUILDING LOAD WASTE ONTO HAND CARTS FOR TRANSPORT INTO THE BUILDING
- 4 INCOMING WASTE IS WEIGHED ON FLOOR SCALES BEFORE OR AFTER SORTING
- 5 WASTE IS SORTED ON THE TIPPING FLOOR USING A FORK LIFT, SKID-STEER, OR BY HAND.
- 6 WASTE IS SORTED INTO DUMPSTERS BEFORE COMPACTION
- 7 CONSTRUCTION, DEMOLITION, AND OTHER LARGE WASTE ITEMS CAN BE LOADED DIRECTLY INTO 40-CY DUMPSTERS
- 8 RECYCLABLES, CONSTRUCTION, DEMOLITION, AND OTHER GENERAL TYPES OF WASTE ARE COMPACTIONED BEFORE SHIPMENT
- 9 AFTER COMPACTION, WASTE IS REMOVED FROM COMPACTORS AND LOADED INTO SHIPPING CONTAINERS FOR TRANSPORT.
- 10 SHIPPING CONTAINERS CAN BE STORED ON SITE AS NEEDED

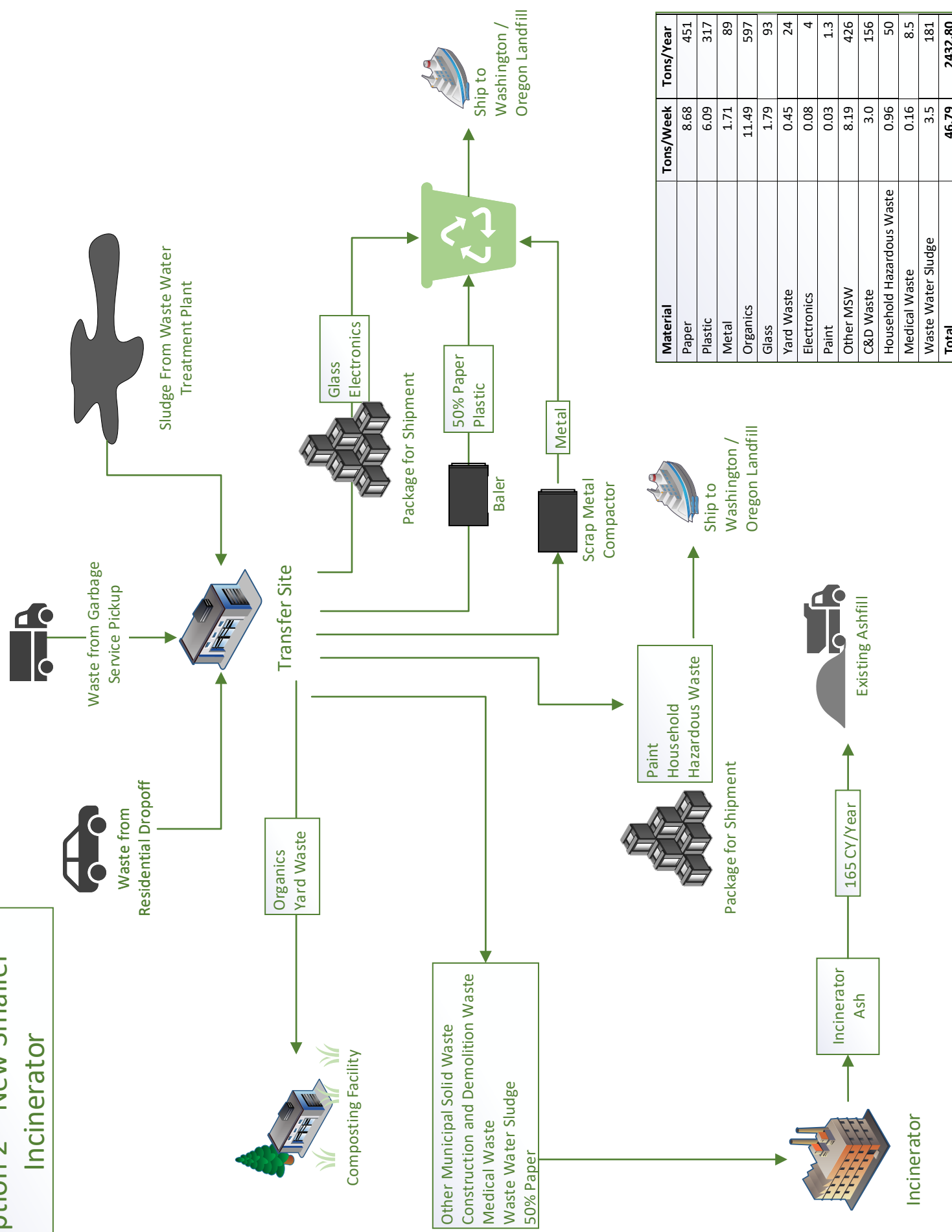
APPENDIX B

DISPOSAL PROCESS FLOW DIAGRAMS

Option 1 – New/Refurbished Full-Size Incinerator

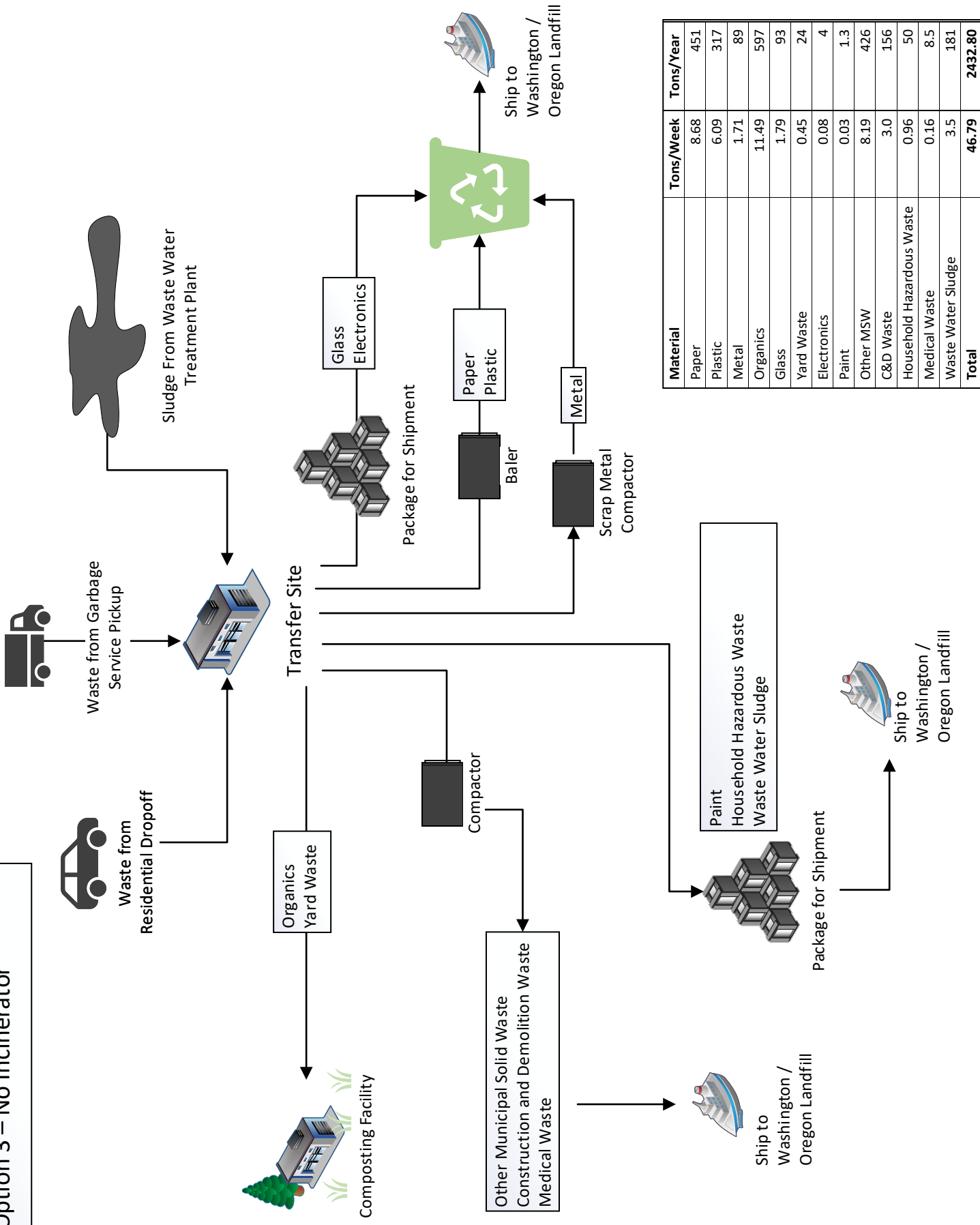


Option 2 – New Smaller Incinerator



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Metal	1.71	89
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Waste Water Sludge	3.5	181
Total	46.79	2432.80

