

"Village with a Past, City with a Future"



210 Fidalgo Avenue, Kenai, Alaska 99611-7794
Telephone: 907-283-7535 / Fax: 907-283-3014
www.ci.kenai.ak.us

ADDENDUM NO. 3

This addendum consists of 31 pages with attachments.

TO: All Bid Packet Holder

FROM: City of Kenai Public Works Department

DATE: August 23, 2019

SUBJECT: Invitation to Bid – Alaska Regional Fire Training Center Building Rehabilitation

DUE DATE: ***August 29, 2019, by no later than 2:00 PM***

Bidders must acknowledge receipt of this Addendum in the appropriate place on the Bid Form. Failure to do so may result in the disqualification or rejection of the bid.

Note: Information in this addendum takes precedence over original information. All other provisions of the document remain unchanged.

01- General

03-01 Substitution Request - Boilers

03- Project Specifications

03-02 See attached revised Special Revisions. Kenai General Conditions and Agreement requirements remain in full affect.

04 – Clarifications

03-03 Liquidated Damages for this project are confirmed at \$1500/day.

SUBSTITUTION REQUEST FORM

TO: CITY OF KENAI
ATTN: SCOTT CURTIN
210 FIDALGO AVE.
KENAI, AK 99611
(907) 283-8240

PROJECT: TRAINING BUILDING REHABILITATION PROJECT

SPECIFIED ITEM:

<u>225235</u>	<u>2.02</u>	<u>BOILERS B-1 and B-2</u>
Section	Paragraph	Description

The undersigned requests consideration of the following:

PROPOSED SUBSTITUTION: Lochinvar FBD-1501

Attached data includes product description, specifications, drawings, photographs, performance and test data adequate for evaluation of the request; applicable portions of the data area clearly identified.

Attached data also includes description of changes to Contract Documents which proposed substitution will require for its proper installation.

The undersigned states that the following paragraphs, unless modified on attachments, are correct:

1. The proposed substitution does not affect dimensions shown on Drawings.
2. The undersigned will pay for changes to the building design, including engineering design, detailing and construction costs caused by the requested substitution.
3. The proposed substitution will have no adverse effect on other trades, the construction schedule, or specified warranty requirements.
4. Maintenance and service parts will be locally available for the proposed substitution.

The undersigned further states that the function, appearance and quality of the Proposed Substitution are equivalent or superior to the Specified Item.

Submitted by:

Signature 

Firm CHC Columbia Hydronics Company

Address 5408 NE 88th Street Vancouver,
WA 98665

Date 08/19/2019

Telephone 360-449-8315

For use by Design Consultant:

☐ Accepted ☐ Accepted as noted

☐ Not Accepted
By: Alec C. Thomson, P.E., T3 Alaska, LLC

Date: 08/23/2019

Remarks: Will need to be provided as dual fuel.

END OF SECTION 01 63 00

CREST
COMMERCIAL
CONDENSING BOILER

Submittal Sheet



Lochinvar[®]
HIGH EFFICIENCY BOILERS & WATER HEATERS

MODELS
FB 0751 - FB 6001



FBN-Sub-09

Job Name:
Alaska Regional Fire Training Center
Building Rehabilitation
Engineer:
Morrison-Maierle: Tim Orthmeyer

Location:
Kenai, Alaska

Model #:
FBD-1501

Contractor:

Agent/Wholesaler:
CHC Columbia Hydronics

Type Gas:

Natural

Equipment Tag(s):

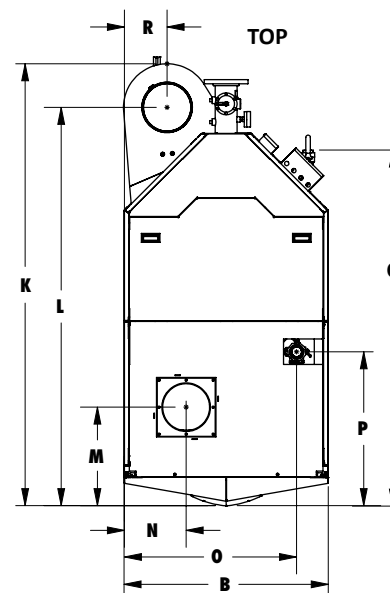
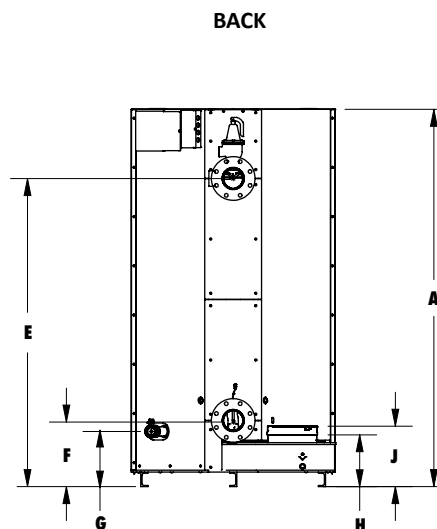
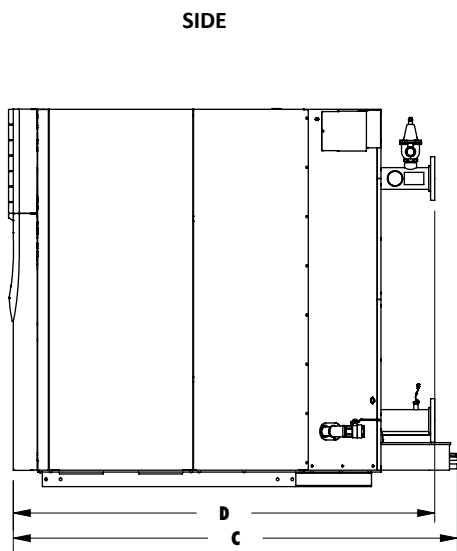
B-1 and B-2

JOB NOTES:

Dual Fuel

Notes:

- * Insert "N" for natural gas, "L" for LP gas models and "D" for dual fuel.
- Indoor installation only. Information subject to change without notice.
- Low NOx Operation.
- Lochinvar should be consulted before selecting a boiler for installations having unusual piping and pickup requirements, such as intermittent system operation, extensive piping systems, etc.
- The ratings have been determined under the provisions governing forced draft burners.
- The Net AHRI water ratings shown are based on a piping and pickup allowance of 1.15.



