

## **APPENDIX A: COST ESTIMATE**

# **Engineer's Quantity Calculations**

for



State of Alaska  
Department of Transportation & Public Facilities  
Central Region

Construction Project:

## **Scammon Bay Airport Feasibility Study**

AIP No. 3-02-0255-005-2023

Project No. CFAPT01005

Prepared by:



ARCHITECTURE · ENGINEERING · LAND SURVEYING · PLANNING

4/25/2024

## Table of Contents

|   | Page |
|---|------|
| Cost Summary  | A-3  |
| Raise & Shift - Local Materials                         | A-4  |
| Raise & Shift - Barged Materials                        | A-5  |
| Near - Local Materials                                  | A-6  |
| Near - Barged Materials                                 | A-7  |
| Castle Hill - Local Materials                           | A-8  |
| Castle Hill - Barged Materials                          | A-9  |
| Ridgeline - Local Materials                             | A-10 |
| Ridgeline - Barged Materials                            | A-11 |
| Quantities  | A-12 |
| Utilities Estimate                                      | A-17 |
| P152.200.0000 - BORROW Estimate                         | A-18 |
| P299.020.0000 Crushed Aggregate Surface Course Estimate | A-19 |

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Cost Summary

| Alternative                                | Construction Cost Estimate | Local or Barged Material | Notes |
|--|----------------------------|--------------------------|-------|
|  |                            |                          |       |
|  |                            |                          |       |
| Raise and Shift Existing Airport 340' East | \$75,659,173               | Local                    |       |
| Raise and Shift Existing Airport 340' East | \$130,448,802              | Barged                   |       |
|  |                            |                          |       |
| Relocate Airport South to Ridgeline        | \$59,398,368               | Local                    |       |
| Relocate Airport South to Ridgeline        | \$109,266,097              | Barged                   |       |
|  |                            |                          |       |
| Relocate Airport to Castle Hill Location   | \$66,714,222               | Local                    |       |
| Relocate Airport to Castle Hill Location   | \$126,997,027              | Barged                   |       |
|  |                            |                          |       |
| Relocate Airport East to Near              | \$94,588,701               | Local                    |       |
| Relocate Airport East to Near              | \$182,828,676              | Barged                   |       |



## Engineer's Estimate

Project Name:

Project Number: CFAPT01005

**SCAMMON BAY AIRPORT RELOCATION: Raise & Shift (Local Material)**

**AIP 3-02-0255-005-2023**

| Item No       | Pay Item   | Pay Unit | Quantity     | Unit Price  | Amount       |
|---------------|--|----------|--------------|-------------|--------------|
|               | Land Purchase  | Acre     | 14           | \$1,000     | \$14,000     |
| D701.010.0072 | CS Pipe, 72-inch   | LF       | 300          | \$1,200     | \$360,000    |
| G100.010.0000 | Mobilization and Demobilization                              | LS       | ALL REQUIRED | \$3,500,000 | \$3,500,000  |
| G115.010.0000 | Worker Meals and Lodging, or Per Diem                        | LS       | ALL REQUIRED | \$1,500,000 | \$1,500,000  |
| G130.010.0000 | Field Office   | LS       | ALL REQUIRED | \$60,000    | \$60,000     |
| G130.020.0000 | Field Laboratory   | LS       | ALL REQUIRED | \$30,000    | \$30,000     |
| G130.060.0000 | Nuclear Testing Equipment Storage Shed                       | EACH     | 1            | \$20,000    | \$20,000     |
| G130.090.0000 | Engineering Communications                                   | CS       | ALL REQUIRED | \$10,000    | \$10,000     |
| G131.010.0000 | Engineering Transportation (Truck)                           | EACH     | 4            | \$50,000    | \$200,000    |
| G131.020.0000 | Engineering Transportation (ATV)                             | EACH     | 1            | \$15,000    | \$15,000     |
| G135.010.0000 | Construction Surveying by the Contractor                     | LS       | ALL REQUIRED | \$200,000   | \$200,000    |
| L100.010.0000 | Airport Lighting   | LS       | ALL REQUIRED | \$1,500,000 | \$1,500,000  |
| L132.010.0010 | Install Approach Lighting Aids, PAPI                         | LS       | ALL REQUIRED | \$500,000   | \$500,000    |
| P152.010.0000 | Unclassified Excavation                                      | CY       | 15,440       | \$20        | \$308,800    |
| P152.190.0000 | Borrow   | CY       | 161,330      | \$40        | \$6,453,183  |
| P154.010.0000 | Subbase Course   | CY       | 51,215       | \$75        | \$3,841,111  |
| P167.020.0000 | Dust Palliative  | LS       | ALL REQUIRED | \$250,000   | \$250,000    |
| P185.010.0000 | Primary Armor Stone, Class I                                 | TON      | 61,353       | \$186       | \$11,411,575 |
| P185.090.0000 | Underlayer Stone, Class I                                    | TON      | 53,731       | \$164       | \$8,811,917  |
| P299.020.0000 | Crushed Aggregate Surface Course                             | TON      | 38,515       | \$70        | \$2,696,037  |
| P640.020.0000 | Segmented Circle (Panel-Type)                                | LS       | ALL REQUIRED | \$50,000    | \$50,000     |
| P641.010.0000 | Erosion, Sediment, and Pollution Control Administration      | LS       | ALL REQUIRED | \$50,000    | \$50,000     |
| P641.030.0000 | Temporary Erosion, Sediment, and Pollution Control           | LS       | ALL REQUIRED | \$300,000   | \$300,000    |
| P641.040.0000 | Temporary Erosion, Sediment, and Pollution Control Additives | CS       | ALL REQUIRED | \$200,000   | \$200,000    |
| P641.070.0000 | SWPPP Manager  | LS       | ALL REQUIRED | \$150,000   | \$150,000    |
| P681.010.0000 | Geotextile, Separation                                       | SY       | 60,336       | \$4         | \$241,344    |
| S142.040.0000 | Equipment Storage Building                                   | LS       | ALL REQUIRED | \$4,000,000 | \$4,000,000  |
| U400.0X0.00X0 | Utility Extensions   | LS       | ALL REQUIRED | \$237,000   | \$237,000    |

**Subtotal: \$46,909,968**

|  |                    |  |                          |                  |                     |
|--|--------------------|--|--------------------------|------------------|---------------------|
|  | DESIGN CONTINGENCY |  | Design Contingency       | 25.00%           | \$11,727,492        |
|  |                    |  |                          | <b>Subtotal:</b> | <b>\$58,637,460</b> |
|  |                    |  | Construction Engineering | 22%              | \$12,900,241        |
|  |                    |  | ICAP                     | 7.03%            | \$4,122,213         |

**Total \$75,659,914**



## Engineer's Estimate

Project Name:

Project Number: CFAPT01005

**SCAMMON BAY AIRPORT RELOCATION: Raise & Shift (Barged Material)**

**AIP 3-02-0255-005-2023**

| Item No          | Pay Item   | Pay Unit | Quantity                 | Unit Price       | Amount               |
|------------------|--|----------|--------------------------|------------------|----------------------|
|                  | Land Purchase  | Acre     | 14                       | \$1,000          | \$14,000             |
| G100.010.0000    | Mobilization and Demobilization                              | LS       | ALL REQUIRED             | \$3,500,000      | \$3,500,000          |
| G115.010.0000    | Worker Meals and Lodging, or Per Diem                        | LS       | ALL REQUIRED             | \$1,500,000      | \$1,500,000          |
| G130.010.0000    | Field Office   | LS       | ALL REQUIRED             | \$60,000         | \$60,000             |
| G130.020.0000    | Field Laboratory   | LS       | ALL REQUIRED             | \$30,000         | \$30,000             |
| G130.060.0000    | Nuclear Testing Equipment Storage Shed                       | EACH     | 1                        | \$20,000         | \$20,000             |
| G130.090.0000    | Engineering Communications                                   | CS       | ALL REQUIRED             | \$10,000         | \$10,000             |
| G131.010.0000    | Engineering Transportation (Truck)                           | EACH     | 4                        | \$50,000         | \$200,000            |
| G131.020.0000    | Engineering Transportation (ATV)                             | EACH     | 1                        | \$15,000         | \$15,000             |
| G135.010.0000    | Construction Surveying by the Contractor                     | LS       | ALL REQUIRED             | \$200,000        | \$200,000            |
| L100.010.0000    | Airport Lighting   | LS       | ALL REQUIRED             | \$1,500,000      | \$1,500,000          |
| L132.010.0010    | Install Approach Lighting Aids, PAPI                         | LS       | ALL REQUIRED             | \$500,000        | \$500,000            |
| P152.010.0000    | Unclassified Excavation                                      | CY       | 15,440                   | \$20             | \$308,800            |
| P152.190.0000    | Borrow   | CY       | 161,330                  | \$133            | \$21,456,833         |
| P154.010.0000    | Subbase Course   | CY       | 51,215                   | \$175            | \$8,962,593          |
| P167.020.0000    | Dust Palliative  | LS       | ALL REQUIRED             | \$250,000        | \$250,000            |
| P185.010.0000    | Primary Armor Stone, Class I                                 | TON      | 61,353                   | \$286            | \$17,546,831         |
| P185.090.0000    | Underlayer Stone, Class I                                    | TON      | 53,731                   | \$264            | \$14,185,037         |
| P299.020.0000    | Crushed Aggregate Surface Course                             | TON      | 38,515                   | \$140            | \$5,392,074          |
| P640.020.0000    | Segmented Circle (Panel-Type)                                | LS       | ALL REQUIRED             | \$50,000         | \$50,000             |
| P641.010.0000    | Erosion, Sediment, and Pollution Control Administration      | LS       | ALL REQUIRED             | \$50,000         | \$50,000             |
| P641.030.0000    | Temporary Erosion, Sediment, and Pollution Control           | LS       | ALL REQUIRED             | \$300,000        | \$300,000            |
| P641.040.0000    | Temporary Erosion, Sediment, and Pollution Control Additives | CS       | ALL REQUIRED             | \$200,000        | \$200,000            |
| P641.070.0000    | SWPPP Manager  | LS       | ALL REQUIRED             | \$150,000        | \$150,000            |
| P681.010.0000    | Geotextile, Separation                                       | SY       | 60,336                   | \$4              | \$241,344            |
| S142.040.0000    | Equipment Storage Building                                   | LS       | ALL REQUIRED             | \$4,000,000      | \$4,000,000          |
| U400.0X0.00X0    | Utility Extensions   | LS       | ALL REQUIRED             | \$237,000        | \$237,000            |
| <b>Subtotal:</b> |  |          |                          |                  | <b>\$80,879,512</b>  |
|                  | DESIGN CONTINGENCY   |          | Design Contingency       | 25.00%           | \$20,219,878         |
|                  |  |          |                          | <b>Subtotal:</b> | <b>\$101,099,390</b> |
|                  |  |          | Construction Engineering | 22%              | \$22,241,866         |
|                  |  |          | ICAP                     | 7.03%            | \$7,107,287          |
| <b>Total</b>     |  |          |                          |                  | <b>\$130,448,543</b> |



## Engineer's Estimate

Project Name:

Project Number: CFAPT01005

**SCAMMON BAY AIRPORT RELOCATION: Near (Local Material)**

**AIP 3-02-0255-005-2023**

| Item No       | Pay Item   | Pay Unit | Quantity                 | Unit Price       | Amount              |
|---------------|--|----------|--------------------------|------------------|---------------------|
|               | Land Purchase  | Acre     | 5                        | \$1,000          | \$5,000             |
| G100.010.0000 | Mobilization and Demobilization                              | LS       | ALL REQUIRED             | \$3,500,000      | \$3,500,000         |
| G115.010.0000 | Worker Meals and Lodging, or Per Diem                        | LS       | ALL REQUIRED             | \$1,500,000      | \$1,500,000         |
| G130.010.0000 | Field Office   | LS       | ALL REQUIRED             | \$60,000         | \$60,000            |
| G130.020.0000 | Field Laboratory   | LS       | ALL REQUIRED             | \$30,000         | \$30,000            |
| G130.060.0000 | Nuclear Testing Equipment Storage Shed                       | EACH     | 1                        | \$20,000         | \$20,000            |
| G130.090.0000 | Engineering Communications                                   | CS       | ALL REQUIRED             | \$10,000         | \$10,000            |
| G131.010.0000 | Engineering Transportation (Truck)                           | EACH     | 4                        | \$50,000         | \$200,000           |
| G131.020.0000 | Engineering Transportation (ATV)                             | EACH     | 1                        | \$15,000         | \$15,000            |
| G135.010.0000 | Construction Surveying by the Contractor                     | LS       | ALL REQUIRED             | \$500,000        | \$500,000           |
| L100.010.0000 | Airport Lighting   | LS       | ALL REQUIRED             | \$1,500,000      | \$1,500,000         |
| L132.010.0010 | Install Approach Lighting Aids, PAPI                         | LS       | ALL REQUIRED             | \$500,000        | \$500,000           |
| P152.010.0000 | Unclassified Excavation                                      | CY       | 40,306                   | \$20             | \$806,111           |
| P152.190.0000 | Borrow   | CY       | 370,691                  | \$40             | \$14,827,644        |
| P154.010.0000 | Subbase Course   | CY       | 58,313                   | \$75             | \$4,373,472         |
| P167.020.0000 | Dust Palliative  | LS       | ALL REQUIRED             | \$250,000        | \$250,000           |
| P185.010.0000 | Primary Armor Stone, Class I                                 | TON      | 61,353                   | \$186            | \$11,411,575        |
| P185.090.0000 | Underlayer Stone, Class I                                    | TON      | 53,731                   | \$164            | \$8,811,917         |
| P299.020.0000 | Crushed Aggregate Surface Course                             | TON      | 41,369                   | \$70             | \$2,895,796         |
| P640.020.0000 | Segmented Circle (Panel-Type)                                | LS       | ALL REQUIRED             | \$50,000         | \$50,000            |
| P641.010.0000 | Erosion, Sediment, and Pollution Control Administration      | LS       | ALL REQUIRED             | \$50,000         | \$50,000            |
| P641.030.0000 | Temporary Erosion, Sediment, and Pollution Control           | LS       | ALL REQUIRED             | \$300,000        | \$300,000           |
| P641.040.0000 | Temporary Erosion, Sediment, and Pollution Control Additives | CS       | ALL REQUIRED             | \$200,000        | \$200,000           |
| P641.070.0000 | SWPPP Manager  | LS       | ALL REQUIRED             | \$150,000        | \$150,000           |
| P681.010.0000 | Geotextile, Separation                                       | SY       | 210,251                  | \$4              | \$841,005           |
| S142.040.0000 | Equipment Storage Building                                   | LS       | ALL REQUIRED             | \$4,000,000      | \$4,000,000         |
| U400.0X0.00X0 | UTILITY EXTENSIONS   | LUMP SUM | ALL REQUIRED             | \$1,838,500      | \$1,838,500         |
|               |  |          |                          | <b>Subtotal:</b> | <b>\$58,646,021</b> |
|               | DESIGN CONTINGENCY   |          | Design Contingency       | 25.00%           | \$14,661,505        |
|               |  |          |                          | <b>Subtotal:</b> | <b>\$73,307,526</b> |
|               |  |          | Construction Engineering | 22%              | \$16,127,656        |
|               |  |          | ICAP                     | 7.03%            | \$5,153,519         |
|               |  |          |                          | <b>Total</b>     | <b>\$94,588,701</b> |



## Engineer's Estimate

Project Name:

Project Number: CFAPT01005

**SCAMMON BAY AIRPORT RELOCATION: Near (Local Material)**

**AIP 3-02-0255-005-2023**

| Item No       | Pay Item   | Pay Unit | Quantity     | Unit Price  | Amount       |
|---------------|--|----------|--------------|-------------|--------------|
|               | Land Purchase  | Acre     | 5            | \$1,000     | \$5,000      |
| G100.010.0000 | Mobilization and Demobilization                              | LS       | ALL REQUIRED | \$3,500,000 | \$3,500,000  |
| G115.010.0000 | Worker Meals and Lodging, or Per Diem                        | LS       | ALL REQUIRED | \$1,500,000 | \$1,500,000  |
| G130.010.0000 | Field Office   | LS       | ALL REQUIRED | \$60,000    | \$60,000     |
| G130.020.0000 | Field Laboratory   | LS       | ALL REQUIRED | \$30,000    | \$30,000     |
| G130.060.0000 | Nuclear Testing Equipment Storage Shed                       | EACH     | 1            | \$20,000    | \$20,000     |
| G130.090.0000 | Engineering Communications                                   | CS       | ALL REQUIRED | \$10,000    | \$10,000     |
| G131.010.0000 | Engineering Transportation (Truck)                           | EACH     | 4            | \$50,000    | \$200,000    |
| G131.020.0000 | Engineering Transportation (ATV)                             | EACH     | 1            | \$15,000    | \$15,000     |
| G135.010.0000 | Construction Surveying by the Contractor                     | LS       | ALL REQUIRED | \$500,000   | \$500,000    |
| L100.010.0000 | Airport Lighting   | LS       | ALL REQUIRED | \$1,500,000 | \$1,500,000  |
| L132.010.0010 | Install Approach Lighting Aids, PAPI                         | LS       | ALL REQUIRED | \$500,000   | \$500,000    |
| P152.010.0000 | Unclassified Excavation                                      | CY       | 40,306       | \$20        | \$806,111    |
| P152.190.0000 | Borrow   | CY       | 370,691      | \$133       | \$49,301,918 |
| P154.010.0000 | Subbase Course   | CY       | 58,313       | \$175       | \$10,204,769 |
| P167.020.0000 | Dust Palliative  | LS       | ALL REQUIRED | \$250,000   | \$250,000    |
| P185.010.0000 | Primary Armor Stone, Class I                                 | TON      | 61,353       | \$286       | \$17,546,831 |
| P185.090.0000 | Underlayer Stone, Class I                                    | TON      | 53,731       | \$264       | \$14,185,037 |
| P299.020.0000 | Crushed Aggregate Surface Course                             | TON      | 41,369       | \$140       | \$5,791,593  |
| P640.020.0000 | Segmented Circle (Panel-Type)                                | LS       | ALL REQUIRED | \$50,000    | \$50,000     |
| P641.010.0000 | Erosion, Sediment, and Pollution Control Administration      | LS       | ALL REQUIRED | \$50,000    | \$50,000     |
| P641.030.0000 | Temporary Erosion, Sediment, and Pollution Control           | LS       | ALL REQUIRED | \$300,000   | \$300,000    |
| P641.040.0000 | Temporary Erosion, Sediment, and Pollution Control Additives | CS       | ALL REQUIRED | \$200,000   | \$200,000    |
| P641.070.0000 | SWPPP Manager  | LS       | ALL REQUIRED | \$150,000   | \$150,000    |
| P681.010.0000 | Geotextile, Separation                                       | SY       | 210,251      | \$4         | \$841,005    |
| S142.040.0000 | Equipment Storage Building                                   | LS       | ALL REQUIRED | \$4,000,000 | \$4,000,000  |
| U400.0X0.00X0 | UTILITY EXTENSIONS   | LUMP SUM | ALL REQUIRED | \$1,838,500 | \$1,838,500  |

**Subtotal: \$113,355,763**

|  |                    |  |                          |                  |                      |
|--|--------------------|--|--------------------------|------------------|----------------------|
|  | DESIGN CONTINGENCY |  | Design Contingency       | 25.00%           | \$28,338,941         |
|  |                    |  |                          | <b>Subtotal:</b> | <b>\$141,694,703</b> |
|  |                    |  | Construction Engineering | 22%              | \$31,172,835         |
|  |                    |  | ICAP                     | 7.03%            | \$9,961,138          |

**Total \$182,828,676**





## Engineer's Estimate

Project Name:

Project Number: CFAPT01005

**SCAMMON BAY AIRPORT RELOCATION: Castle Hill (Local Material)**

**AIP 3-02-0255-005-2023**

| Item No          | Pay Item   | Pay Unit | Quantity                 | Unit Price       | Amount              |
|------------------|--|----------|--------------------------|------------------|---------------------|
|                  | Land Purchase  | Acre     | 23                       | \$1,000          | \$23,000            |
| G100.010.0000    | Mobilization and Demobilization                              | LS       | ALL REQUIRED             | \$3,500,000      | \$3,500,000         |
| G115.010.0000    | Worker Meals and Lodging, or Per Diem                        | LS       | ALL REQUIRED             | \$1,500,000      | \$1,500,000         |
| G130.010.0000    | Field Office   | LS       | ALL REQUIRED             | \$60,000         | \$60,000            |
| G130.020.0000    | Field Laboratory   | LS       | ALL REQUIRED             | \$30,000         | \$30,000            |
| G130.060.0000    | Nuclear Testing Equipment Storage Shed                       | EACH     | 1                        | \$20,000         | \$20,000            |
| G130.090.0000    | Engineering Communications                                   | CS       | ALL REQUIRED             | \$10,000         | \$10,000            |
| G131.010.0000    | Engineering Transportation (Truck)                           | EACH     | 4                        | \$50,000         | \$200,000           |
| G131.020.0000    | Engineering Transportation (ATV)                             | EACH     | 1                        | \$15,000         | \$15,000            |
| G135.010.0000    | Construction Surveying by the Contractor                     | LS       | ALL REQUIRED             | \$500,000        | \$500,000           |
| L100.010.0000    | Airport Lighting   | LS       | ALL REQUIRED             | \$1,500,000      | \$1,500,000         |
| L132.010.0010    | Install Approach Lighting Aids, PAPI                         | LS       | ALL REQUIRED             | \$500,000        | \$500,000           |
| P152.010.0000    | Unclassified Excavation                                      | CY       | 166,594                  | \$20             | \$3,331,876         |
| P152.190.0000    | Borrow   | CY       | 284,495                  | \$40             | \$11,379,787        |
| P154.010.0000    | Subbase Course   | CY       | 72,222                   | \$75             | \$5,416,667         |
| P167.020.0000    | Dust Palliative  | LS       | ALL REQUIRED             | \$250,000        | \$250,000           |
| P299.020.0000    | Crushed Aggregate Surface Course                             | TON      | 52,797                   | \$70             | \$3,695,767         |
| P640.020.0000    | Segmented Circle (Panel-Type)                                | LS       | ALL REQUIRED             | \$50,000         | \$50,000            |
| P641.010.0000    | Erosion, Sediment, and Pollution Control Administration      | LS       | ALL REQUIRED             | \$50,000         | \$50,000            |
| P641.030.0000    | Temporary Erosion, Sediment, and Pollution Control           | LS       | ALL REQUIRED             | \$300,000        | \$300,000           |
| P641.040.0000    | Temporary Erosion, Sediment, and Pollution Control Additives | CS       | ALL REQUIRED             | \$200,000        | \$200,000           |
| P641.070.0000    | SWPPP Manager  | LS       | ALL REQUIRED             | \$150,000        | \$150,000           |
| P681.010.0000    | Geotextile, Separation                                       | SY       | 251,111                  | \$4              | \$1,004,445         |
| S142.040.0000    | Equipment Storage Building                                   | LS       | ALL REQUIRED             | \$4,000,000      | \$4,000,000         |
| U400.0X0.00X0    | UTILITY EXTENSIONS   | LUMP SUM | ALL REQUIRED             | \$3,677,000      | \$3,677,000         |
| <b>Subtotal:</b> |  |          |                          |                  | <b>\$41,363,542</b> |
|                  | DESIGN CONTINGENCY   |          | Design Contingency       | 25.00%           | \$10,340,885        |
|                  |  |          |                          | <b>Subtotal:</b> | <b>\$51,704,427</b> |
|                  |  |          | Construction Engineering | 22%              | \$11,374,974        |
|                  |  |          | ICAP                     | 7.03%            | \$3,634,821         |
| <b>Total</b>     |  |          |                          |                  | <b>\$66,714,222</b> |