Option 3 – No Incinerator

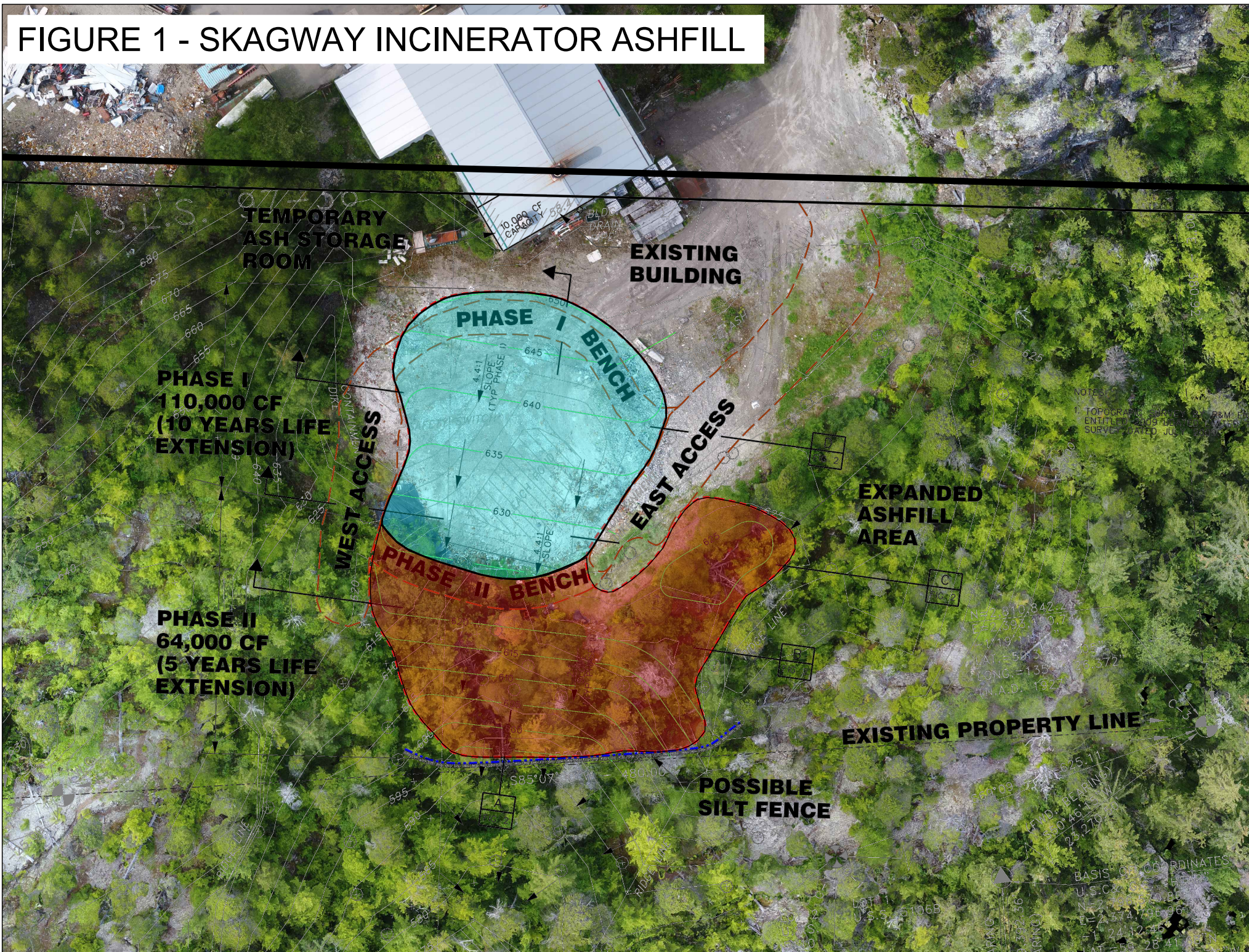


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Household Hazardous Waste	0.96	50
Medical Waste	0.16	8.5
Waste Water Sludge	3.5	181
Total	46.79	2432.80

APPENDIX C

ASHFILL FIGURE

FIGURE 1 - SKAGWAY INCINERATOR ASHFILL



APPENDIX D

TRANSFER SITE COST ESTIMATE

SKAGWAY TRANSFER SITE

15% COST ESTIMATE

BASE BID		ENGINEERS ESTIMATE			
	DESCRIPTION	QUANTITY	PAY UNIT	UNIT PRICE	AMOUNT
	CLEARING	ALL REQUIRED	LUMP SUM	\$5,000.00	\$5,000.00
	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	ALL REQUIRED	LUMP SUM	\$10,000.00	\$10,000.00
	SITE EXCAVATION AND EARTHWORK	ALL REQUIRED	LUMP SUM	\$60,000.00	\$60,000.00
	AGGREGATE BASE COURSE (4")	900	CY	\$35.00	\$31,500.00
	HOT MIX ASPHALT (4")	1,800	TON	\$125.00	\$225,000.00
	PRE-FABRICATED METAL BUILDING COMPLETE	1	EACH	\$3,500,000.00	\$3,500,000.00
	COMPACTOR UNIT	1	EACH	\$60,000.00	\$60,000.00
	RECYCLING BALER	1	EACH	\$35,000.00	\$35,000.00
	SCRAP METAL COMPACTOR UNIT	1	EACH	\$25,000.00	\$25,000.00
	FLOOR SCALE	4	EACH	\$2,500.00	\$10,000.00
	FORK LIFT	1	EACH	\$30,000.00	\$30,000.00
	8-YARD DUMPSTER	11	EACH	\$2,500.00	\$27,500.00
	20-FOOT DUMPSTER/SHIPPING CONTAINER	5	EACH	\$6,000.00	\$30,000.00
	MOBILIZATION AND DEMOBILIZATION	ALL REQUIRED	LUMP SUM	\$30,000.00	\$30,000.00
	EROSION, SEDIMENT, AND POLLUTION CONTROL ADMINISTRATION	ALL REQUIRED	LUMP SUM	\$10,000.00	\$10,000.00
	TEMPORARY EROSION, SEDIMENT, AND POLLUTION CONTROL	ALL REQUIRED	LUMP SUM	\$5,000.00	\$5,000.00
	CONSTRUCTION SURVEYING	ALL REQUIRED	LUMP SUM	\$15,000.00	\$15,000.00
	TRAFFIC MAINTENANCE	ALL REQUIRED	LUMP SUM	\$5,000.00	\$5,000.00
		SUBTOTAL COST			\$4,114,000.00
		LOCATION MARKUP (10%)			\$411,400.00
		CONTINGENCY (10%)			\$411,400.00
		TOTAL CONSTRUCTION COST			\$4,936,800.00

APPENDIX E

WASTE DISPOSAL COST COMPARISON

Waste Disposal Cost Comparisons

Waste Stream	2040 Projection Tons/Yr	Current Shipping		Cost to Dispose- \$/Yr Through 2040			Notes
		Rates \$/Ton Ship	Option #1	Option #2	Option #3		
Recycling							[4]
Paper	451	\$ (50.00)	\$ 51,301.25	\$ 14,375.63	\$ (22,550.00)		[1]
Plastic	317	\$ (50.00)	\$ 36,058.75	\$ (15,850.00)	\$ (15,850.00)		
Metal	89	\$ (655.56)	\$ (58,344.44)	\$ (58,344.44)	\$ (58,344.44)		
Glass	93	\$ (50.00)	\$ (4,650.00)	\$ (4,650.00)	\$ (4,650.00)		
Electronics	4	\$ (50.00)	\$ (200.00)	\$ (200.00)	\$ (200.00)		
General Solid Waste	426	\$ 316.82	\$ 48,457.50	\$ 48,457.50	\$ 134,965.44		
Hazardous Waste							
Paint	1.3	\$ 325.59	\$ 423.26	\$ 423.26	\$ 423.26		
Household HW	50	\$ 520.00	\$ 26,000.00	\$ 26,000.00	\$ 26,000.00		
Medical Waste	8.5	\$ 1,497.70	\$ 966.88	\$ 966.88	\$ 12,730.41		
Waste Water Sludge (Total)	181						
To Incinerator			\$ 20,588.75	\$ 20,588.75			
Prepare for Shipment		\$ 757.30			\$ 137,072.11		
Incinerator Ash		\$ 462.25					[3]
Option 1	164		\$ 22,746.26				[2]
Option 2	101			\$ -			
Option 3	0				\$ -		
Construction Debris	156	\$ 504.03	\$ 17,726.80	\$ 17,726.80	\$ 78,548.39		
Totals			\$ 161,075.00	\$ 49,494.37	\$ 288,145.17		

Notes:

- [1] Option #2 - Half to incinerator, half shipped
- [2] Assume 70% to ashfill, 30% shipped - see Report for ashfill capacity
- [3] Not based on actual quote to ship ash, based on quoted hazardous materials cost of \$13,000 per container
- [4] Recycling values based on current market conditions, subject to change
- [5] Organics and yard waste not included in cost analysis as these waste streams are expected to have minor impact on operation of transfer site and incinerator
- [6] Assume \$3.25 per gallon of incinerator fuel
- [7] Assume 35 gallons of fuel per ton of waste incinerated
- [8] No waste oil accounted for in waste stream - addition of waste oil will improve cost to incinerate



REVISED November 29, 2021

Tyson Ames
MOS Director of Public Works
PO Box 415
Skagway, Ak 99840

SUBJECT: Skagway Transfer Facility Design and Bidding Services Scope of Work and Fee Proposal, Option D

Dear Mr. Ames:

PDC Engineers have revised the Transfer Facility fees for an Option D which includes two buildings: a base bid building about 11,000 sq ft and an Additive Alternate building about 9,000 sq ft. As requested we are submitting a revised fee proposal for those two buildings for the completion of Design, Bidding, and Permitting for the Municipality of Skagway (MOS) Solid Waste Transfer Facility in Skagway, Alaska. Option D does not include Construction Services as those were requested to be removed from the scope of work. We are including HMS for cost estimating and JYW Architects for architectural services. A tertiary metal structure for a scales or exterior metal compactor is not included; it is assumed these functions will be included in the two buildings.

We are proposing the following phases of work. Proposed duration time for each phase is also listed below. Time frame suggested below is after notice-to-proceed of the relevant phase. The requested 35% submittal listed below is a refresh of the previous phase and will capture final comments from that earlier submittal.

- 35% Construction Documents Submittal 10 weeks
- 65% Construction Documents Submittal 10 weeks
- 95% Construction Documents Submittal 8 weeks
- 100% Construction Documents Submittal 4 weeks
- Permitting and Assistance for Applicable Agencies Concurrent with 100% CD and Bidding Phases
- Bidding 4 weeks

Specific discipline tasks are as follows:

Project Management

Scope of work will include project management of the design, bidding, and construction services for the Transfer Facility project including all team oversight and coordination, owner coordination, and contractor coordination. Scope also includes:

- Project Manager site trip visits:
 - Two trips to site during design; one at 35% and one at 65%, with public meeting evening attendance included for the 35% design trip.
 - Pre-Construction Site Trip.