Model Number	Input MBH		Thermal %	Gross Output MBH	Net AHRI Rating MBH	Turn-down	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	Gas Conn.	Water Inlet/Outlet	Air Intake	Vent Size	Oper. Weight (with water)	Ship. Weight (lbs.)
	Min	Max																											
FB*0751	50	750	96.2%	722	628	15:1	78"	30"	55-1/2"	57-5/8"	66-1/8"	11-7/8"	11-3/8"	11-1/4"	12-1/2"	55"	51"	13"	8-3/4"	26-3/4"	23-3/4"	49-1/2"	7-3/8"	1-1/4"	3"	6"	6"	1,768	1,560
FB*1001	50	999	96.2%	962	837	20:1	78"	30"	56-1/2"	57-5/8"	66-1/8"	11-7/8"	11-3/8"	11-1/4"	12-1/2"	56"	51"	13"	8-3/4"	26-3/4"	23-1/8"	49-1/2"	6-1/2"	1-1/4"	3"	6"	6"	1,838	1,596
FB*1251	63	1,250	96.2%	1,203	1,046	20:1	78"	30"	56-1/2"	57-3/4"	66-1/8"	11-7/8"	11-3/8"	11-1/4"	12-1/2"	56"	51-3/8"	13"	8-3/4"	26-3/4"	21-5/8"	49-1/2"	6-1/2"	1-1/2"	3"	6"	8"	1,975	1,648
FB*1501	60	1,500	96.2%	1,443	1,255	25:1	78"	30"	67-3/4"	68"	65-3/8"	12-3/8"	11-3/8"	11-1/4"	12-1/2"	67-1/4"	62-3/8"	15-7/8"	9"	26-7/8"	27-7/8"	59-1/4"	5-1/8"	1-1/2"	4"	8"	8"	2,307	1,961
FB*1751	70	1,750	96.2%	1,684	1,464	25:1	78"	30"	66-1/4"	68"	65-3/8"	12-3/8"	11-3/8"	11-1/4"	12-1/2"	65-3/4"	61-1/2"	15-7/8"	9"	27"	27-1/8"	58-3/4"	5-1/8"	1-1/2"	4"	8"	8"	2,458	2,017
FB*2001	80	1,999	96.2%	1,924	1,673	25:1	78"	30"	66-1/2"	68"	65-3/8"	12-3/8"	11-3/8"	11-1/4"	12-1/2"	66"	61-1/2"	15-7/8"	9"	27"	26-3/4"	58-3/4"	5-1/8"	1-1/2"	4"	8"	8"	2,570	2,087
FB*2501	125	2,500	96%	2,400	2,087	20:1	77-3/4"	35"	83-3/4"	83-3/4"	63-3/4"	13-1/2"	11-1/4"	10-1/2"	12-1/4"	83-1/4"	76-1/4"	19-3/4"	9-1/4"	28-3/4"	32"	71"	7-1/4"	2"	4"	8"	9"	3,600	2,577
FB*3001	150	3,000	96%	2,883	2,507	20:1	77-3/4"	35"	83-3/4"	83-3/4"	63-3/4"	13-1/2"	11-1/4"	10-1/2"	12-1/4"	83-1/4"	76-1/4"	19-3/4"	9-1/4"	28-3/4"	32"	71"	7-1/4"	2"	4"	10"	10"	3,900	2,881
FB*3501	175	3,500	96%	3,364	2,925	20:1	77-3/4"	42"	91-1/2"	86-3/4"	63-1/2"	13-1/4"	11-1/2"	10-3/4"	12-1/2"	91"	82"	20-1/4"	12-3/4"	35-1/2"	31-3/4"	73-1/4"	8-3/4"	2"	4"	10"	10"	4,600	3,218
FB*4001	333	3,999	96%	3,843	3,342	12:1	77-3/4"	45-1/2"	103-1/2"	99"	63-1/2"	13-3/4"	11-1/2"	10-3/4"	12-1/2"	103"	94"	24-3/4"	13-1/2"	39-1/2"	42-1/4"	85-1/4"	10-1/2"	2-1/2"	4"	12"	12"	5,200	3,805
FB*5001	500	4,999	96%	4,804	4,177	10:1	77-3/4"	46-1/2"	102-1/4"	99-1/2"	63-1/2"	15"	11-1/2"	10-3/4"	12-1/2"	101-3/4"	92-1/2"	22"	14"	39-3/4"	39-1/2"	84"	9"	2-1/2"	6"	14"	14"	5,900	4,101
FB*6001	600	6,000	96%	5,766	5,014	10:1	77-3/4"	50"	102-3/4"	99-3/4"	63-1/4"	14-3/4"	11-1/2"	10-3/4"	12-1/2"	102-1/2"	93-1/4"	20"	15-3/4"	43-1/2"	36-1/2"	83-3/4"	9-1/4"	2-1/2"	6"	14"	14"	6,900	4,711

CREST[®]

CONDENSING BOILER

Codes & Registrations

ANSI Z21.13/CSA Certified

→ ASME Certified, "H" Stamp / National Board

California Code Compliant

Canadian Registration Number (CRN)

CSD1 / Factory Mutual / GE Gap Compliant

South Coast Air Quality Management District
Qualified (FB 0751-2001)