## Engineer's Estimate

Project Name:

Project Number: CFAPT01005

**SCAMMON BAY AIRPORT RELOCATION: Castle Hill (Barged Material)**

**AIP 3-02-0255-005-2023**

| Item No          | Pay Item   | Pay Unit | Quantity                 | Unit Price       | Amount               |
|------------------|--|----------|--------------------------|------------------|----------------------|
|                  | Land Purchase  | Acre     | 23                       | \$1,000          | \$23,000             |
| G100.010.0000    | Mobilization and Demobilization                              | LS       | ALL REQUIRED             | \$3,500,000      | \$3,500,000          |
| G115.010.0000    | Worker Meals and Lodging, or Per Diem                        | LS       | ALL REQUIRED             | \$1,500,000      | \$1,500,000          |
| G130.010.0000    | Field Office   | LS       | ALL REQUIRED             | \$60,000         | \$60,000             |
| G130.020.0000    | Field Laboratory   | LS       | ALL REQUIRED             | \$30,000         | \$30,000             |
| G130.060.0000    | Nuclear Testing Equipment Storage Shed                       | EACH     | 1                        | \$20,000         | \$20,000             |
| G130.090.0000    | Engineering Communications                                   | CS       | ALL REQUIRED             | \$10,000         | \$10,000             |
| G131.010.0000    | Engineering Transportation (Truck)                           | EACH     | 4                        | \$50,000         | \$200,000            |
| G131.020.0000    | Engineering Transportation (ATV)                             | EACH     | 1                        | \$15,000         | \$15,000             |
| G135.010.0000    | Construction Surveying by the Contractor                     | LS       | ALL REQUIRED             | \$500,000        | \$500,000            |
| L100.010.0000    | Airport Lighting   | LS       | ALL REQUIRED             | \$1,500,000      | \$1,500,000          |
| L132.010.0010    | Install Approach Lighting Aids, PAPI                         | LS       | ALL REQUIRED             | \$500,000        | \$500,000            |
| P152.010.0000    | Unclassified Excavation                                      | CY       | 166,594                  | \$20             | \$3,331,876          |
| P152.190.0000    | Borrow   | CY       | 284,495                  | \$133            | \$37,837,791         |
| P154.010.0000    | Subbase Course   | CY       | 72,222                   | \$175            | \$12,638,889         |
| P167.020.0000    | Dust Palliative  | LS       | ALL REQUIRED             | \$250,000        | \$250,000            |
| P299.020.0000    | Crushed Aggregate Surface Course                             | TON      | 52,797                   | \$140            | \$7,391,533          |
| P640.020.0000    | Segmented Circle (Panel-Type)                                | LS       | ALL REQUIRED             | \$50,000         | \$50,000             |
| P641.010.0000    | Erosion, Sediment, and Pollution Control Administration      | LS       | ALL REQUIRED             | \$50,000         | \$50,000             |
| P641.030.0000    | Temporary Erosion, Sediment, and Pollution Control           | LS       | ALL REQUIRED             | \$300,000        | \$300,000            |
| P641.040.0000    | Temporary Erosion, Sediment, and Pollution Control Additives | CS       | ALL REQUIRED             | \$200,000        | \$200,000            |
| P641.070.0000    | SWPPP Manager  | LS       | ALL REQUIRED             | \$150,000        | \$150,000            |
| P681.010.0000    | Geotextile, Separation                                       | SY       | 251,111                  | \$4              | \$1,004,445          |
| S142.040.0000    | Equipment Storage Building                                   | LS       | ALL REQUIRED             | \$4,000,000      | \$4,000,000          |
| U400.0X0.00X0    | UTILITY EXTENSIONS   | LUMP SUM | ALL REQUIRED             | \$3,677,000      | \$3,677,000          |
| <b>Subtotal:</b> |  |          |                          |                  | <b>\$78,739,535</b>  |
|                  | DESIGN CONTINGENCY   |          | Design Contingency       | 25.00%           | \$19,684,884         |
|                  |  |          |                          | <b>Subtotal:</b> | <b>\$98,424,418</b>  |
|                  |  |          | Construction Engineering | 22%              | \$21,653,372         |
|                  |  |          | ICAP                     | 7.03%            | \$6,919,237          |
| <b>Total</b>     |  |          |                          |                  | <b>\$126,997,027</b> |



## Engineer's Estimate

Project Name:

Project Number: CFAPT01005

**SCAMMON BAY AIRPORT RELOCATION: Ridgeline (Local Material)**

**AIP 3-02-0255-005-2023**

| Item No          | Pay Item   | Pay Unit | Quantity                 | Unit Price       | Amount              |
|------------------|--|----------|--------------------------|------------------|---------------------|
|                  | Land Purchase  | Acre     | 17                       | \$1,000          | \$17,000            |
| G100.010.0000    | Mobilization and Demobilization                              | LS       | ALL REQUIRED             | \$3,500,000      | \$3,500,000         |
| G115.010.0000    | Worker Meals and Lodging, or Per Diem                        | LS       | ALL REQUIRED             | \$1,500,000      | \$1,500,000         |
| G130.010.0000    | Field Office   | LS       | ALL REQUIRED             | \$60,000         | \$60,000            |
| G130.020.0000    | Field Laboratory   | LS       | ALL REQUIRED             | \$30,000         | \$30,000            |
| G130.060.0000    | Nuclear Testing Equipment Storage Shed                       | EACH     | 1                        | \$20,000         | \$20,000            |
| G130.090.0000    | Engineering Communications                                   | CS       | ALL REQUIRED             | \$10,000         | \$10,000            |
| G131.010.0000    | Engineering Transportation (Truck)                           | EACH     | 4                        | \$50,000         | \$200,000           |
| G131.020.0000    | Engineering Transportation (ATV)                             | EACH     | 1                        | \$15,000         | \$15,000            |
| G135.010.0000    | Construction Surveying by the Contractor                     | LS       | ALL REQUIRED             | \$500,000        | \$500,000           |
| L100.010.0000    | Airport Lighting   | LS       | ALL REQUIRED             | \$1,500,000      | \$1,500,000         |
| L132.010.0010    | Install Approach Lighting Aids, PAPI                         | LS       | ALL REQUIRED             | \$500,000        | \$500,000           |
| P152.010.0000    | Unclassified Excavation                                      | CY       | 47,991                   | \$20             | \$959,825           |
| P152.190.0000    | Borrow   | CY       | 224,174                  | \$40             | \$8,966,964         |
| P154.010.0000    | Subbase Course   | CY       | 67,426                   | \$75             | \$5,056,944         |
| P167.020.0000    | Dust Palliative  | LS       | ALL REQUIRED             | \$250,000        | \$250,000           |
| P299.020.0000    | Crushed Aggregate Surface Course                             | TON      | 47,539                   | \$70             | \$3,327,748         |
| P640.020.0000    | Segmented Circle (Panel-Type)                                | LS       | ALL REQUIRED             | \$50,000         | \$50,000            |
| P641.010.0000    | Erosion, Sediment, and Pollution Control Administration      | LS       | ALL REQUIRED             | \$50,000         | \$50,000            |
| P641.030.0000    | Temporary Erosion, Sediment, and Pollution Control           | LS       | ALL REQUIRED             | \$300,000        | \$300,000           |
| P641.040.0000    | Temporary Erosion, Sediment, and Pollution Control Additives | CS       | ALL REQUIRED             | \$200,000        | \$200,000           |
| P641.070.0000    | SWPPP Manager  | LS       | ALL REQUIRED             | \$150,000        | \$150,000           |
| P681.010.0000    | Geotextile, Separation                                       | SY       | 188,288                  | \$4              | \$753,151           |
| S142.040.0000    | Equipment Storage Building                                   | LS       | ALL REQUIRED             | \$4,000,000      | \$4,000,000         |
| U400.0X0.00X0    | Utility Extensions   | LS       | ALL REQUIRED             | \$4,911,000      | \$4,911,000         |
| <b>Subtotal:</b> |  |          |                          |                  | <b>\$36,827,633</b> |
|                  | DESIGN CONTINGENCY   |          | Design Contingency       | 25.00%           | \$9,206,908         |
|                  |  |          |                          | <b>Subtotal:</b> | <b>\$46,034,541</b> |
|                  |  |          | Construction Engineering | 22%              | \$10,127,599        |
|                  |  |          | ICAP                     | 7.03%            | \$3,236,228         |
| <b>Total</b>     |  |          |                          |                  | <b>\$59,398,368</b> |