Environmental/Planning

- Preparation of public meeting materials for 35% presentation.
- Facilitate the public meeting for 35% presentation.
- Post public meeting summary comments.
- Assume that Municipality of Skagway will publish public meeting announcements.
- Site trips and attendance at public meeting by Planner and Environmental Engineer at 35% level.
- Provide at least 3 locations in Southeast Alaska that operate solid waste transfer stations that ship waste.
- Assist with all State and Federal permitting.
- Identify requirements and obtain documentation for shipping biosolids from Skagway WWTP, clinic biohazards, etc.
- Identify AML shipping requirements and obtain shipping cost estimates for solid waste, biohazards, and biosolids.
- Identify and obtain ADEC compliance for Transfer Station facility operation and waste shipment.
- Consult with ADEC regarding composting options and obtain any required permits or approvals.
- Assist with ADEC-approval for land development.
- Conduct (1) site visit.
- Attend (1) public meeting.

Topographic Mapping

Scope of work will include an on the ground field survey of the existing 15-Acre facility to produce topographic mapping in a 1' contour interval. Existing MOS Compost building, staging areas, fill limits, stockpiles, entrance to Klondike Highway, existing overhead and underground utilities will be mapped to produce an engineering topographic map for our civil engineering design team to work from.

Civil Engineering

The site will consist of a pad approximately 3 to 3.5 acres in area that will support the installation of two buildings approximately 11,000 and 9,000 sq ft. respectively. Both buildings are anticipated to be a tall single-story, pre-engineered metal building (PEMB) on concrete foundation with concrete tipping walls. The PEMB's will be used for the transfer site for collecting, processing, and preparing waste from the community for transport to the incinerator or for shipping to a remote landfill or recycling center. Auxiliary spaces for the staff include office space, a bathroom, locker room with shower, and a laundry space. Building support spaces such as mechanical and electrical rooms should also be provided.

- Earthwork activities include excavation and structural embankment for the building and associated parking and vehicle movements on site.
- Underground utilities will consist of a new buried water service from a water storage tank. A sewer service line will be installed to carry wastewater to a new septic tank and leach field for on site disposal. Piping will be included in the design for future connection to municipal water service.
- Site grading and drainage plans, utility plans, site cross sections, construction details and typical sections will be developed for the solid waste transfer stations. Erosion and sediment control plan with details will be developed for the contractor to prepare his SWPPP plan from. Estimate of quantities will be prepared for site work and site utilities will be prepared.
- Technical specifications will be prepared for the civil engineering design elements of the project.
- 35%, 65%, 95% and final 100% final bid ready construction plans for the MOS Solid Waste Transfer facility will be made with submittals in PDF format.
- Site visit at the 35% and 65% design meetings with owner will be included as part of the scope of work.
- Bidding support services will be provided during the bid phase period of the project and participating in the prebid meeting by phone.

Geotechnical Engineering

Geotechnical engineering for this site will include reviewing the PND Engineers "Skagway Solid Waste, Recycling, Public Works and R/V Park Geotechnical Investigation" dated

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9109 Mendenhall Mall Road, Suite 4, Juneau, Alaska 99801

907.780.6060

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December 30, 2016 for this site. A total of 34 shallow machine dug test pits were performed within the property.

- PDC will prepare a letter recommendation for the site work preparation for the solid waste transfer facility.
- Review of 95% civil documents for conformance with geotechnical recommendations will be made.

Architectural

Architectural scope includes producing production of 35%, 65%, 95% and 100% Drawings, technical architectural specifications and

- Technical Specifications
- Architectural will work with Structural on the PEMB specifications and details
- Coordination with MEP and Struct
- Bidding Service: Answering questions Ect.
- (1) Site Visit at 35% Design.
- See Attachment B for their fee proposal

Fire Protection

Fire Protection Engineering scope includes the following:

- review the previous 35% submittal dated March 2021,
- confirm design assumptions per team meeting exchange,
- Not included: design fire alarm devices per applicable code requirements. It is preliminary assumed that suppression systems are not required. If they are determined to be required, fees for that design would be submitted for addendum at that time.
- Not included: design suppression system per applicable codes. It is preliminary assumed that suppression systems are not required. If they are determined to be required, fees for that design would be submitted for addendum at that time.
- review and update code analysis for inclusion into narrative,
- review egress path compliance with applicable codes,
- design site trip at post 35% submittal. No other FP site trips are included during design.
- coordinate permit application with State Fire Marshal's Office,
- review contractor bids.

Structural

Structural scope is to provide a structural foundation design for the transfer facility pre-engineered metal buildings (PEMB).

- Preparation of PEMB specifications and details with assistance from Architect is included.
- Design site trip at post 35% submittal.
- Seismic restraints of mechanical and electrical equipment is excluded and to be delegated design in the construction contract.

Mechanical

Mechanical design scope is to include ventilation heating and plumbing systems as outlined in the 35% Schematic Report dated March 2021. Water and sanitary sewer connections will be at 5 feet outside the building. Utility services provided under Civil division. Provision will be made in design for future water service connection to municipality.

- 1 Mechanical design site visit is anticipated, post 35% submittal.

Electrical

Electrical scope of work is to provide power, lighting, and signal design for the transfer facility, metal compactor covered shelter, and surrounding site development.

- Transfer Facility Buildings: Power, Interior lighting, and Exterior building mounted lighting. No signal design including stub-outs for future telephone and internet service is anticipated.
- 1 Electrical design site visit is anticipated, post 35% submittal.
- Site: Power service to the Transfer Facility is the only anticipated Electrical utility work. Revisions to the existing Compost Building's power service is excluded. In addition, no pole mounted site lighting or security is anticipated, and access control at the entry gate is excluded.

Cost Estimating

Construction Services Fee Summary is as follows: Provide estimates at 35%, 65%, and 95% levels. See Attachment C.

Estimate of Total Fee's

ENGINEERING TASK SUMMARY	Task Total (\$)
35% Design	127,942
65% Design	125,060
95% Design	97,665
Construction Documents	44,790
Compliance and Permitting	16,640
Bidding	19,235
Project Total	431,332

We propose to perform the Design phases as fixed fee for \$395,457 and the Bidding, Compliance Review & Permitting phases as fixed fees at \$35,875, for an engineering project total of \$431,332. See attached fee schedules for readable summary and discipline breakdowns.

Additional engineering work that is requested or added to the contract will be billed on a separate time and materials basis or negotiated separately. PDC will keep you apprised of budget and scope status throughout the performance of this work and alert you of any non-scope items that may impact the budget.

PDC is committed to providing high quality and economical services to MOS.

Thank you for this opportunity; we look forward to beginning this work. Please call if you have any questions or comments.

Sincerely,

J. Mark Pusich, Principal Civil Engineer
PDC Engineers

Attachments: Included in a single PDF package.

- Attachment A: Fee Spread Sheet Schedules
- Attachment B: JYW Architects Spreadsheet
- Attachment C: Estimations Cost Estimating Spreadsheet

PDC Summary Sheet

#	PHASE	P. M.	STRUCT	MECH	ELECT	CIVIL	ENVIR / PLANNER	SURVEY	FIRE	GEOTECH	PDC Reimb. Markup	PDC Total	JYW Architects	Estimatio ns	Subconsultant Total	Subconsultant Markup	Total
22	35% Design	\$ 9,500	\$ 22,315	\$ 11,710	\$ 15,910	\$ 13,575	\$ 7,855	\$ 6,990	\$ 12,560	\$ 3,200		\$ 103,615	\$ 6,550	\$ 7,574	\$ 14,124	\$ 706	\$ 118,445
	Reimbursable	\$ 983	\$ 447	\$ 447	\$ 897	\$ 683	\$ 1,852	\$ 2,648	\$ 1,071	\$ -	\$ -	\$ 9,028	\$ 447		\$ 447	\$ 22	\$ 9,497
	Phase Total	\$ 10,483	\$ 22,762	\$ 12,157	\$ 16,807	\$ 14,258	\$ 9,707	\$ 9,638	\$ 13,631	\$ 3,200	\$ -	\$ 112,643	\$ 6,997	\$ 7,574	\$ 14,571	\$ 728	\$ 127,942
25	65% Design	\$ 10,500	\$ 18,975	\$ 19,040	\$ 19,955	\$ 19,140	\$ 3,610	\$ -	\$ 6,545	\$ -		\$ 97,765	\$ 13,000	\$ 11,248	\$ 24,248	\$ 1,212	\$ 123,225
	Reimbursable	\$ 683	\$ -	\$ -	\$ -	\$ 683	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,366	\$ 447		\$ 447	\$ 22	\$ 1,835
	Phase Total	\$ 11,183	\$ 18,975	\$ 19,040	\$ 19,955	\$ 19,823	\$ 3,610	\$ -	\$ 6,545	\$ -	\$ -	\$ 99,131	\$ 13,447	\$ 11,248	\$ 24,695	\$ 1,234	\$ 125,060
30	95% Design	\$ 12,300	\$ 12,550	\$ 17,920	\$ 17,215	\$ 14,170	\$ 660	\$ -	\$ 5,515	\$ 800		\$ 81,130	\$ 4,500	\$ 11,248	\$ 15,748	\$ 787	\$ 97,665
	Reimbursable	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			\$ -	\$ -	\$ -
	Phase Total	\$ 12,300	\$ 12,550	\$ 17,920	\$ 17,215	\$ 14,170	\$ 660	\$ -	\$ 5,515	\$ 800	\$ -	\$ 81,130	\$ 4,500	\$ 11,248	\$ 15,748	\$ 787	\$ 97,665
35	Construction Documents	\$ 5,600	\$ 6,545	\$ 9,185	\$ 10,185	\$ 7,030	\$ 660	\$ -	\$ 4,745	\$ -		\$ 43,950	\$ 800		\$ 800	\$ 40	\$ 44,790
	Reimbursable	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			\$ -	\$ -	\$ -
	Phase Total	\$ 5,600	\$ 6,545	\$ 9,185	\$ 10,185	\$ 7,030	\$ 660	\$ -	\$ 4,745	\$ -	\$ -	\$ 43,950	\$ 800	\$ -	\$ 800	\$ 40	\$ 44,790
73	Compliance Review and Permitting	\$ 2,600	\$ 1,305	\$ 1,330	\$ 1,060	\$ 4,700	\$ 3,990	\$ -	\$ 1,655	\$ -		\$ 16,640	\$ -		\$ -	\$ -	\$ 16,640
	Reimbursable	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			\$ -	\$ -	\$ -
	Phase Total	\$ 2,600	\$ 1,305	\$ 1,330	\$ 1,060	\$ 4,700	\$ 3,990	\$ -	\$ 1,655	\$ -	\$ -	\$ 16,640	\$ -	\$ -	\$ -	\$ -	\$ 16,640
37	Bid Phase Services	\$ 4,600	\$ 2,575	\$ 2,680	\$ 2,020	\$ 3,000	\$ 535	\$ -	\$ 2,670	\$ -		\$ 18,080	\$ 1,100		\$ 1,100	\$ 55	\$ 19,235
	Reimbursable	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			\$ -	\$ -	\$ -
	Phase Total	\$ 4,600	\$ 2,575	\$ 2,680	\$ 2,020	\$ 3,000	\$ 535	\$ -	\$ 2,670	\$ -	\$ -	\$ 18,080	\$ 1,100	\$ -	\$ 1,100	\$ 55	\$ 19,235
85																	
85																	
	Subtotal	\$ 46,766	\$ 64,712	\$ 62,312	\$ 67,242	\$ 62,981	\$ 19,162	\$ 9,638	\$ 34,761	\$ 4,000	\$ -	\$ 371,574	\$ 26,844	\$ 30,070	\$ 56,914	\$ 2,844	\$ 431,332
	Estimated Sales Tax																\$ -
	Grand Total																\$ 431,332