Smart Touch™ Features

CON-X-US Remote Connect

SMART TOUCH Touchscreen Operating Control

Full-Color 8" Touchscreen LCD Display

Built-in Cascading Sequencer for up to 8 Boilers

- › Built-in Redundancy
- › Cascade Multiple Sized Boilers
- › Lead/Lag Cascade
- › Efficiency Optimized Cascade

Front-End Loading Capability with Copper-Fin II® and Power-Fin® Boilers

Building Management System Integration with 0-10 VDC Input

BACnet MSTP Communications

Modbus Communication

Outdoor Reset Control with Outdoor Air Sensor

Password Security

Domestic Hot Water Prioritization

- › DHW tank piped with priority in the boiler loop
- › DHW tank piped as a zone in the system with the pumps controlled by the Smart System
- › DHW Modulation Limiting
- › Separately Adjustable SH/DHW Switching Times

Low Water Flow Safety Control & Indication

Inlet & Outlet Temperature Readout

Freeze Protection

Service Reminder

Time Clock

Data Logging

- › Hours Running, Space Heating
- › Hours Running, Domestic Hot Water
- › Hours Running, Modulation Rate
- › Ignition Attempts
- › Last 10 Lockouts

Programmable System Efficiency Optimizers

- › Night Setback
- › Anti-Cycling
- › Outdoor Air Reset Curve
- › Ramp Delay
- › Boost Temperature & Time
- › Modulation Factor Control

Three Pump Control

- › System Pump
- › Boiler Pump
- › Domestic Hot Water Pump



AHRI
MEMBER

AHRI
CERTIFIED



DESIGNED ★ ENGINEERED ★ ASSEMBLED
USA

High-Voltage Terminal Strip

-
- › 120 VAC / 60 Hertz / 1 Phase Power Supply (FB 0751-2001)
 - › 208 VAC / 60 Hertz / 3 Phase Power Supply (FB 2501-3501)
 - › 480 VAC / 60 Hertz / 3 Phase Power Supply (FB 4001-6001)
 - › System Pump, Boiler Pump and DHW Pump Power

Low-Voltage Terminal Strip

- › 24 VAC Auxiliary Device Relay
- › Auxiliary Proving Switch Contacts
- › Alarm on Any Failure Contacts
- › Runtime Contacts
- › DHW Thermostat Contacts
- › Unit Enable/Disable Contacts
- › System Sensor Contacts
- › DHW Tank Sensor Contacts
- › Outdoor Air Sensor Contacts
- › Cascade Contacts
- › 0-10 VDC BMS External Control Contact
- › 0-10 VDC Variable Speed Boiler Pump Control Contact

Standard Features

Proof of Closure Valve (FB 6001)

Modulating Burner with up to 25:1 Turndown

Direct-Spark Ignition

Low NOx Operation

Sealed Combustion

Air Inlet Filter

Low Gas Pressure Operation

Vertical and Horizontal Direct Venting

- › Direct Vent up to 100 Feet
- › PVC, CPVC, Polypropylene or AL29-4C (FB 0751-3501)
- › AL29-4C (FB 0751-6001)

ASME "H" Stamped Heat Exchanger

316L Stainless Steel Fire Tubes

160 psi Working Pressure

On/Off Switch

Adjustable High Limit with Manual Reset

Low Water Cutoff with Manual Reset & Test

High & Low Gas Pressure Switches w/Manual Reset

Low Air Pressure Switches

Condensate Trap w/Blocked Drain Switch

Drain Valve

System Sensor

Outdoor Air Sensor

Inlet & Outlet Temperature Sensors

High-Voltage Terminal Strip

Low-Voltage Terminal Strip

Downstream Gas Test Cocks

50 psi ASME Relief Valve

Temperature & Pressure Gauge

Zero Clearances to Combustible Materials

High Altitude Models Available

10-Year Limited Warranty (See Warranty for Details)

1-Year Warranty on Parts (See Warranty for Details)

Optional Equipment

- ☐ Alarm Bell
- ☐ BMS Gateway - BACnet IP or LonWorks
- ☐ Condensate Neutralization Kit
- ☐ Common Vent Kits Damper
- ☐ Motorized Isolation Valve
- ☐ Variable Speed Boiler Pump
- ☐ Wireless Outdoor Temperature Sensor
- ☐ 75 psi ASME Relief Valve
- ☐ 100 psi ASME Relief Valve
- ☐ 125 psi ASME Relief Valve
- ☐ 150 psi ASME Relief Valve

Electrical Options (Shipped Loose):

- › FB 0751-2001
 - ☐ 208V/ 3Ø/60 Hz → 120V/ 1Ø/60Hz
 - ☐ 480V/ 3Ø/60 Hz → 120V/ 1Ø/60Hz
 - ☐ 600V/ 3Ø/60 Hz → 120V/ 1Ø/60Hz
- › FB 2501-3501
 - ☐ 480V/ 3Ø/60 Hz → 208V/ 3Ø/60Hz
 - ☐ 600V/ 3Ø/60 Hz → 208V/ 3Ø/60Hz
- › FB 4001-6001
 - ☐ 208V/ 3Ø/60Hz → 480V/ 3Ø/60 Hz
 - ☐ 600V/ 3Ø/60 Hz → 480V/ 3Ø/60Hz



Lochinvar, LLC
300 Maddox Simpson Parkway
Lebanon, Tennessee 37090
P: 615.889.8900 / F: 615.547.1000
f t in y Lochinvar.com