## Engineer's Estimate

Project Name:

Project Number: CFAPT01005

**SCAMMON BAY AIRPORT RELOCATION: Ridgeline (Barged Material)**

**AIP 3-02-0255-005-2023**

| Item No          | Pay Item   | Pay Unit | Quantity                 | Unit Price       | Amount               |
|------------------|--|----------|--------------------------|------------------|----------------------|
|                  | Land Purchase  | Acre     | 17                       | \$1,000          | \$17,000             |
| G100.010.0000    | Mobilization and Demobilization                              | LS       | ALL REQUIRED             | \$3,500,000      | \$3,500,000          |
| G115.010.0000    | Worker Meals and Lodging, or Per Diem                        | LS       | ALL REQUIRED             | \$1,500,000      | \$1,500,000          |
| G130.010.0000    | Field Office   | LS       | ALL REQUIRED             | \$60,000         | \$60,000             |
| G130.020.0000    | Field Laboratory   | LS       | ALL REQUIRED             | \$30,000         | \$30,000             |
| G130.060.0000    | Nuclear Testing Equipment Storage Shed                       | EACH     | 1                        | \$20,000         | \$20,000             |
| G130.090.0000    | Engineering Communications                                   | CS       | ALL REQUIRED             | \$10,000         | \$10,000             |
| G131.010.0000    | Engineering Transportation (Truck)                           | EACH     | 4                        | \$50,000         | \$200,000            |
| G131.020.0000    | Engineering Transportation (ATV)                             | EACH     | 1                        | \$15,000         | \$15,000             |
| G135.010.0000    | Construction Surveying by the Contractor                     | LS       | ALL REQUIRED             | \$500,000        | \$500,000            |
| L100.010.0000    | Airport Lighting   | LS       | ALL REQUIRED             | \$1,500,000      | \$1,500,000          |
| L132.010.0010    | Install Approach Lighting Aids, PAPI                         | LS       | ALL REQUIRED             | \$500,000        | \$500,000            |
| P152.010.0000    | Unclassified Excavation                                      | CY       | 47,991                   | \$20             | \$959,825            |
| P152.190.0000    | Borrow   | CY       | 224,174                  | \$133            | \$29,815,157         |
| P154.010.0000    | Subbase Course   | CY       | 67,426                   | \$175            | \$11,799,537         |
| P167.020.0000    | Dust Palliative  | LS       | ALL REQUIRED             | \$250,000        | \$250,000            |
| P299.020.0000    | Crushed Aggregate Surface Course                             | TON      | 47,539                   | \$140            | \$6,655,496          |
| P640.020.0000    | Segmented Circle (Panel-Type)                                | LS       | ALL REQUIRED             | \$50,000         | \$50,000             |
| P641.010.0000    | Erosion, Sediment, and Pollution Control Administration      | LS       | ALL REQUIRED             | \$50,000         | \$50,000             |
| P641.030.0000    | Temporary Erosion, Sediment, and Pollution Control           | LS       | ALL REQUIRED             | \$300,000        | \$300,000            |
| P641.040.0000    | Temporary Erosion, Sediment, and Pollution Control Additives | CS       | ALL REQUIRED             | \$200,000        | \$200,000            |
| P641.070.0000    | SWPPP Manager  | LS       | ALL REQUIRED             | \$150,000        | \$150,000            |
| P681.010.0000    | Geotextile, Separation                                       | SY       | 188,288                  | \$4              | \$753,151            |
| S142.040.0000    | Equipment Storage Building                                   | LS       | ALL REQUIRED             | \$4,000,000      | \$4,000,000          |
| U400.0X0.00X0    | Utility Extensions   | LUMP SUM | ALL REQUIRED             | \$4,911,000      | \$4,911,000          |
| <b>Subtotal:</b> |  |          |                          |                  | <b>\$67,746,166</b>  |
|                  | DESIGN CONTINGENCY   |          | Design Contingency       | 25.00%           | \$16,936,541         |
|                  |  |          |                          | <b>Subtotal:</b> | <b>\$84,682,707</b>  |
|                  |  |          | Construction Engineering | 22%              | \$18,630,196         |
|                  |  |          | ICAP                     | 7.03%            | \$5,953,194          |
| <b>Total</b>     |  |          |                          |                  | <b>\$109,266,097</b> |

**Quantities**
**RAISE EXISTING - Alternative eliminated, but used for Raise & Shift Calculations**

|                | Alternative       | X section End Area | Length     | Width | Depth | Area (SY) | Volume (CY)   | Tons (x2) |
|----------------|-------------------|--------------------|------------|-------|-------|-----------|---------------|-----------|
| <b>Runway</b>  | Sta. 2+30-29+00   | 1951               | 2670       |       |       |           | 192932        |           |
|                | 29+00-38+30       | 1024               | 930        |       |       |           | 35271         |           |
|                | Total Fill        |                    |            |       |       |           | <b>228203</b> |           |
|                | Subbase           |                    | 3800       | 150   | 2     |           | 42222         |           |
|                |                   |                    |            |       |       |           |               |           |
|                | CABC              |                    | 3800       | 150   | 0.75  |           | 15833         |           |
|                |                   |                    |            |       |       |           |               |           |
|                | Borrow            |                    |            |       |       |           | 170148        |           |
|                |                   |                    |            |       |       |           |               |           |
|                | Geotextile Fabric |                    |            |       |       |           |               |           |
| <b>APRON</b>   | Total Fill        |                    |            |       |       |           |               |           |
|                | Surface Area      |                    | 250        | 400   | 8     |           | 29630         |           |
|                | Side Slopes       |                    | 1100       | 32    | 8     |           | 5215          |           |
|                |                   |                    |            |       |       |           |               |           |
|                | CABC              |                    | 250        | 400   | 0.75  |           | 2778          |           |
|                | Subbase           |                    | 250        | 400   | 2.00  |           | 7407          |           |
|                |                   |                    |            |       |       |           |               |           |
|                | Borrow            |                    |            |       |       |           | 24659         |           |
| <b>Road</b>    | Geotextile Fabric |                    |            |       |       |           |               |           |
|                | Total Fill        | 408                | <b>400</b> |       |       |           | <b>6044</b>   |           |
|                | CABC              |                    | 400        | 28    | 0.5   |           | 207           |           |
|                | Subbase           |                    | 400        | 28    | 1     |           | 415           |           |
|                | Borrow            |                    |            |       |       |           | 5422          |           |
| <b>Taxiway</b> | Geotextile Fabric |                    |            |       |       |           |               |           |
|                | Total Fill        | 999                | 200        |       |       |           | 7400          |           |
|                | CABC              |                    | 200        | 79    | 0.75  |           | 439           |           |
|                | Subbase           |                    | 200        | 79    | 2     |           | 1170          |           |
|                | Borrow            |                    |            |       |       |           | 5791          |           |
| <b>Airport</b> | Geotextile Fabric | 0                  |            |       |       |           |               |           |
|                | Borrow            |                    |            |       |       |           | 206020        | 412040    |
|                | Subbase           |                    |            |       |       |           | 51215         | 102430    |
|                | CABC              |                    |            |       |       |           | 19257         | 38515     |
|                | Geotextile Fabric |                    |            |       |       |           |               |           |