PROJECT MANAGEMENT

#	TASK	Lead Engineering Technician					Hourly Subtotal	Subtotal Cost
		Billing Rate (\$/hr)	Principal	Senior Engineer	Project Engineer	Technical Editor		
		\$250.00	\$200.00	\$155.00	\$115.00	\$110.00		
22	35% Design							
	Project Coordination	24					24	\$ 6,000
	Project Meetings	6					6	\$ 1,500
	Site Trip - After 35% Submittal	8					8	\$ 2,000
	Hourly Subtotal	38	0	0	0	0	38	
	Cost	\$ 9,500	\$ -	\$ -	\$ -	\$ -		\$ 9,500
25	65% Design							
	Project Coordination	28					28	\$ 7,000
	Project Meetings	6					6	\$ 1,500
	Site Visit - After 65% Submittal	8					8	\$ 2,000
	Hourly Subtotal	42	0	0	0	0	42	
	Cost	\$ 10,500	\$ -	\$ -	\$ -	\$ -		\$ 10,500
30	95% Design							
	Project Coordination	24	4				28	\$ 6,800
	Project Div 0 & 1 Specifications	10	2				12	\$ 2,900
	Project Meetings	4	8				12	\$ 2,600
	Hourly Subtotal	38	14	0	0	0	52	
	Cost	\$ 9,500	\$ 2,800	\$ -	\$ -	\$ -		\$ 12,300
35	Construction Documents							
	Project Coordination	10	4				14	\$ 3,300
	Update Front End Specs	6	2				8	\$ 1,900
	Project Meetings		2				2	\$ 400
	Hourly Subtotal	16	8	0	0	0	24	
	Cost	\$ 4,000	\$ 1,600	\$ -	\$ -	\$ -		\$ 5,600
73	Compliance Review and Perm							
	Project Coordination	4	4				8	\$ 1,800
	Project Meetings		4				4	\$ 800
	Hourly Subtotal	4	8	0	0	0	12	
Cost	\$ 1,000	\$ 1,600	\$ -	\$ -	\$ -		\$ 2,600	
37	Bid Phase Services							
	Pre-Bid Mtg via Phone	2	4				6	\$ 1,300
	Project Coordination; Addendums	2	8				10	\$ 2,100
	Owner Coordination		4				4	\$ 800
	Bid Reviews		2				2	\$ 400
	Hourly Subtotal	4	18	0	0	0	22	
Cost	\$ 1,000	\$ 3,600	\$ -	\$ -	\$ -		\$ 4,600	
85								
							0	\$ -
							0	\$ -
							0	\$ -
							0	\$ -
	Hourly Subtotal	0	0	0	0	0	0	
Cost	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -	
85								
							0	\$ -
							0	\$ -
							0	\$ -
							0	\$ -
	Hourly Subtotal	0	0	0	0	0	0	
Cost	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -	

STRUCTURAL ENGINEERING

#	TASK	Principal	Senior	Lead	Staff	Technical	Senior	Hourly	Subtotal	Subtotal Cost
		Structural Engineer	Structural Engineer	Structural Engineer	Structural Engineer	Editor	Engineering Technician			
		Billing Rate (\$/hr)	\$250.00	\$190.00	\$175.00	\$130.00	\$115.00	\$125.00		
22	35% Design									
	Kickoff Coordination		1	1	5			2	9	\$ 1,265
	Site Visit & review information								8	\$ 1,040
	Coordinate layout with arch and civil			1	4				5	\$ 695
	Geotech coordination			1	2				3	\$ 435
	Develop loads and estimate reactions					18			18	\$ 2,340
	Schematic Foundation Design			2	14				16	\$ 2,170
	Schematic loading dock, mezz, site features			2	10				12	\$ 1,650
	Schematic metal compactor building			4	20			12	36	\$ 4,800
	Narrative and specs			2	10	1			13	\$ 1,765
	Drawings				2			20	22	\$ 2,760
	Review Cost Estimate by others			2	4				6	\$ 870
	QC			6					6	\$ 1,050
	Site Visit & review information								8	\$ 1,040
	Review meeting and respond to comments			1	2				3	\$ 435
	Hourly Subtotal	0	1	22	107	1		34	165	
	Cost	\$ -	\$ 190	\$ 3,850	\$ 13,910	\$ 115	\$ 4,250			\$ 22,315
25	65% Design									
	Cross discipline phase coordination		1	1	3			2	7	\$ 1,005
	Foundation design development & details			2	24				26	\$ 3,470
	Loading dock, mezzanine sizing, site features design development			2	20				22	\$ 2,950
	Update narrative, specification development			2	12	1			15	\$ 2,025
	Metal compactor building			3	18			12	33	\$ 4,365
	Drawings				2			20	22	\$ 2,760
	Review Cost Estimate by others			1	3				4	\$ 565
	QC			8					8	\$ 1,400
	Review and respond to comments			1	2				3	\$ 435
	Hourly Subtotal	0	1	20	84	1		34	140	
	Cost	\$ -	\$ 190	\$ 3,500	\$ 10,920	\$ 115	\$ 4,250			\$ 18,975
30	95% Design									
	Cross discipline phase coordination		1	1	5			2	9	\$ 1,265
	Foundation design, draft final			1	12				13	\$ 1,735
	Loading dock, mezz, site features draft final			1	16				17	\$ 2,255
	Narrative and specifications			2	4	1			7	\$ 985
	Metal compactor building			2	8			8	18	\$ 2,390
	Drawings				2			16	18	\$ 2,260
	Review Cost Estimate by others			1	1				2	\$ 305
	QC			6					6	\$ 1,050
	Review and respond to comments			1	1				2	\$ 305
	Hourly Subtotal	0	1	15	49	1		26	92	
	Cost	\$ -	\$ 190	\$ 2,625	\$ 6,370	\$ 115	\$ 3,250			\$ 12,550
35	Construction Documents									
	Coordinating final deliverable		1	1	1			2	5	\$ 745
	Updating final design			2	8				10	\$ 1,390
	Final drawings				2			10	12	\$ 1,510
	Final specifications			1	3	1			5	\$ 680
	Calc package			1	8				9	\$ 1,215
	QC			4					4	\$ 700
	Review cost Estimate by others			1	1				2	\$ 305
	Hourly Subtotal	0	1	10	23	1		12	47	
	Cost	\$ -	\$ 190	\$ 1,750	\$ 2,990	\$ 115	\$ 1,500			\$ 6,545
73	Compliance Review and Permi									
	SoA Fire Marshal review responses			2	4				6	\$ 870
	Skagway municipal permit support			1	2				3	\$ 435
	Hourly Subtotal	0	0	3	6	0		0	9	
	Cost	\$ -	\$ -	\$ 525	\$ 780	\$ -	\$ -			\$ 1,305
37	Bid Phase Services									
	Bid questions and addenda			2	8				10	\$ 1,390
	Conformed documents			1	2			6	9	\$ 1,185
	Hourly Subtotal	0	0	3	10	0		6	19	
	Cost	\$ -	\$ -	\$ 525	\$ 1,300	\$ -	\$ 750			\$ 2,575
85										
									0	\$ -
									0	\$ -
									0	\$ -
									0	\$ -
	Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			\$ -
Discipline Totals		0	4	73	279	4		112	472	
Design Services		\$ -	\$ 760	\$ 12,775	\$ 36,270	\$ 460	\$ 14,000			\$ 64,265