	FB-0751	FB-1001	FB-1251	FB-1501	FB-1751	FB-2001
WATER						
GALLON CAPACITY	73	77	87	94	106	111
HEATING SURFACE (SQ. FT.)	87	114.7	140.5	162.3	186	197.8
INLET WATER CONNECTION	3" Flanged	3" Flanged	3" Flanged	4" Flanged	4" Flanged	4" Flanged
OUTLET WATER CONNECTION	3" Flanged	3" Flanged	3" Flanged	4" Flanged	4" Flanged	4" Flanged
DRAIN	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2
MAXIMUM FLOW RATE (GPM)	350	350	350	350	350	350
ABSOLUTE MINIMUM FLOW RATE (GPM)	18	18	18	25	25	25
20°F ΔT WATER FLOW (GPM)	72	96	120	144	168	192
HEAD LOSS (FT. OF HD.)	4.8	8.3	9.2	12.3	13.8	14.5
40°F ΔT WATER FLOW (GPM)	36	48	60	72	84	96
HEAD LOSS (FT. OF HD.)	3.0	6.0	6.0	7.3	8.1	8.1
MAX. WORKING PRESSURE (PSI)	160	160	160	160	160	160
# OF RELIEF VALVES	1	1	1	1	1	1
RELIEF VALVE SIZE	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	1 1/2
RELIEF VALVE RATING (MBH)	1,954,000	1,954,000	1,954,000	1,954,000	1,954,000	3,075,000
RELIEF VALVE PRESSURE RATING (PSI)	50	50	50	50	50	50
GAS						
BTU/HR INPUT	750,000	999,999	1,250,000	1,500,000	1,750,000	1,999,999
BTU/HR OUTPUT (HIGH FIRE)	720,000	960,000	1,200,000	1,440,000	1,680,000	1,920,000
BTU/HR OUTPUT (LOW FIRE)	48,100	48,100	60,125	57,720	67,340	76,960
HORSE POWER (INPUT)	22	30	37	45	52	60
INLET CONNECTION	1 1/4	1 1/4	1 1/2	1 1/2	1 1/2	1 1/2
MAX. INLET PRESSURE, NAT	14" w.c.	14" w.c.	14" w.c.	14" w.c.	14" w.c.	14" w.c.
MIN. INLET PRESSURE, NAT	4" w.c.	4" w.c.	4" w.c.	4" w.c.	4" w.c.	4" w.c.
MAX. INLET PRESSURE, LP	14" w.c.	14" w.c.	14" w.c.	14" w.c.	14" w.c.	14" w.c.
MIN. INLET PRESSURE, LP	4" w.c.	4" w.c.	4" w.c.	4" w.c.	4" w.c.	4" w.c.
ELECTRICAL *						
VOLTAGE/HEATER (VAC)	120/1PH	120/1PH	120/1PH	120/1PH	120/1PH	120/1PH
VOLTAGE/CONTROL (VAC)	24	24	24	24	24	24
TOTAL AMPS (FLA)	5	6	7	10	10	13
MINIMUM CIRCUIT AMPS (MCA)	6	8	9	13	13	16
# OF ELECTRICAL CONNECTIONS	1	1	1	1	1	1
DIMENSIONS						
HEIGHT	78	78	78	78	78	78
WIDTH	30	30	30	30	30	30
DEPTH	57 5/8	57 5/8	57 3/4	68	68	68
SHIPPING WEIGHT (lbs.)	1,560	1,596	1,648	1,961	2,017	2,087
OPERATING WEIGHT (lbs.)	1,768	1,838	1,975	2,307	2,458	2,570
SERVICE CLEARANCES (RECOMMENDED)						
FRONT	30	30	30	30	30	30
REAR	24	24	24	24	24	24
RIGHT SIDE	24	24	24	24	24	24
LEFT SIDE	24	24	24	24	24	24
TOP	24	24	24	24	24	24
DIRECT VENTING						
VENT SIZE	6	6	8	8	8	8
AIR INLET SIZE	6	6	6	8	8	8
VENT CATEGORY	II or IV	II or IV	II or IV	II or IV	II or IV	II or IV
VENT MATERIAL	SS, CPVC, PVC, Polypro	SS, CPVC, PVC, Polypro	SS, CPVC, PVC, Polypro	SS, CPVC, PVC, Polypro	SS, CPVC, PVC, Polypro	SS, CPVC, PVC, Polypro

* Electrical - For alternate voltages and amp draws, please consult the factory or the installation and operation manual.

Unless otherwise specified dimensions are in inches.

Lochinvar LLC • 300 Maddox Simpson Pkwy • Lebanon, TN 37090 • 615-889-8900 / Fax: 615-547-1000


www.Lochinvar.com

Ratings



DOE



<div> Crest AHRI Rating</div>					Other Specifications						
Model Number Note: Change "N" to "L" for L.P. gas models.	Input MBH (Notes 4 - 6)		Gross Output MBH (Note 1)	Net AHRI Ratings Water, MBH (Note 2)	Appliance Water Content Gallons	Pipe Size Outlet	Pipe Size Inlet	Gas Inlet Size	Air Size	Vent Size (Note 3)	Weight w/Water (lbs.)
	Min	Max									
FB(N,L,D)0751	50	750	720	626	73	3"	3"	1 1/4"	6"	6"	1768
FB(N,L,D)1001	50	999	960	835	77	3"	3"	1 1/4"	6"	6"	1838
FB(N,L,D)1251	62	1250	1200	1043	87	3"	3"	1 1/2"	6"	8"	1975
FB(N,L,D)1501	60	1500	1440	1252	94	4"	4"	1 1/2"	8"	8"	2307
FB(N,L,D)1751	70	1750	1680	1460	106	4"	4"	1 1/2"	8"	8"	2458
FB(N,L,D)2001	80	1999	1920	1670	111	4"	4"	1 1/2"	8"	8"	2570
FB(N,L,D)2501	125	2500	2403	2089	157	4"	4"	2"	8"	9"	3600
FB(N,L,D)3001	150	3000	2880	2504	156	4"	4"	2"	10"	10"	3900
FB(N,L,D)3501	175	3500	3360	2922	202	4"	4"	2"	10"	10"	4600
FB(N,L,D)4001	333	3999	3840	3339	201	4"	4"	2 1/2"	12"	12"	5200
FB(N,L,D)5001	500	4999	4800	4174	254	6"	6"	2 1/2"	14"	14"	5900
FB(N,L,D)6001	600	6000	5760	5009	304	6"	6"	2 1/2"	14"	14"	6900

NOTICE

Maximum allowed working pressure is located on the rating plate.