Quantities

**RAISE & SHIFT EXISTING**

|         | Alternative                    | X section End Area | Length | Width | Depth | Area (SY) | Volume (CY) | Tons (x2) |
|---------|--------------------------------|--------------------|--------|-------|-------|-----------|-------------|-----------|
| Runway  | 5+70-29+00                     | 1951               | 2330   |       |       |           | 168364      |           |
|         | 29+00-38+30                    | 1024               | 930    |       |       |           | 35271       |           |
|         | 38+30-41+70                    | 2548               | 340    |       |       |           | 32086       |           |
|         | 200' Extension                 | 2410               | 250    |       |       |           | 22315       |           |
|         | <b>Total Fill</b>              |                    |        |       |       |           | 258036      |           |
|         | Subbase                        |                    | 3800   | 150   | 2     |           | 42222       |           |
|         |                                |                    |        |       |       |           |             |           |
|         |                                |                    |        |       |       |           |             |           |
|         | CABC                           |                    | 3800   | 150   | 0.75  |           | 15833       |           |
|         | Minus Borrow for Bank Armor    | 165.31             | 9650   |       |       |           | 59083       |           |
|         | Unclassified Ex for Bank Armor | 43.2               | 9650   |       |       |           | 15440       |           |
|         | Borrow                         |                    |        |       |       |           | 125457      |           |
| APRON   | Geotextile Fabric              |                    | 500    | 150   |       | 8333      |             |           |
|         | <b>Same as Raise RW Alt</b>    |                    |        |       |       |           |             |           |
|         | Total Fill                     |                    |        |       |       |           | 34844       |           |
|         | CABC                           |                    |        |       |       |           | 2778        |           |
|         | Subbase                        |                    |        |       |       |           | 7407        |           |
|         | Borrow                         |                    |        |       |       |           | 24659       |           |
| Road    | Geotextile Fabric              |                    |        |       |       |           | 0           |           |
|         | <b>Same as Raise RW Alt</b>    |                    |        |       |       |           |             |           |
|         | Total Fill                     |                    |        |       |       |           | 6044        |           |
|         | CABC                           |                    |        |       |       |           | 207         |           |
|         | Subbase                        |                    |        |       |       |           | 415         |           |
|         | Borrow                         |                    |        |       |       |           | 5422        |           |
| Taxiway | Geotextile Fabric              |                    |        |       |       |           | 0           |           |
|         | <b>Same as Raise RW Alt</b>    |                    |        |       |       |           |             |           |
|         | Total Fill                     |                    |        |       |       |           | 7400        |           |
|         | CABC                           |                    |        |       |       |           | 439         |           |
|         | Subbase                        |                    |        |       |       |           | 1170        |           |
|         | Borrow                         |                    |        |       |       |           | 5791        |           |
| Airport | Geotextile Fabric              |                    |        |       |       |           | 0           |           |
|         | Borrow                         |                    |        |       |       |           | 161330      | 322659    |
|         | Subbase                        |                    |        |       |       |           | 51215       | 102430    |
|         | CABC                           |                    |        |       |       |           | 19257       | 38515     |
|         | Geotextile Fabric              |                    |        |       |       | 60336     |             |           |
|         | Erosion Protection             |                    | 10450  |       |       |           |             |           |
|         | Excavation                     |                    |        |       |       |           | 15440       |           |

Quantities

Ridgeline

|              | Alternative       | X section End Area | Length | Width | Depth | Area (SY) | Volume (CY) | Tons (x2) |
|--------------|-------------------|--------------------|--------|-------|-------|-----------|-------------|-----------|
| Runway       | Total Fill        |                    |        |       |       |           | 167956      |           |
|              |                   |                    |        |       |       |           |             |           |
|              |                   |                    |        |       |       |           |             |           |
|              | Subbase           | 332                | 3800   |       |       |           | 46726       |           |
|              |                   |                    |        |       |       |           |             |           |
|              | CABC              | 115.1              | 3800   |       |       |           | 16199       |           |
|              |                   |                    |        |       |       |           |             |           |
|              | Borrow            |                    |        |       |       |           | 167956      |           |
|              | Excavation        |                    |        |       |       |           | 22482       |           |
|              | Geotextile Fabric |                    |        |       |       | 91231     |             |           |
| APRON and TW | Total Fill        |                    |        |       |       |           | 20857       |           |
|              | Surface Area      |                    |        |       |       |           |             |           |
|              | Side Slopes       |                    |        |       |       |           |             |           |
|              | CABC-Apron        |                    | 200    | 400   | 0.75  |           | 2222        |           |
|              | CABC-TW           |                    | 300    | 79    | 0.75  |           | 658         |           |
|              | Subbase-Apron     |                    | 200    | 400   | 2     |           | 5926        |           |
|              | Subbase-TW        |                    | 300    | 79    | 2     |           | 1756        |           |
|              | Borrow            |                    |        |       |       |           | 20857       |           |
|              | Geotextile Fabric |                    |        |       |       | 17890     |             |           |
| Road         | Total Fill        | 173                | 9500   |       |       |           | 60870       |           |
|              | CABC              | 15.2               | 9500   |       | 0.5   |           | 5348        |           |
|              | Subbase           | 37                 | 9500   |       | 1     |           | 13019       |           |
|              | Borrow            |                    |        |       |       |           | 35361       |           |
|              | Geotextile Fabric |                    | 9500   | 75    |       | 79167     |             |           |
|              | Excavation        | 145                | 9500   |       |       |           | 51019       |           |
| Airport      | Borrow            |                    |        |       |       |           | 224174      |           |
|              | Subbase           |                    |        |       |       |           | 67426       |           |
|              | CABC              |                    |        |       |       |           | 23770       | 47539     |
|              | Geotextile Fabric |                    |        |       |       | 188288    |             |           |
|              | Excavation        |                    |        |       |       |           | 47991       |           |