MECHANICAL ENGINEERING

#	TASK	Principal Mechanical Engineer	Senior Mechanical Engineer	Lead Mechanical Engineer	Staff Mechanical Engineer	Technical Editor	Lead Engineering Technician	Hourly Subtotal	Subtotal Cost
		Billing Rate (\$/hr)	\$250.00	\$180.00	\$165.00	\$130.00	\$115.00	\$110.00	
22	35% Design								
	Set Up Project, Review Past Submittal, Kickoff mtg	1	3	2	2		1	9	\$ 1,490
	Code Review		1	2	4			7	\$ 1,030
	Calculations, Preliminary Equipment Selection		4	2	16			22	\$ 3,130
	Design Narrative - Mech		3	2	8			13	\$ 1,910
	Project Coordination		4	1	2		1	8	\$ 1,255
	Cost Estimate Review		3	1				4	\$ 705
	QC	3						3	\$ 750
	Site Trip after 35% Submittal		8					8	\$ 1,440
	Hourly Subtotal	4	26	10	32	0	2	74	
	Cost	\$ 1,000	\$ 4,680	\$ 1,650	\$ 4,160	\$ -	\$ 220		\$ 11,710
25	65% Design								
	Pick Up Review Comments, Set Up Dwgs	1	2		1		2	6	\$ 960
	Update Calculations		2	2	5			9	\$ 1,340
	Update Equipment Selections		4	2	6			12	\$ 1,830
	Design Plumbing Systems Dwgs		2	8	14		8	32	\$ 4,380
	Design Ventilation/Exhaust Systems Dwgs		3	8	24		16	51	\$ 6,740
	Update Narrative, Spec TOC		1	2	3			6	\$ 900
	Project Coordination		2	1	2		1	6	\$ 895
	Review Cost Estimate		2	1				3	\$ 525
	QC	4					1	5	\$ 1,110
	Respond to Comments		2					2	\$ 360
	Hourly Subtotal	5	20	24	55	0	28	132	
	Cost	\$ 1,250	\$ 3,600	\$ 3,960	\$ 7,150	\$ -	\$ 3,080		\$ 19,040
30	95% Design								
	Pick Up Review Comments, Update Dwgs	1	2		2		2	7	\$ 1,090
	Update Calculations			1	1			2	\$ 295
	Update Equipment Selections		2	2	4			8	\$ 1,210
	Design Plumbing Systems Dwgs		3	16			12	31	\$ 4,500
	Design Ventilation/Exhaust Systems Dwgs		4		30		16	50	\$ 6,380
	Specifications		8			1		9	\$ 1,555
	Project Coordination		2	1	2		1	6	\$ 895
	Review Cost Estimate		2	1				3	\$ 525
	QC	4					1	5	\$ 1,110
	Respond to Comments		2					2	\$ 360
	Hourly Subtotal	5	25	21	39	1	32	123	
	Cost	\$ 1,250	\$ 4,500	\$ 3,465	\$ 5,070	\$ 115	\$ 3,520		\$ 17,920
35	Construction Documents								
	Pick Up Review Comments, Update Dwgs	1	1		1		2	5	\$ 780
	Update Design Dwgs		6	8	16		16	46	\$ 6,240
	Update Specifications		6			1		7	\$ 1,195
	QC	3					2	5	\$ 970
		4	13	8	17	1	20	63	
	Cost	\$ 1,000	\$ 2,340	\$ 1,320	\$ 2,210	\$ 115	\$ 2,200		\$ 9,185
73	Compliance Review and Permit								
	Agency Review Comments and Permitting	1	6					7	\$ 1,330
	Hourly Subtotal	1	6	0	0	0	0	7	
	Cost	\$ 250	\$ 1,080	\$ -	\$ -	\$ -	\$ -		\$ 1,330
37	Bid Phase Services								
	Pre Bid Mtg		1					1	\$ 180
	Bid Coordination; Addendums, Clarifications	1	6	2	2		2	13	\$ 2,140
	Bid Review		2					2	\$ 360
	Hourly Subtotal	1	9	2	2	0	2	16	
	Cost	\$ 250	\$ 1,620	\$ 330	\$ 260	\$ -	\$ 220		\$ 2,680
85									
								0	\$ -
								0	\$ -
								0	\$ -
								0	\$ -
								0	\$ -
								0	\$ -
	Hourly Subtotal	0	0	0	0	0	0	0	
	Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -
85									
								0	\$ -
								0	\$ -
								0	\$ -
								0	\$ -
								0	\$ -
								0	\$ -
	Hourly Subtotal	0	0	0	0	0	0	0	
	Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -
Discipline Totals		20	99	65	145	2	84	415	
Design Services		\$ 5,000	\$ 17,820	\$ 10,725	\$ 18,850	\$ 230	\$ 9,240		\$ 61,865

ELECTRICAL ENGINEERING

#	TASK	Principal Electrical Engineer	Senior Electrical Engineer	Lead Electrical Engineer	Project Electrical Engineer	Technical Editor	Lead Engineering Technician	Hourly Subtotal	Subtotal Cost	
	Billing Rate (\$/hr)	\$250.00	\$200.00	\$185.00	\$160.00	\$115.00	\$110.00			
22	35% Design									
	Kick-Off Meeting, Review Previous Submittal		1		2		1	4	\$ 630	
	Code Review		1		8			9	\$ 1,480	
	Design Analysis, Prelim Calculations				6			6	\$ 960	
	Design Narrative - Electrical				8	2		10	\$ 1,510	
	Schematic Design: Transfer Facility				12		8	20	\$ 2,800	
	Schematic Design: Site				10		6	16	\$ 2,260	
	Schematic Design: Metal Compactor Shelter				8		4	12	\$ 1,720	
	Design/Project Coordination		1		6		1	8	\$ 1,270	
	Cost Estimate Review				2			2	\$ 320	
	QA/QC		2					2	\$ 400	
	Site Visit [Post 35% submittal]				16			16	\$ 2,560	
	Hourly Subtotal		0	5	0	78	2	20	105	
	Cost	\$ -	\$ 1,000	\$ -	\$ 12,480	\$ 230	\$ 2,200		\$ 15,910	
25	65% Design									
	Review Comments and Resolutions, Set Up Dwgs		1		2		2	5	\$ 740	
	Update Design Analysis, Calculations				16			16	\$ 2,560	
	Update Design Narrative - Electrical				3	1		4	\$ 595	
	Design Drawings, Schedules [Transfer Facility: PWR, LTG, SIGNAL]				20		12	32	\$ 4,520	
	Design Drawings [Site: PWR, LTG, SIGNAL]				18		10	28	\$ 3,980	
	Design Drawings, Schedules [Metal Compactor Covered Shelter: PWR, LTG]				12		8	20	\$ 2,800	
	Specifications [TOC/Prelim Sheet Specs]				4			4	\$ 640	
	Design Coordination and Meetings		1		8		4	13	\$ 1,920	
	QA/QC		4				2	6	\$ 1,020	
	Submittal				2		2	4	\$ 540	
	Review Cost Estimate				2			2	\$ 320	
	Respond to Comments				2			2	\$ 320	
	Hourly Subtotal		0	6	0	89	1	40	136	
Cost	\$ -	\$ 1,200	\$ -	\$ 14,240	\$ 115	\$ 4,400		\$ 19,955		
30	95% Design									
	Review Comments and Resolutions		1		4		2	7	\$ 1,060	
	Update Design Analysis, Calculations				10			10	\$ 1,600	
	Update Drawings, Schedules [Transfer Facility: PWR, LTG, SIGNAL]				18		10	28	\$ 3,980	
	Update Drawings [Site: PWR, LTG, SIGNAL]				16		8	24	\$ 3,440	
	Update Drawings, Schedules [Metal Compactor Covered Shelter: PWR, LTG]				10		6	16	\$ 2,260	
	Specifications				8	1		9	\$ 1,395	
	Design Coordination and Meetings		1		6		4	11	\$ 1,600	
	QA/QC		4				2	6	\$ 1,020	
	Submittal				2		2	4	\$ 540	
	Review Cost Estimate				2			2	\$ 320	
	Hourly Subtotal		0	6	0	76	1	34	117	
	Cost	\$ -	\$ 1,200	\$ -	\$ 12,160	\$ 115	\$ 3,740		\$ 17,215	
	35	Construction Documents								
Review Comments and Resolutions, Update Dwgs					2		2	4	\$ 540	
Update Drawings, Schedules [Transfer Facility: PWR, LTG, SIGNAL]					14		8	22	\$ 3,120	
Update Drawings [Site: PWR, LTG, SIGNAL]					10		6	16	\$ 2,260	
Update Drawings, Schedules [Metal Compactor Covered Shelter: PWR, LTG]					8		4	12	\$ 1,720	
Update Specifications					6	1		7	\$ 1,075	
QA/QC			3				2	5	\$ 820	
Submittal					2		3	5	\$ 650	
Hourly Subtotal			0	3	0	42	1	25	71	
Cost		\$ -	\$ 600	\$ -	\$ 6,720	\$ 115	\$ 2,750		\$ 10,185	
73	Compliance Review and Permi									
	Permitting/Fire Marshall Comments & Resolutions		1		4		2	7	\$ 1,060	
Hourly Subtotal		0	1	0	4	0	2	7		
Cost	\$ -	\$ 200	\$ -	\$ 640	\$ -	\$ 220		\$ 1,060		
37	Bid Phase Services									
	Bid Coordination; Addendums, Clarifications		1		10		2	13	\$ 2,020	
Hourly Subtotal		0	1	0	10	0	2	13		
Cost	\$ -	\$ 200	\$ -	\$ 1,600	\$ -	\$ 220		\$ 2,020		
85										
								0	\$ -	
								0	\$ -	
								0	\$ -	
								0	\$ -	
								0	\$ -	
85										
								0	\$ -	
								0	\$ -	
								0	\$ -	
								0	\$ -	
								0	\$ -	
Hourly Subtotal		0	0	0	0	0	0	0		
Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -		