Notes:

- The ratings are based on standard test procedures prescribed by the United States Department of Energy.
- Net AHRI ratings are based on net installed radiation of sufficient quantity for the requirements of the building and nothing need be added for normal piping and pickup. Ratings are based on a piping and pickup allowance of 1.15.
- Crest boilers require special gas venting. Use only the vent materials and methods specified in the Crest Installation and Operation Manual.
- Standard Crest boilers are equipped to operate from sea level to 4,500 feet **only**. The boiler will de-rate by 1.4% for each 1,000 feet above sea level up to 4,500 feet.
- High altitude Crest Models are equipped to operate from 3,000 to 12,000 feet **only**. The boiler will not de-rate up to 5,500 feet and will de-rate by 1.6% for each 1,000 feet above 5,500 feet. The operation given in this manual remains the same as the standard boilers. A high altitude label (as shown in FIG A.) is also affixed to the unit.

De-rate values are based on proper combustion calibration and CO₂'s adjusted to the recommended levels.

- High altitude Crest Models 4.0 and 5.0 will not de-rate up to 5,500 feet.
- The high altitude Crest 6.0 model will de-rate by 2.0% for each 1000 feet above sea level up to 5,500 feet.
- For Crest Models 4.0, 5.0 and 6.0, installations above 5,500 feet contact the factory.
- Ratings have been confirmed by the Hydronics Section of AHRI.

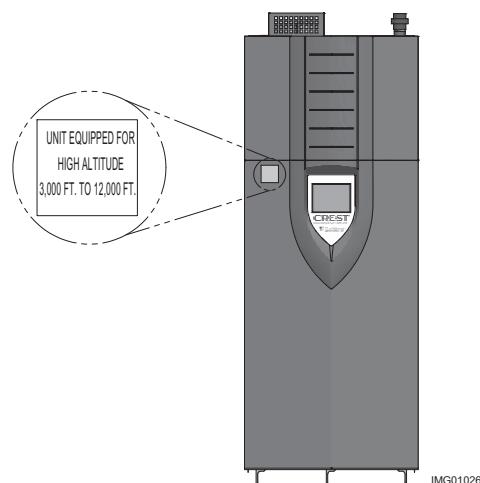


Figure A High Altitude Label Location

**SECTION 1.10
SPECIAL PROVISIONS
CONTENTS
KENAI TRAINING CENTER
KENAI, ALASKA**

- 1.00 Location and Scope**
 - 1.01 Location
 - 1.02 Scope
- 2.00 Contract Documents**
 - 2.01 Specifications
 - 2.02 Plans
- 3.00 Pre-Bid Conference / Pre-Construction Conference**
 - 3.01 Pre-bid Conference
 - 3.02 Pre-Construction Conference
- 4.00 Project Award, Financing and Scheduling**
 - 4.01 Funding
 - 4.02 Scheduling
 - 4.03 Permits
- 5.00 Number of Prime Contracts**
- 6.00 Construction Surveys by Contractor**
- 7.00 Contractor Operations**
 - 7.01 Underground Utilities
 - 7.02 Job Site Safety
- 8.00 Materials Testing and Quality Control**
- 9.00 Contract Time, Liquidated and Actual Damages**
 - 10.01 Contract Time
 - 10.02 Liquidated Damages and Actual Damages
- ~~**10.00 Payment to Contractor**~~
 - ~~11.01 General~~
 - ~~11.02 Partial and Final Payment~~
 - ~~11.03 Payments to Subcontractors and Suppliers~~
- ~~**11.00 Engineering Interpretations**~~
 - ~~11.01 Engineering Decisions~~
- ~~**12.00 Emergency Situations**~~

~~13.0 Insurance~~

- ~~13.01 Licensed Insured's~~
- ~~13.02 Certificates of Insurance~~
- ~~13.03 Contractor's Insurance~~
- ~~13.04 Owner's Insurance~~
- ~~13.05 Contractor's Insurance Coverage~~
- ~~13.06 Waiver of Rights~~
- ~~13.07 Receipt and Application of Insurance Proceeds~~
- ~~13.08 Acceptance of Insurance, Option to Replace~~
- ~~13.09 Partial Utilization, Acknowledgement of Property Insurer~~

14.00 Submittals

- 14.01 Initial Submittal
- 14.02 Shop Drawings
- 14.03 Procedure
- 14.04 Engineer's Approval

~~15.00 Dispute Resolution (Mediation)~~

16.00 Federal AID Relationship (FAA Grant) to Instruction to Bidders.

17.00 Underground Utilities

18.00 Record Drawings and Material Testing Summary

19.00 Buy American – Supplemental Information

20.00 Work Area Cleanup

21.00 Contractor's Certificate and Release

SPECIAL PROVISIONS

The following Special Provisions are hereby made a part of this contract and shall supplement and/or supersede any articles of these specifications in conflict therewith.

Any subsequent addenda issued after these specifications have been prepared shall supplement and/or supersede any article of these specifications.

Herein the **Owner**, shall be understood to be City of Kenai, Kenai, Alaska

Herein the **Engineer**, shall be understood as the firm of **Morrison Maierle, Inc**

Herein where the term **FAA** is used it shall be understood as the **Federal Aviation Administration**.

1.00 LOCATION AND SCOPE

1.01 Location: Alaska Regional Emergency Services Training Center, Kenai, Alaska

1.02 Scope: The major elements of work include:

- Schedule 1 – Training System Components
- Schedule 2- Training Building Rehabilitation
- Schedule 3 – Roof System Rehabilitation
- Schedule 4 – Flooring Rehabilitation
- Schedule 5 – Interior and Exterior Lighting Rehabilitation
- Schedule 6 – Maneuver Area Rehabilitation

2.00 CONTRACT DOCUMENTS

2.01 Specifications: As itemized in Table of Contents of these specifications.

2.02 Plans: The plans for the project are bound separately but are as much a part and parcel of these contract documents as if they were bound herein. Said plans are itemized by sheet title and number on the title sheet of the plans.