Quantities

CASTLE HILL

|              | Alternative       | X section End Area | Length | Width | Depth | Area (SY) | Volume (CY) | Tons (x2) |
|--------------|-------------------|--------------------|--------|-------|-------|-----------|-------------|-----------|
| Runway       | Total Fill        |                    |        |       |       |           | 377778      |           |
|              |                   |                    |        |       |       |           |             |           |
|              |                   |                    |        |       |       |           |             |           |
|              | Subbase           | 332                | 3800   |       |       |           | 46726       |           |
|              |                   |                    |        |       |       |           |             |           |
|              | CABC              | 115.1              | 3800   |       |       |           | 16199       |           |
|              |                   |                    |        |       |       |           |             |           |
|              | Borrow            |                    |        |       |       |           | 218376      |           |
|              | Excavation        |                    |        |       |       |           | 96477       |           |
|              | Geotextile Fabric |                    |        |       |       | 120993    |             |           |
| APRON and TW | Total Fill        |                    |        |       |       |           | 28594       |           |
|              | Surface Area      |                    |        |       |       |           |             |           |
|              | Side Slopes       |                    |        |       |       |           |             |           |
|              | CABC-Apron        |                    | 200    | 400   | 0.75  |           | 2222        |           |
|              | CABC-TW           |                    | 300    | 79    | 0.75  |           | 658         |           |
|              | Subbase-Apron     |                    | 200    | 400   | 2     |           | 5926        |           |
|              | Subbase-TW        |                    | 300    | 79    | 2     |           | 1756        |           |
|              | Borrow            |                    |        |       |       |           | 17730       |           |
|              | Geotextile Fabric |                    |        |       |       | 21785     |             |           |
|              | Excavation        |                    |        |       |       |           | 302         |           |
| Road         | Total Fill        | 173                | 13000  |       |       |           | 83296       |           |
|              | CABC              | 15.2               | 13000  |       | 0.5   |           | 7319        |           |
|              | Subbase           | 37                 | 13000  |       | 1     |           | 17815       |           |
|              | Borrow            |                    |        |       |       |           | 48389       |           |
|              | Geotextile Fabric |                    | 13000  | 75    |       | 108333    |             |           |
|              | Excavation        | 145                | 13000  |       |       |           | 69815       |           |
| Airport      | Borrow            |                    |        |       |       |           | 284495      |           |
|              | Subbase           |                    |        |       |       |           | 72222       |           |
|              | CABC              |                    |        |       |       |           | 26398       | 52797     |
|              | Geotextile Fabric |                    |        |       |       | 251111    |             |           |
|              | Excavation        |                    |        |       |       |           | 166594      |           |



Quantities

Near

| Runway       | Alternative       | X section End Area | Length | Width | Depth | Area (SY) | Volume (CY) | Tons (x2) |
|--------------|-------------------|--------------------|--------|-------|-------|-----------|-------------|-----------|
|              | Total Fill        |                    |        |       |       |           | 354983      |           |
|              |                   |                    |        |       |       |           |             |           |
|              | Subbase           | 332                | 3800   |       |       |           | 46726       |           |
|              |                   |                    |        |       |       |           |             |           |
|              | CABC              | 115.1              | 3800   |       |       |           | 16199       |           |
|              |                   |                    |        |       |       |           |             |           |
|              | Borrow            |                    |        |       |       |           | 292058      |           |
|              | Excavation        |                    |        |       |       |           | 20000       |           |
|              | Geotextile Fabric |                    |        |       |       | 109422    |             |           |
| APRON and TW | Total Fill        |                    |        |       |       |           | 78587       |           |
|              |                   |                    |        |       |       |           |             |           |
|              | CABC-Apron        |                    | 200    | 400   | 0.75  |           | 2222        |           |
|              | CABC-TW           |                    | 300    | 79    | 0.75  |           | 658         |           |
|              | Subbase-Apron     |                    | 200    | 400   | 2     |           | 5926        |           |
|              | Subbase-TW        |                    | 300    | 79    | 2     |           | 1756        |           |
|              | Borrow            |                    |        |       |       |           | 68025       |           |
|              | Geotextile Fabric |                    |        |       |       |           |             |           |
| Road         | Excavation        |                    |        |       |       | 25076     | 5000        |           |
|              | Total Fill        | 173                | 2850   |       |       |           | 18261       |           |
|              | CABC              | 15.2               | 2850   |       |       |           | 1604        |           |
|              | Subbase           | 37                 | 2850   |       |       |           | 3906        |           |
|              | Borrow            |                    |        |       |       |           | 10608       |           |
|              | Geotextile Fabric |                    | 2850   | 75    |       | 23750     |             |           |
| Airport      | Excavation        | 145                | 2850   |       |       |           | 15306       |           |
|              | Borrow            |                    |        |       |       |           | 370691      |           |
|              | Subbase           |                    |        |       |       |           | 58313       |           |
|              | CABC              |                    |        |       |       |           | 20684       | 41369     |
|              | Geotextile Fabric |                    |        |       |       | 210251    |             |           |
|              | Excavation        |                    |        |       |       |           | 40306       |           |

**Utility Estimate**

**PROJECT NAME: AMATS: Scammon Bay "Ridgeline" estimate**  
Location: Scammon Bay, AK

| Utility Company | Description of Work and Location                                 | Unit  | Unit Cost    | Total               |
|-----------------|--|-------|--------------|---------------------|
| UUI (GCI)       | Install aerial 25- 100 pair (6 miles = 31680 ft)                 | 31680 | \$ 45.00     | \$ 1,425,600.00     |
| AVEK            | Install aerial single phase poles and line (6 miles = 127 poles) | 127   | \$ 21,000.00 | \$ 2,667,000.00     |
|                 | Subtotal cost of utility works :                                 |       |              | \$ 4,092,600.00     |
|                 | 20%  |       | \$           | 818,520.00          |
|                 | <b>Total cost of utility works :</b>                             |       | <b>\$</b>    | <b>4,911,120.00</b> |

Assumed distance from community center is new installation length. This can be updated once final location is selected, the exact length of the access road needed for the airport is finalized, and reviewing AVEC poles for closer connections to tie into. Assumed 20% mark up for barging in freight.

**PROJECT NAME: AMATS: Scammon Bay "Castle Hill" estimate**  
Location: Scammon Bay, AK

| Utility Company | Description of Work and Location                                  | Unit  | Unit Cost    | Total               |
|-----------------|---|-------|--------------|---------------------|
| UUI (GCI)       | Install aerial 25- 100 pair (4.5 miles = 23760 ft)                | 23760 | \$ 45.00     | \$ 1,069,200.00     |
| AVEK            | Install aerial single phase poles and line (4.5 miles = 95 poles) | 95    | \$ 21,000.00 | \$ 1,995,000.00     |
|                 | Subtotal cost of utility works :                                  |       |              | \$ 3,064,200.00     |
|                 | 20%   |       | \$           | 612,840.00          |
|                 | <b>Total cost of utility works :</b>                              |       | <b>\$</b>    | <b>3,677,040.00</b> |

Assumed distance from community center is new installation length. This can be updated once final location is selected, the exact length of the access road needed for the airport is finalized, and reviewing AVEC poles for closer connections to tie into. Assumed 20% mark up for barging in freight.

**PROJECT NAME: AMATS: Scammon Bay "Shift and Raise" estimate**  
Location: Scammon Bay, AK

| Utility Company | Description of Work and Location                                | Unit | Unit Cost    | Total             |
|-----------------|---|------|--------------|-------------------|
| UUI (GCI)       | Install aerial 25- 100 pair (.3 miles = 1584 ft)                | 1584 | \$ 45.00     | \$ 71,280.00      |
| AVEK            | Install aerial single phase poles and line (.3 miles = 6 poles) | 6    | \$ 21,000.00 | \$ 126,000.00     |
|                 | Subtotal cost of utility works :                                |      |              | \$ 197,280.00     |
|                 | 20%   |      | \$           | 39,456.00         |
|                 | <b>Total cost of utility works :</b>                            |      | <b>\$</b>    | <b>236,736.00</b> |

Assumed distance from community center is new installation length. This can be updated once final location is selected and determining if new services will be needed.  
Assumed 20% mark up for barging in freight.