CIVIL ENGINEERING										
#	TASK	Principal Civil Engineer	Senior Civil Engineer	Lead Civil Engineer	Staff Civil Engineer	Civil EIT	Senior Engineering Technician	Hourly Subtotal	Subtotal Cost	
	Billing Rate (\$/hr)	\$250.00	\$185.00	\$175.00	\$135.00	\$105.00	\$125.00			
22	35% Design									
	Notes/Symbols/Legends							1	\$ 125	
	Survey Control Map							2	\$ 250	
	Site Plan/Building Layout/Siting			2				4	\$ 850	
	Site Grading			2				4	\$ 850	
	Site Utilities			2				4	\$ 850	
	Vehicle Turning Movements			4				2	\$ 950	
	Site Cross Sections			2				4	\$ 850	
	Erosion and Sediment Control Plan				4			6	\$ 1,450	
	Civil Quantities/Cost Estimate Review			4				4	\$ 1,200	
	Site Trip after 35% Submittal	8							\$ 2,000	
	Public Meetings in Skagway	8							\$ 2,000	
	PDC Team Coordination			4					\$ 700	
	PDC QC/Civil Management	6							\$ 1,500	
	Hourly Subtotal	22	0	24	0	0	0	31	77	
	Cost	\$ 5,500	\$ -	\$ 4,200	\$ -	\$ -	\$ -	\$ 3,875	\$ 13,575	
	25	65% Design								
Site Plan/Building Layouts/Siting				2				8	\$ 1,350	
Site Grading				8				8	\$ 2,400	
Site Utilities				4				4	\$ 1,200	
Site Fencing Plan and Details				4				4	\$ 1,200	
Vehicle Turning Movements				2				8	\$ 1,350	
Site Cross Sections				6				8	\$ 2,050	
Erosion and Sediment Control Plan								2	\$ 400	
Technical Specifications				4		8			\$ 1,540	
Civil Quantities/Cost Estimate Review				6				8	\$ 2,050	
Site Trip after 65% Submittal		8							\$ 2,000	
PDC Team Coordination				8					\$ 1,400	
PDC QC/Civil Management		8							\$ 2,000	
Hourly Subtotal		16	0	46	0	8	0	50	120	
Cost		\$ 4,000	\$ -	\$ 8,050	\$ -	\$ 840	\$ -	\$ 6,250	\$ 19,140	
30		95% Design								
		Site Plan/Building Layout/Siting			2				4	\$ 850
	Site Grading			8				8	\$ 2,400	
	Site Utilities			4				4	\$ 1,200	
	Site Fencing Plan and Details			4				4	\$ 1,200	
	Vehicle Turning Movements			2				8	\$ 1,350	
	Site Cross Sections			2				8	\$ 1,350	
	Erosion and Sediment Control Plan							2	\$ 400	
	Technical Specifications			4		4			\$ 1,120	
	Civil Quantities/Cost Estimate Review			4				4	\$ 1,200	
	PDC Team Coordination			8					\$ 1,400	
	PDC QC/Civil Management	6							\$ 1,500	
	Hourly Subtotal	6	0	40	0	4	0	42	92	
	Cost	\$ 1,500	\$ -	\$ 7,000	\$ -	\$ 420	\$ -	\$ 5,250	\$ 14,170	
	35	Construction Documents								
		Correct up Plans per Owner/PDC QC			8				8	\$ 2,400
		Correct up Specifications per Owner/PDC QC			6		6			\$ 1,680
Create Final PDF Submittal								6	\$ 750	
Final Quantity and Cost Estimate				4				4	\$ 1,200	
PDC QC/Civil Management		4							\$ 1,000	
Hourly Subtotal		4	0	18	0	6	0	18	46	
Cost	\$ 1,000	\$ -	\$ 3,150	\$ -	\$ 630	\$ -	\$ 2,250	\$ 7,030		
73	Compliance Review and Permi									
	ADEC Water/Sewer Permit Drawings			8				12	\$ 2,900	
	Respond to ADEC Review Comments			6				6	\$ 1,800	
	Hourly Subtotal	0	0	14	0	0	0	18	32	
Cost	\$ -	\$ -	\$ 2,450	\$ -	\$ -	\$ -	\$ 2,250	\$ 4,700		
37	Bid Phase Services									
	Participate in pre bid conference by phone	2							\$ 500	
	Respond to Bidders Questions			6					\$ 1,050	
	Prepare Addenda as Required			4				4	\$ 1,200	
	Bid Review	1							\$ 250	
	Hourly Subtotal	3	0	10	0	0	0	4	17	
Cost	\$ 750	\$ -	\$ 1,750	\$ -	\$ -	\$ -	\$ 500	\$ 3,000		
85										
	Hourly Subtotal	0	0	0	0	0	0	0	0	
	Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
85										
	Hourly Subtotal	0	0	0	0	0	0	0	0	
Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Discipline Totals		51	0	152	0	18	163	384		
Design Services		\$ 12,750	\$ -	\$ 26,600	\$ -	\$ 1,890	\$ 20,375	\$ 61,615		

ENVIRONMENTAL / PLANNING

#	TASK	Senior	Lead	Environmental	Senior	Billing Rate (\$/hr)	Hourly Subtotal	Subtotal Cost
		Planner/GI S	Planner/GI S	Analyst	Engineering Technician			
		\$190.00	\$160.00	\$125.00	\$125.00			
22	35% Design							
	Set up Project, Research and Project Communication: regulators, vendors, etc.	2	2	22			26	\$ 3,450
	prepare public meeting materials (PPT, graphics, sign-in, etc.)	2	12				14	\$ 2,300
	facilitate/coordinate public meeting Overnight		20				20	\$ 3,200
	post-meeting summary of comments		2	1			3	\$ 445
	Project Coordination		1	2			3	\$ 410
	site visit/public meeting			12			12	\$ 1,500
	Hourly Subtotal	2	35	15	0		52	
	Cost	\$ 380	\$ 5,600	\$ 1,875	\$ -			\$ 7,855
25	65% Design							
	Update Research and Project Communication: regulators, vendors, etc.	2	2	16			20	\$ 2,700
	prepare public meeting materials (PPT, graphics, sign-in, etc.)	0	0	0			0	\$ -
	facilitate/coordinate public meeting		0	0			0	\$ -
	post-meeting summary of comments		0	0			0	\$ -
	Project Coordination		1	2			3	\$ 410
	Communication: regulators, vendors, etc.			4			4	\$ 500
	Hourly Subtotal	2	3	22	0		27	
	Cost	\$ 380	\$ 480	\$ 2,750	\$ -			\$ 3,610
30	95% Design							
	Update Post Meeting and Agency Information		1	4			5	\$ 660
	Hourly Subtotal	0	1	4	0		5	
	Cost	\$ -	\$ 160	\$ 500	\$ -			\$ 660
35	Construction Documents							
	Update Post Meeting and Agency Information		1	4			5	\$ 660
	Hourly Subtotal	0	1	4	0		5	
	Cost	\$ -	\$ 160	\$ 500	\$ -			\$ 660
73	Compliance Review and Permi							
	ADEC On Site Wastewater Permit		6	6			12	\$ 1,710
	ADEC On Site Drinking Water Permit		8	8			16	\$ 2,280
							0	\$ -
	Hourly Subtotal	0	14	14	0		28	
	Cost	\$ -	\$ 2,240	\$ 1,750	\$ -			\$ 3,990
37	Bid Phase Services							
	Bidding Coordination		1	3			4	\$ 535
	Hourly Subtotal	0	1	3	0		4	
	Cost	\$ -	\$ 160	\$ 375	\$ -			\$ 535
85								
							0	\$ -
	Hourly Subtotal	0	0	0	0		0	
	Cost	\$ -	\$ -	\$ -	\$ -			\$ -
85								
							0	\$ -
	Hourly Subtotal	0	0	0	0		0	
	Cost	\$ -	\$ -	\$ -	\$ -			\$ -
	Discipline Totals	4	55	62	0		121	
	Design Services	\$ 760	\$ 8,800	\$ 7,750	\$ -			\$ 17,310

SURVEYING

#	TASK	Principal Professional Surveyor	Senior Professional Surveyor	Staff Professional Surveyor	Land Surveyor, LSIT	Two-Man Crew	Senior Engineering Technician	Hourly Subtotal	Subtotal Cost
	Billing Rate (\$/hr)	\$250.00	\$195.00	\$125.00	\$105.00	\$230.00	\$125.00		
22	35% Design								
	Review Existing Record Info/Survey Work				2			2	\$ 210
	Survey Team Mob/Demob to Skagway					4		4	\$ 920
	Field Survey of 15-Acre Transfer Site					16		16	\$ 3,680
	Office Reduction/Mapping Preparation				16			16	\$ 1,680
	PDC QC	2						2	\$ 500
	Hourly Subtotal	2	0	0	18	20	0	40	
Cost	\$ 500	\$ -	\$ -	\$ -	\$ 1,890	\$ 4,600	\$ -	\$ 6,990	
25	65% Design								
	Hourly Subtotal	0	0	0	0	0	0	0	\$ -
	Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
30	95% Design								
	Hourly Subtotal	0	0	0	0	0	0	0	\$ -
	Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
35	Construction Documents								
	Hourly Subtotal	0	0	0	0	0	0	0	\$ -
	Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
73	Compliance Review and Permi								
	Hourly Subtotal	0	0	0	0	0	0	0	\$ -
	Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
37	Bid Phase Services								
	Hourly Subtotal	0	0	0	0	0	0	0	\$ -
	Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
85									
	Hourly Subtotal	0	0	0	0	0	0	0	\$ -
	Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
85									
	Hourly Subtotal	0	0	0	0	0	0	0	\$ -
	Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Discipline Totals	2	0	0	18	20	0	40	
	Design Services	\$ 500	\$ -	\$ -	\$ 1,890	\$ 4,600	\$ -	\$ -	\$ 6,990