3.00 PRE-BID / PRE-CONSTRUCTION / PRE-PAVING CONFERENCE

3.01 The Pre-Bid Conference . . There will be a Pre-Bid Conference, at the time and location referenced in the invitation to bid. Interested Prime Contractors are encouraged to attend. The purpose of the conference will be to discuss safety, construction scope, and scheduling. A tour of the project site will be conducted for interested parties following the conference. The Owner will not provide additional tours. A pre-construction conference will be scheduled with the successful bidder(s) following contract award and prior to construction.

3.02 **Pre-Construction Conference.**

The Prime Contractor(s) shall submit within seven (7) days prior to the pre-construction conference(s) a construction schedule in a form that shows the daily schedule of work. The schedule shall be capable of updating to show actual progress of work, and enable revisions, if required, to be easily made. Construction operations may begin no sooner than five (5) days after approval of the construction schedule. This time is necessary for coordination of the Airport users.

At the pre-construction conference(s), the Contractor(s) will be required to discuss details of how they expect to conduct their operations. These details shall include their best estimate of timing on such things as delivery of materials and the commencement of the various construction activities as per the Schedule outlined in the plans and specifications. Costs associated with the pre-construction conference(s) shall not be paid for directly, but shall be absorbed in other items of work.

4.00 **PROJECT AWARD, FINANCING AND SCHEDULING**

4.01 **Funding:** This project is to be built with the Owner's local funds and grant(s) from the FAA. Therefore, award of the Contract by the Sponsor will be made subject to concurrence of the FAA.

4.02 **Scheduling:** The Notice to Proceed with construction of the project will be issued to the Contractor after FAA concurrence in Contract award is made and grant issued for the project.

The Notice to Proceed however is dependent on the issuance of a grant by the FAA and the Owners ability to issue a notice to proceed.

4.03 **Permits:** All permits required to complete the work are an obligation of the Contractor to obtain. ~~at the Contractor's expense.~~ **The City of Kenai will cover the Building Permit Costs.**

5.00 **NUMBER OF PRIME CONTRACTS**

The Owner reserves the right to enter into a single contract with a single Contractor for the combination of schedules and alternate schedules as selected by the Owner. See City of Kenai General Provisions as it relates to limitations on subcontracting portions of the contract.

5.01 **Subcontracts:**

The successful prime contractor shall provide a copy of all subcontractor contracts on the project.

6.00 **CONSTRUCTION SURVEYS BY CONTRACTOR**

All survey requirements shall be the responsibility of the Contractor and shall comply with the requirements of the Technical Specifications as applicable.

7.00 CONSTRUCTION SURVEYS BY CONTRACTOR

7.01 Underground Utilities. The Contractor shall be responsible for checking with the Owners of underground utilities as to the location of their underground lines. The Contractor shall be solely responsible for any damage done to these installations due to failure to locate them or to properly protect them when their location is known.

It shall be solely the responsibility of the Contractor to fully coordinate his work with the agencies and to keep them informed of his construction activities so that these vital installations are fully protected at all times.

7.02 Jobsite Safety. Jobsite health and safety is the sole responsibility of the Contractor. Neither the professional activities of the Engineer/Owner, nor the presence of the Engineer's/Owner's employees and subconsultants at the construction site, shall relieve the Contractor, Subcontractors or any other Contractor entity of their obligations, duties and responsibilities including, but not limited to, construction means, methods, sequence, techniques or procedures necessary for performing, superintending or coordinating all portions of the work of construction in accordance with the contract documents and any health or safety precautions required by any regulatory agencies. The Contractor shall indemnify and defend the Owner, Engineer, and Engineer's subconsultants from all claims arising from the performance of the Contractor and his Subcontractors.

It is understood and agreed that the Contractor has sole responsibility for jobsite safety. Notwithstanding this Contractor responsibility, if the Engineer observes situations that the Engineer believes to be a hazard or safety violation, the Engineer shall report the matter to the Contractor, the Owner and the Project Manager. The Contractor agrees to indemnify the Engineer and hold the Engineer harmless from any claims, demands or liability arising from the Engineer's exercise of professional responsibility in this regard.

Personal Protective Equipment. All Contractor personnel shall wear safety vests and other applicable personal protective equipment (PPE) while on the project site in accordance with the Contractor's safety program. As the Contractor is responsible for all jobsite safety, the Contractor may direct the Owner and Engineer to utilize required PPE while in their designated work area(s).

8.00 MATERIALS TESTING AND QUALITY CONTROL

8.01 Testing Responsibilities.

Contractor

The Contractor shall provide an independent certified testing laboratory (approved by the Engineer and meeting project specifications) to perform all materials, acceptance, and quality control tests called for in the specifications, at no cost to the Owner.

Testing results shall be provided to the Engineer at the time of the test. Handwritten reports shall to be delivered to the Engineer the next working day, with a typewritten report to follow. A full copy of the typewritten testing results on applicable FAA forms, and an electronic copy on a CD, shall be provided to the Engineer from the testing laboratory at the end of construction. No work on a particular item shall be accomplished until the required preliminary and suitability tests have been completed for that particular item. At the Owner's request the Contractor shall provide samples of materials for independent test verification at the Owner's expense.

Acceptance and rejection of materials will generally be determined from tests made of the various courses complete and in-place in the field. It is the responsibility of the Contractor to conduct, control and test his production operations in such a manner that the material produced will meet the specification requirements.

- 8.02 Acceptance and rejection of materials will generally be determined from tests made of the various courses complete and in-place in the field. It is the responsibility of the Contractor to conduct, control and test his production operations in such a manner that the material produced will meet the specification requirements.
- 8.03 In addition, the Contractor shall provide a summary of all materials testing performed on the project in a neatly organized bound document covering all materials testing organized by each specification section. The summary of the test results shall be provided in electronic format.