State of Alaska  
Department of Transportation and Public Facilities  
Central Region Highway Design

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| <b>0</b>                                       |     |    |      |           |
| <b>P152.010.0000 - Unclassified Excavation</b> |     |    |      |           |
| SHEET NUMBER                                   | 1   | OF | 1    | PIH       |
| CALCULATED BY                                  | JAG |    | DATE | 4/24/2024 |
| CHECKED BY                                     |     |    | DATE |           |

| P152.010.0000 - Unclassified Excavation |      |          |      |                 |                     |                     | P152.01 |   |
|---|------|----------|------|-----------------|---------------------|---------------------|---------|---|
| Engineers Est. Quantity =               |      |          |      |                 |                     |                     | CY      |   |
|   |      |          |      |                 |                     |                     | \$      | - |
|   |      |          |      |                 |                     |                     | CY      |   |
| Project                                 | Year | Quantity | Unit | Low Bidder<br>1 | 2nd Low Bidder<br>2 | 3rd Low Bidder<br>3 | Remarks |   |
| Kaltag Airport Improvements             | 2021 | 2,800    | CY   | \$ 19.40        | \$ 12.50            | \$ 18.00            |         |   |
| Bethel Airport Parallel Runway I        | 2019 | 26,910   | CY   | \$ 10.00        | \$ 17.00            |                     |         |   |
| CHEFORNAK AIRPORT REHA                  | 2022 | 9,400    | CY   | \$ 24.00        | \$ 24.00            |                     |         |   |
| Saint Mary's Airport Improveme          | 2022 | 13340    | CY   | \$ 19.65        | \$ 6.24             | \$ 30.00            |         |   |
|   |      |          | CY   |                 |                     |                     |         |   |
|   |      |          | CY   |                 |                     |                     |         |   |
|   |      |          | CY   |                 |                     |                     |         |   |
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|                        |     |    |      |          |
| 0                      |     |    |      |          |
| P152.200.0000 - BORROW |     |    |      |          |
| SHEET NUMBER           | 1   | OF | 1    | PIH      |
| CALCULATED BY          | JAG |    | DATE | 4/5/2024 |
| CHECKED BY             |     |    | DATE |          |

Appendix A - 19

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|------------------------|-----|----|------|-----------|
|                        |     |    |      |           |
| 0                      |     |    |      |           |
| P152.200.0000 - BORROW |     |    |      |           |
| SHEET NUMBER           | 1   | OF | 1    | PIH       |
| CALCULATED BY          | JAG |    | DATE | 4/24/2024 |
| CHECKED BY             |     |    | DATE |           |

Appendix A - 20

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|                        |     |    |      |           |
| 0                      |     |    |      |           |
| P152.190.0000 - BORROW |     |    |      |           |
| SHEET NUMBER           | 1   | OF | 1    | PIH       |
| CALCULATED BY          | JAG |    | DATE | 4/24/2024 |
| CHECKED BY             |     |    | DATE |           |

Appendix A - 21

|                                |     |    |      |           |
|--------------------------------|-----|----|------|-----------|
|                                |     |    |      |           |
| 0                              |     |    |      |           |
| P154.020.0000 - SUBBASE COURSE |     |    |      |           |
| SHEET NUMBER                   | 1   | OF | 1    | PIH       |
| CALCULATED BY                  | JAG |    | DATE | 4/24/2024 |
| CHECKED BY                     |     |    | DATE |           |

Appendix A - 22

State of Alaska  
Department of Transportation and Public Facilities  
Central Region Highway Design

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| 0  |     |    |      |          |
| P299.020.0000 Crushed Aggregate Surface Course |     |    |      |          |
| SHEET NUMBER                                   | 1   | OF | 1    | PIH      |
| CALCULATED BY                                  | JAG |    | DATE | 4/8/2024 |
| CHECKED BY                                     |     |    | DATE |          |

P299.020.0000 Crushed Aggregate Surface Course

P299.02

Engineers Est. Quantity =

Ton

\$

-

Ton

| Project                              | Year | Quantity   | Unit | Low Bidder                | 2nd Low Bidder | 3rd Low Bidder      | Remarks |
|--------------------------------------|------|------------|------|---------------------------|----------------|---------------------|---------|
|                                      |      |            |      | 1                         | 2              | 3                   |         |
| KWETHLUK AIRPORT REHAB               | 2023 | 38,971 Ton |      | \$ 156.00                 | \$ 215.00      | \$ 449.59           |         |
| CHEFORNAK AIRPORT REHA               | 2022 | 46,320 Ton |      | \$ 93.00                  | \$ 175.00      |                     |         |
| MEKORYUK AIRPORT REHAE               | 2023 | 1,872 Ton  |      | \$ 188.00                 | \$ 195.00      | \$ 180.00           |         |
| CHEFORNAK AIRPORT REHA               | 2022 | 46320 Ton  |      | \$ 93.00                  | \$ 175.00      |                     |         |
| Shishmaref Airport Erosion Con       | 2022 | 1600 Ton   |      | \$ 150.00                 | \$ 256.00      | \$ 199.43           |         |
| KIPNUK AIRPORT REHABILIT             | 2021 | 49010 Ton  |      | \$ 110.00                 | \$ 170.10      |                     |         |
| Ton                                  |      |            |      |                           |                |                     |         |
|                                      |      |            |      | <u>Average Unit Price</u> |                | <u>Median Price</u> |         |
| By All                               | \$   | 187.01     |      | \$                        | 175.00         |                     |         |
| By Projects                          | \$   | 178.51     |      |                           |                |                     |         |
| Average Low Bidder, similar quantity |      |            |      |                           |                |                     |         |
|                                      |      |            |      | \$                        | 113.00         |                     |         |
| Inflate @ 10% per year               |      |            |      |                           |                |                     |         |
|                                      |      |            |      | 136                       |                |                     |         |
|                                      |      |            |      | Use \$140                 |                |                     |         |



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| 0  |     |    |      |           |
| P299.020.0000 Crushed Aggregate Surface Course |     |    |      |           |
| SHEET NUMBER                                   | 1   | OF | 1    | PIH       |
| CALCULATED BY                                  | JAG |    | DATE | 4/24/2024 |
| CHECKED BY                                     |     |    | DATE |           |

Appendix A - 24

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|--|-----|----|------|-----------|
|  |     |    |      |           |
| 0  |     |    |      |           |
| P185.010.0000 Primary Armor Stone, Class I |     |    |      |           |
| SHEET NUMBER                               | 1   | OF | 1    | PIH       |
| CALCULATED BY                              | JAG |    | DATE | 4/23/2024 |
| CHECKED BY                                 |     |    | DATE |           |

Appendix A - 25

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|---|-----|----|------|-----------|
|   |     |    |      |           |
| 0                                       |     |    |      |           |
| P185.090.0000 Underlayer Stone, Class I |     |    |      |           |
| SHEET NUMBER                            | 1   | OF | 1    | PIH       |
| CALCULATED BY                           | JAG |    | DATE | 4/23/2024 |
| CHECKED BY                              |     |    | DATE |           |

Appendix A - 26

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|                               |     |    |      |           |
| 0                             |     |    |      |           |
| 611.2011.000A Underlayer Rock |     |    |      |           |
| SHEET NUMBER                  | 1   | OF | 1    | PIH       |
| CALCULATED BY                 | JAG |    | DATE | 4/23/2024 |
| CHECKED BY                    |     |    | DATE |           |

Appendix A - 27

|                          |     |    |      |           |
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|                          |     |    |      |           |
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| 611.2000.0000 Armor Rock |     |    |      |           |
| SHEET NUMBER             | 1   | OF | 1    | PIH       |
| CALCULATED BY            | JAG |    | DATE | 4/23/2024 |
| CHECKED BY               |     |    | DATE |           |

Appendix A - 28

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|------------------------------|-----|----|------|-----------|
|                              |     |    |      |           |
| 0                            |     |    |      |           |
| 611.0002.0004 RIPRAP CLASS 4 |     |    |      |           |
| SHEET NUMBER                 | 1   | OF | 1    | PIH       |
| CALCULATED BY                | JAG |    | DATE | 4/23/2024 |
| CHECKED BY                   |     |    | DATE |           |

Appendix A - 29

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|------------------------------|-----|----|------|-----------|
|                              |     |    |      |           |
| 0                            |     |    |      |           |
| 611.0001.0003 RIPRAP CLASS 3 |     |    |      |           |
| SHEET NUMBER                 | 1   | OF | 1    | PIH       |
| CALCULATED BY                | JAG |    | DATE | 4/23/2024 |
| CHECKED BY                   |     |    | DATE |           |

Appendix A - 30