FIRE PROTECTION

#	TASK	Principal	Senior Fire	Lead Fire	Project Fire	Staff Fire	Fire	Lead	Billing Rate (\$/hr)	\$250.00	\$205.00	\$175.00	\$140.00	\$130.00	\$105.00	\$110.00	Hourly Subtotal	Subtotal Cost	
		Fire Protection Engineer	Protection Engineer	Protection Engineer	Protection Engineer	Protection Engineer	Protection EIT	Engineering Technician											
22	35% Design																		
	Set Up Project, Review Past Submittal, Kickoff mtg		1	2					5									9	\$ 1,420
	Code Review			2					5									7	\$ 1,060
	New Sprinkler Design - Not Included			0					0									0	\$ -
	Fire Alarm System - Not Included			0					0									0	\$ -
	Design Narrative			3					8									11	\$ 1,655
	Project Coordination			2					2									6	\$ 890
	Cost Estimate Review			2					2									2	\$ 410
	QC		3	1														4	\$ 955
	Site Trip after 35% Submittal			16														16	\$ 3,280
	Drawings - Egress, Fire Life Safety Functions			2					8									6	\$ 2,110
	Review Meetings			2					2									1	\$ 780
Hourly Subtotal		4	32	0	0	30	0	10									76		
Cost	\$	1,000	6,560	-	-	3,900	-	1,100										\$ 12,560	
25	65% Design																		
	Pick up Review Comments			4				4										4	\$ 1,780
	Update Design Narrative, Spec TOC			2				4										6	\$ 930
	Cost Estimate Review			2				4										2	\$ 410
	Meetings			2				4										6	\$ 930
	Update Drawings			2				4									4	10	\$ 1,370
	Sprinkler/Fire Alarm System			0				0										0	\$ -
	Project Coordination			2				2										4	\$ 670
	Site Trip After 65% Submittal (0)																	0	\$ -
	QC		1	1														2	\$ 455
	Hourly Subtotal		1	15	0	0	18	0	8									42	
	Cost	\$	250	3,075	-	-	2,340	-	880										\$ 6,545
30	95% Design																		
	Pick up Review Comments			2				3										4	\$ 1,240
	Update Design Narrative, Drawings			2				2										2	\$ 890
	Cost Estimate Review		1	2														3	\$ 660
	Project Specifications			2				4										6	\$ 930
	Review Cost Estimate			1														1	\$ 205
	Project Coordination			1				2										3	\$ 465
	Update Calculations			1				2										3	\$ 465
	QC		1	2														3	\$ 660
	Hourly Subtotal		2	13	0	0	13	0	6									34	
	Cost	\$	500	2,665	-	-	1,690	-	660										\$ 5,515
	35	Construction Documents																	
Phase coordination and correspondence				1				2										3	\$ 465
Final Drawings				2				2									4	\$ 1,110	
Final Specifications				2				4										6	\$ 930
Update Calculations				2				2										4	\$ 670
QC			3	4														7	\$ 1,570
Hourly Subtotal			3	11	0	0	10	0	4									28	
Cost	\$	750	2,255	-	-	1,300	-	440										\$ 4,745	
73	Compliance Review and Perm																		
	SFMO Coordination			3				8										11	\$ 1,655
	Hourly Subtotal		0	3	0	0	8	0	0									11	
Cost	\$	-	615	-	-	1,040	-	-										\$ 1,655	
37	Bid Phase Services																		
	Pre-Bid Mtg			1														1	\$ 205
	Bidding Coordination, Addendums		1	5				2									1	9	\$ 1,645
	Bid Review			4														4	\$ 820
Hourly Subtotal		1	10	0	0	2	0	1									14		
Cost	\$	250	2,050	-	-	260	-	110										\$ 2,670	
85																			
																		0	\$ -
																		0	\$ -
																		0	\$ -
	Hourly Subtotal		0	0	0	0	0	0	0									0	\$ -
Cost	\$	-	-	-	-	-	-	-										\$ -	
85																			
																		0	\$ -
																		0	\$ -
	Hourly Subtotal																	0	\$ -
Cost	\$																	\$ -	
Discipline Totals			11	84	0	0	81	0	29								205		
Design Services		\$	2,750	17,220	-	-	10,530	-	3,190									\$ 33,690	

GEOTECH

#	TASK	Senior	Lab	Technical	Senior	Hourly	Subtotal Cost
		Geotech	Technician	Editor	Engineering		
		Engineer	Technician	Editor	Technician		
	Billing Rate (\$/hr)	\$200.00	\$105.00	\$110.00	\$115.00		
22	35% Design					Hourly Subtotal	Subtotal Cost
	Review PND Geotechnical Report	4				4	\$ 800
	Prepare Letter of Recommendations	12				12	\$ 2,400
						0	\$ -
	Hourly Subtotal	16	0	0	0	16	
	Cost	\$ 3,200	\$ -	\$ -	\$ -		\$ 3,200
25	65% Design					Hourly Subtotal	Subtotal Cost
						0	\$ -
						0	\$ -
	Hourly Subtotal	0	0	0	0	0	
	Cost	\$ -	\$ -	\$ -	\$ -		\$ -
30	95% Design					Hourly Subtotal	Subtotal Cost
	Review 95% Civil drawings for recommendations	4				4	\$ 800
						0	\$ -
	Hourly Subtotal	4	0	0	0	4	
	Cost	\$ 800	\$ -	\$ -	\$ -		\$ 800
35	Construction Documents					Hourly Subtotal	Subtotal Cost
						0	\$ -
						0	\$ -
	Hourly Subtotal	0	0	0	0	0	
	Cost	\$ -	\$ -	\$ -	\$ -		\$ -
73	Compliance Review and Permi					Hourly Subtotal	Subtotal Cost
						0	\$ -
						0	\$ -
	Hourly Subtotal	0	0	0	0	0	
	Cost	\$ -	\$ -	\$ -	\$ -		\$ -
37	Bid Phase Services					Hourly Subtotal	Subtotal Cost
						0	\$ -
						0	\$ -
	Hourly Subtotal	0	0	0	0	0	
	Cost	\$ -	\$ -	\$ -	\$ -		\$ -
85						Hourly Subtotal	Subtotal Cost
						0	\$ -
						0	\$ -
	Hourly Subtotal	0	0	0	0	0	
	Cost	\$ -	\$ -	\$ -	\$ -		\$ -
85						Hourly Subtotal	Subtotal Cost
						0	\$ -
						0	\$ -
	Hourly Subtotal	0	0	0	0	0	
	Cost	\$ -	\$ -	\$ -	\$ -		\$ -
Discipline Totals		20	0	0	0	20	
Design Services		\$ 4,000	\$ -	\$ -	\$ -		\$ 4,000

REIMBURSABLE EXPENSES

Table with 15 main sections (22, 25, 30, 35, 73, 37, 85) detailing reimbursable expenses. Each section includes a '25%' design category and lists items such as Project Manager, Structural, Mechanical, Electrical, Civil, Environmental, Survey, Fire Protection, and Geotech, with columns for unit, unit cost, and subtotal.

September 23, 2021

Doug Murray
 PDC Engineers
 9109 Mendenhall Mall Rd, Suite 4
 Juneau, AK 99801

Re: Skagway Solid Waste Transfer Station
 Fee Proposal

Doug,

We can provide you with cost estimating services for this project for the fees, outlined below. We have based our fee on the attachment and SOW outlined in your email of 20Sept21.

Please Allow **3 weeks** for us to develop the draft estimate for your review, per design level.

This proposal is Fixed Fee for 3 design levels. If the scope changes we reserve the opportunity to renegotiate.

Item	Admin Rate	\$94.00	Estimator \$80.00	Sr Estimator \$147.00	LS Totals			
Construction Cost Estimates								
35% Design Level	1	\$94	20	\$1,600	40	\$5,880	61	\$7,574
65% Design Level	2	\$188	28	\$2,240	60	\$8,820	90	\$11,248
95% Design Level	2	\$188	28	\$2,240	60	\$8,820	90	\$11,248
Project Totals	5	\$470	76	\$6,080	160	\$23,520	241	\$30,070

We look forward to working with you on this project.

Sincerely,



Jay Lavoie
 President

DESIGN SERVICES PROPOSAL



SUMMARY

Project: **SKG Transfer Facility**
 JYW Project No.: **TBD**

SERVICES	FEE	TYPE	EXPENSES	TAX	TOTAL
Schematic Design	\$6,550	Time/Expense	\$220	\$0	\$6,770
Design Development	\$13,000	Time/Expense	\$220	\$0	\$13,220
Construction Documents	\$5,300	Time/Expense	\$0	\$0	\$5,300
Bidding and Negotiations	\$1,100	Time/Expense	\$0	\$0	\$1,100
Construction Administration	\$7,210	Time/Expense	\$440	\$0	\$7,650
TOTAL					\$34,040

DESIGN SERVICES PROPOSAL



SCHEMATIC DESIGN SERVICES

Project: **SKG Transfer Facility**

JYW Project No.: TBD

STAFF:	Architect						Interior Design			Construction Manage			Drafter		Exec A	Cler A	ACC	TOTAL
	PMgr	A-III	A-II	A-I	Int III	Int II	ID-III	ID-II	ID-I	CM-III	CM-II	CM-I	D-II	D-I	EA	CA	A	
	\$170	\$140	\$125	\$110	\$95	\$85	\$140	\$115	\$65	\$140	\$120	\$95	\$95	\$85	\$80	\$40	\$85	
ARCHITECTURE:																		
Project Management	1																	
Disc Coord/Doc Review																		
Agency Consul/Rev																		
Schedule Dev/Monitoring																		
Cost Estimates				4														
GoToMeetings																		
Schematic Design Dwgs				40														
Outline Specs																		
Energy Analysis																		
Code Analysis																		
Presentations																		
Quality Control																		
Site Visit				12														
Submittal				2														
Subtotal Hours	1	0	0	58	0	0	0	0	0	0	0	0	0	0	0	0	0	59
Subtotal Dollars \$	170	0	0	6,380	0	0	0	0	0	0	0	0	0	0	0	0	0	\$6,550