9.00 CONTRACT TIME, LIQUIDATED AND ACTUAL DAMAGES

The project schedule is anticipated to be:

October 1, 2019 – Issue Notice to Proceed with construction.

February 28, 2020 – Substantial Completion Inspection

March 27, 2020 – Final Inspection and completion of project.

These dates may be subject to changes based on availability of grant funds or other occurrences.

- 9.01 Contract Time: Contract time is as follows:

October 1, 2019 – Issue Notice to Proceed with construction.

February 28, 2020 – Substantial Completion Inspection

March 27, 2020 – Final Inspection and completion of project.

Liquidated damages apply to overrun of contract time

A pre-construction conference will be held prior to beginning construction, at which time, a Notice to Proceed will be issued. The Notice to Proceed (NTP) dates is contingent on the construction schedule proposed by the Contractor and approved by the Owner.

Once the Engineer agrees that the contract is substantially complete, the Engineer will examine the project and provide a punch list of items to be completed. Upon receipt of the punch list, the Contractor shall have ten (10) calendar days to complete the punch list items and any other items remaining to complete the project, unless otherwise agreed to by the Owner in writing. Typically, the project will not be considered substantially complete until at least 95% of all work has been satisfactorily completed.

Should the punch list items of work not be completed within the time period, the Owner has the right to employ another company to perform the work and withhold payments to the Prime Contractor to pay for completion.

9.02 Liquidated Damages and Actual Damages:

The Owner shall be entitled to liquidated damages for failure of the Contractor to complete the work within the specified contract time noted above.

The Contractor further agrees to pay damages for expenses incurred by the Owner for additional engineering services during the contract time overrun; for unscheduled employment of the Engineer necessitated by the Contractor working overtime, Sundays, or holidays; and for furnishing materials or equipment not in conformance with the Contract Documents.

A. As compensation for damages incurred by the Owner as a result of the Contractor exceeding the specified total contract time, the Contractor shall be assessed a liquidated damage of \$1,500.00 per calendar day for each calendar day that the work remains uncompleted beyond the specified contract time for the total project.

C. The Bidder further agrees to pay actual damages according to the following hourly rates for the unscheduled employment of the Engineer necessitated by the Contractor:

1. Working more than 10 hours per day, more than five (5) days per week and Saturdays (time and one-half), and holidays, and Sundays (double time).
2. Furnishing materials or equipment not in conformance with Contract Documents necessitating redesign by the Engineer.
3. Working beyond the time of completion established in the Notice to Proceed with Construction:

Description	Cost
Supervising Engineer III	\$195/ hr
Supervising Engineer II	\$185/hr
Supervising Engineer I	\$175/hr
Senior Engineer II	\$160/hr
Senior Engineer I	\$145/hr
Design Engineer II	\$135/hr
Design Engineer I	\$125/hr
Engineer Intern II	\$112/hr

Engineer Intern I	\$103/hr
Senior Engineering Technician	\$138/hr
Engineering Technician	\$103/hr
Land Surveyor III	\$135/hr
Land Surveyor II	\$120/hr
Land Surveyor I	\$108/hr
Survey Technician III	\$95/hr
Survey Technician II	\$85/hr
Survey Technician I	\$72/hr
Out-of-Pocket Cost Materials, Equipment, supplies, transportation, lodging, subsistence, etc.	At Cost

Liquidated and actual damages noted above will be applied concurrently, if applicable, for each calendar day and occurrence in which the Contractor does not meet the criteria noted.

All damages shall be paid by deduction from monthly progress payments and the final payment.

10.00 PAYMENT TO CONTRACTORS

~~10.01 General: This AIP project involves payment to Contractors not only from funds the Owner has on hand for this purpose but also, to a substantial degree grant funds from the Federal Aviation Administration (FAA). The Contractor is hereby advised that the Owner and the Engineer will expedite partial and final payments to the Contractor as much as possible but since FAA grant funds must be obtained to make these payments, the Contractor should anticipate and allow time for obtaining these grant funds before expecting partial or final payments under this Contract.~~

~~10.02 Partial and Final Payments: Following is the procedure, which will be used in making partial and final payments to the Contractor. At the pre-construction conference the Engineer and Contractor(s) shall agree on a date each month when work will be cut off for that month's estimate. No later than ten (10) calendar days after said cut off date the Engineer will prepare the estimate for payment to the Contractor and Federal Aid Application for FAA grant payment to the Airport which will be provided to the Owner within the ten day period.~~

- ~~A. No later than seven (7) days after receipt of the Federal Grant payment from the U.S. Treasury the Airport will process and pay the claim for the partial or final estimate as the case may be.~~
- ~~B. The Contractor may request in writing a reduction in the amount of retainage withheld.~~
- ~~C. The Contractor will not be paid the final retainage of his contract price until the final FAA inspection has been held. There may be considerable delay in receiving final payment.~~
- ~~D. Final Payment shall not be due until the Contractor has provided the Owner with an "Amounts Paid DBE Participants," in the form provided, Record Drawings as per General and Special Provisions, and Lien Releases or certification as per General and Special Provisions.~~

~~E. The making of final payment will not relieve the Contractor from claims arising from the failure of the work to comply with the requirements of the Contract Document.~~

~~10.03 **Payments to Subcontractors and Suppliers:** The Prime Contractor agrees to pay each subcontractor and supplier under this prime contract for satisfactory performance of its contract no later than ten (10) days from the receipt of each payment the Prime Contractor receives from the Owner. The Prime Contractor agrees further to return retainage payments to each subcontractor or supplier within ten (10) days after the subcontractor's work is satisfactorily completed. Any delay or postponement of payment from the above referenced time frame may occur only for good cause following written approval of the Owner. This clause applies to both DBE and non-DBE subcontractors and suppliers.~~