CONSULTANTS:

- Civil Engineering
- Structural Engineering
- Mechanical Engineering
- Electrical Engineering
- Hazardous Materials Investigation
- Landscape Architecture
- Cost Estimating

Subtotal		\$0
Overhead/Profit	10%	\$0
Consultants Total Labor		\$0

Subtotal Schematic Design Services LABOR	\$6,550
Subtotal Schematic Design Services REIMBURSABLES (see attached)	\$220
TOTAL SCHEMATIC DESIGN SERVICES FEE	\$6,770

DESIGN SERVICES PROPOSAL



DESIGN DEVELOPMENT SERVICES

Project: **SKG Transfer Facility**

JYW Project No.: TBD

STAFF:	Architect						Interior Design			Construction Manage			Drafter		Exec A	Cler A	ACC	TOTAL
	PMgr	A-III	A-II	A-I	Int III	Int II	ID-III	ID-II	ID-I	CM-III	CM-II	CM-I	D-II	D-I	EA	CA	A	
	\$170	\$140	\$125	\$110	\$95	\$85	\$140	\$115	\$65	\$140	\$120	\$95	\$95	\$85	\$80	\$40	\$85	
ARCHITECTURE:																		
Project Management	4																	
Disc Coord/Doc Review																		
Agency Consul/Rev																		
Schedule Dev/Monitoring																		
Cost Estimates																		
Meetings																		
Design Development Dwgs				60														
Specifications				40														
Energy Analysis																		
Code Analysis																		
Presentations																		
Quality Control																		
Site Visit				12														
Submittal																		
Subtotal Hours	4	0	0	112	0	0	0	0	0	0	0	0	0	0	0	0	0	116
Subtotal Dollars \$	680	0	0	12,320	0	0	0	0	0	0	0	0	0	0	0	0	0	\$13,000

CONSULTANTS:

- Civil Engineering
- Structural Engineering
- Mechanical Engineering
- Electrical Engineering
- Hazardous Materials Engineering
- Landscape Architecture
- Cost Estimating

Subtotal		\$0
Overhead/Profit	10%	\$0
Consultants Total Labor		\$0

Subtotal Design Development Services LABOR	\$13,000
Subtotal Design Development Services REIMBURSABLES (see attached)	\$220
TOTAL DESIGN DEVELOPMENT SERVICES FEE	\$13,220

CONSTRUCTION DOCUMENT SERVICES

Project: **SKG Transfer Facility**

JYW Project No.: TBD

STAFF:	Architect						Interior Design			Construction Manage			Drafter		Exec A	Cler A	ACC	TOTAL
	PMgr	A-III	A-II	A-I	Int III	Int II	ID-III	ID-II	ID-I	CM-III	CM-II	CM-I	D-II	D-I	EA	CA	A	
	\$170	\$140	\$125	\$110	\$95	\$85	\$140	\$115	\$65	\$140	\$120	\$95	\$95	\$85	\$80	\$40	\$85	
ARCHITECTURE:																		
Project Management	4																	
Disc Coord/Doc Review																		
Agency Consul/Rev																		
Schedule Dev/Monitoring																		
Cost Estimates																		
Meetings																		
Construction Dwgs				20														
Specifications				20														
Energy Analysis																		
Code Analysis																		
Presentations																		
Quality Control																		
LEED																		
Submittal				2														
Subtotal Hours	4	0	0	42	0	0	0	0	0	0	0	0	0	0	0	0	0	46
Subtotal Dollars \$	680	0	0	4,620	0	0	0	0	0	0	0	0	0	0	0	0	0	\$5,300

CONSULTANTS:

- Civil Engineering
- Structural Engineering
- Mechanical Engineering
- Electrical Engineering
- Hazardous Materials Engineering
- Landscape Architecture
- Cost Estimating

Subtotal		\$0
Overhead/Profit	10%	\$0
Consultants Total Labor		\$0

Subtotal Construction Document Services LABOR	\$5,300
Subtotal Construction Document Services REIMBURSABLES (see attached)	\$0
TOTAL CONSTRUCTION DOCUMENT SERVICES FEE	\$5,300

DESIGN SERVICES PROPOSAL



BIDDING AND NEGOTIATION SERVICES

Project: **SKG Transfer Facility**

JYW Project No.: **TBD**

STAFF:	Architect						Interior Design			Construction Manage			Drafter		Exec A	Cler A	ACC	TOTAL
	PMgr	A-III	A-II	A-I	Int III	Int II	ID-III	ID-II	ID-I	CM-III	CM-II	CM-I	D-II	D-I	EA	CA	A	
	\$170	\$140	\$125	\$110	\$95	\$85	\$140	\$115	\$65	\$140	\$120	\$95	\$95	\$85	\$80	\$40	\$85	
ARCHITECTURE:																		
Project Management																		
Disc Coor/Doc Review																		
Agency Consul/Rev																		
Schedule Dev/Monitoring																		
Pre Bid Meeting																		
Bidding Materials																		
Addenda																		
Bidding/Negotiation				10														
Analysis of Alts/Subs																		
Special Bidding																		
Bid Evaluation																		
Construction Contract																		
Subtotal Hours	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Subtotal Dollars \$	0	0	0	1,100	0	0	0	0	0	0	0	0	0	0	0	0	0	\$1,100

CONSULTANTS:

- Civil Engineering
- Structural Engineering
- Mechanical Engineering
- Electrical Engineering
- Hazardous Materials Engineering
- Landscape Architecture

Subtotal		\$0
Overhead/Profit	10%	\$0
Consultants Total Labor		\$0

Subtotal Bidding and Negotiation Services LABOR	\$1,100
Subtotal Bidding and Negotiation Services REIMBURSABLES (see attached)	\$0
TOTAL BIDDING AND NEGOTIATION SERVICES FEE	\$1,100

DESIGN SERVICES PROPOSAL



CONSTRUCTION ADMINISTRATION

Project: **SKG Transfer Facility**

JYW Project No.: TBD

STAFF:	Architect						Interior Design			Construction Manage			Drafter		Exec A	Cler A	ACC	TOTAL
	PMgr	A-III	A-II	A-I	Int III	Int II	ID-III	ID-II	ID-I	CM-III	CM-II	CM-I	D-II	D-I	EA	CA	A	
	\$170	\$140	\$125	\$110	\$95	\$85	\$140	\$115	\$65	\$140	\$120	\$95	\$95	\$85	\$80	\$40	\$85	
ARCHITECTURE:																		
Project Management	1																	
Pre-Construction Conf Clarifications				8														
Submittal Review				20														
Testing/Inspection																		
RFIs/RFPs/CO'S				20														
Field Observations																		
1 @ 8				8														
Substantial Compl Insp																		
1 @ 8				8														
Final Completion Insp																		
x @																		
Close-out																		
Subtotal Hours	1	0	0	64	0	0	0	0	0	0	0	0	0	0	0	0	0	65
Subtotal Dollars \$	170	0	0	7,040	0	0	0	0	0	0	0	0	0	0	0	0	0	\$7,210

CONSULTANTS:

- Civil Engineering
- Structural Engineering
- Mechanical Engineering
- Electrical Engineering
- Hazardous Materials Engineering
- Landscape Architecture

Subtotal		\$0
Overhead/Profit	10%	\$0
Consultants Total Labor		\$0

Subtotal Construction Administration Services LABOR	\$7,210
Subtotal Construction Administration Services REIMBURSABLES (see attached)	\$440
TOTAL CONSTRUCTION ADMINISTRATION SERVICES FEE	\$7,650

DESIGN SERVICES PROPOSAL

REIMBURSABLE EXPENSES

JYW Project No.: **SKG Transfer Facility**

JYW Project No.: **TBD**



PHASE:	10	20	30	40	50	60	70	80	TOTAL	
	Pre-D	Site	SD	DD	CD	BID	CA	CO		
TRAVEL										
Arch	Trips	0	0	1	1	0	0	2	0	4
Cost	\$200	\$0.00	\$0.00	\$200.00	\$200.00	\$0.00	\$0.00	\$400.00	\$0.00	\$800
Civil	Trips	0	0	0	0	0	0	0	0	0
Cost	\$0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0
Struct	Trips	0	0	0	0	0	0	0	0	0
Cost	\$0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0
Mech	Trips	0	0	0	0	0	0	0	0	0
Cost	\$0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0
Elect	Trips	0	0	0	0	0	0	0	0	0
Cost	\$0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0
Other	Trips	0	0	0	0	0	0	0	0	0
Cost	\$0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0
Subtotal		\$0	\$0	\$200	\$200	\$0	\$0	\$400	\$0	\$800

PER DIEM

Arch	No. Days	0	0	0	0	0	0	0	0	0
Civil	No. Days	0	0	0	0	0	0	0	0	0
Struct	No. Days	0	0	0	0	0	0	0	0	0
Mech	No. Days	0	0	0	0	0	0	0	0	0
Elect	No. Days	0	0	0	0	0	0	0	0	0
Other	No. Days	0	0	0	0	0	0	0	0	0
Rate	\$0	0	0	0	0	0	0	0	0	0
Total		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

PRINTING/COPYING

11 x 17 Copy	No. Sheets	0	0	0	0	0	0	0	0	0
Rate	\$0.25	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Letter Copy:	No. Sheets	0	0	0	0	0	0	0	0	0
Rate	\$0.15	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

SCANS	Rate	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
CD's	Rate	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
POSTAGE/COURIER	Rate	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
MISSCELANEOUS	Rate	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENGIN REIMB	Rate	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
RENDERINGS	Rate	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

OH/P	10%	\$0	\$0	\$20	\$20	\$0	\$0	\$40	\$0	\$80
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TOTAL REIMBURSABLES		\$0	\$0	\$220	\$220	\$0	\$0	\$440	\$0	\$880
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