11.00 ENGINEERING INTERPRETATIONS

~~11.01 **Engineering Decisions:** It is realized that timely engineering decisions on construction activities or results have an important bearing on the Contractor's schedule. On this project the Engineer will make every effort to have a Resident Project Representative (RPR) readily available to the project during the construction schedule, who has the authority to make judgment calls on matters dealing with interpretation of the plans and specifications, with the one qualification, that he shall have the right to take twenty-four (24) hours to confer with other Engineers or FAA before giving said decision.~~

~~When the decision affects a plan design or specification change, it should be realized that more time may be required than twenty-four (24) hours to gain the necessary Owner and FAA participation in the decision process including time for formal change order preparation as required.~~

12.00 EMERGENCY SITUATIONS

~~12.01 Contractor shall take appropriate measures during emergency situations.~~

13.00 INSURANCE

13.01 Licensed Insurers

~~A. All insurance required by the Contract Documents to be purchased and maintained by the Contractor shall be obtained from insurance companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue insurance policies for the limits and coverages so required.~~

~~B. Without limiting any of the other obligations or liabilities of the Contractor, Contractor shall secure and maintain such insurance from an insurance company (or companies) authorized to write insurance in the state of the project location, with minimum "A.M. Best Rating" of A, VI, as will protect the Contractor, the vicarious acts of~~

~~subcontractors, the Owner, the Engineer, the Engineer's Consultants, and the respective directors, officers, partners, agents, employees and other consultants and subcontractors of each and any of all such additional insureds from claims for bodily injury (including sickness, disease and mental anguish), death, and property damage which may arise from operations and completed operations under this Agreement. Contractor shall not commence work under this Agreement until such insurance has been obtained and certificates of insurance, with binders, and endorsements or certified copies of the insurance policy shall have been filed with the Owner and the Engineer.~~

~~13.02 Certificates of Insurance~~

- ~~A. CONTRACTOR shall deliver to OWNER, with copies to each additional insured, certificates of insurance, endorsements, (and other evidence of insurance requested by OWNER or any other additional insured) which CONTRACTOR is required to purchase and maintain in accordance with paragraphs 13.03 and 13.05.~~
- ~~B. An Authorized Representative of the insurance company for the CONTRACTOR shall review the specified insurance requirements of paragraphs 13.03 and 13.05.~~
- ~~C. All insurance required to be provided under paragraphs 13.03 and 13.05 shall be written in such a manner as to afford primary insurance coverage (as opposed to excess or secondary coverage) to meet or exceed the insurance requirements for all insureds and additional insureds and their directors, officers, employees and agents.~~
- ~~D. Failure of the Owner to demand such certificates, endorsements, or other evidence of Contractor's full compliance with these insurance requirements or failure of the Owner to identify a deficiency in the compliance from the evidence provided shall not be construed as a waiver of Contractor's obligation to maintain such insurance.~~
- ~~E. By requiring such insurance and insurance limits specified herein, Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect the Contractor.~~
- ~~F. The insurance and insurance limits required herein shall not be deemed as a limitation on the Contractor's liability under the indemnities granted to the Owner in the Contract Documents.~~

~~13.03 Contractors Insurance~~

- ~~A. Contractor shall purchase and maintain such insurance as is appropriate for the Work being performed and as will provide protection from claims set forth below which may arise out of or result from Contractor's performance of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable:~~

1. ~~claims under workers' compensation, disability benefits, and other similar employee benefit acts;~~
2. ~~claims for damages against Contractor because of bodily injury, property damage, occupational sickness, accident or disease, or death of or to Contractor's employees.~~
3. ~~claims for damages because of bodily injury, sickness, disease, property damage, or death of any person other than Contractor's employees;~~
4. ~~claims for damages insured by reasonably available personal injury liability coverage;~~
5. ~~claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom; and~~
6. ~~claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.~~
7. ~~The Liability Policy Purchased by the Contractor will provide that the definition of bodily injury will include claims for mental anguish.~~

~~B. The policies of insurance required by this Paragraph 13.03 shall:~~

1. ~~with respect to insurance required by Paragraphs 13.03.A.3 through 13.03.A.6 inclusive, be written on an occurrence basis, include as additional insureds Owner and Engineer, Engineer's Consultants, and any other individuals or entities identified in the Special Provisions, all of whom shall be listed as additional insureds, and include coverage for the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of all such additional insureds, and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby;~~
2. ~~include at least the specific coverages and be written for not less than the limits of liability provided in the Special Provisions or required by Laws or Regulations, whichever is greater;~~
3. ~~include contractual liability insurance covering Contractor's indemnity obligations under Paragraphs 7.2-11 of the General Provisions;~~
4. ~~contain a provision or endorsement that the coverage afforded will not be canceled, materially changed or renewal refused until at least 45 days prior written notice has been given to Owner and Contractor and to each other additional insured identified in the Special Provisions to whom a certificate of insurance has been issued (and the certificates of insurance and endorsements furnished by the Contractor pursuant to Paragraph 13.02 will so provide);~~

5. ~~remain in effect for a period of at least one year following final payment and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work in accordance with General Provisions Section 90-10; and~~

~~6. Additional Insureds:~~

- a. ~~With respect to insurance required by paragraphs 13.03.A.3 through 13.03.A.6, inclusive, include the following as additional insureds. Use the following Additional Insured Endorsements:~~

ENTITY	FORM
Owner — City of Kenai; Kenai, Alaska	use Additional Insured Endorsements CG2010 and CG2037 Additional insured must include On-going Operations as well as Completed Operations.
Engineer — Morrison Maierle, Inc	use Additional Insured Endorsement CG2032
Engineers' Consultants — K+A Design Studios, T-3 Alaska, LLC.	use Additional Insured Endorsement; CG2032

~~13.04 Owner's Insurance~~

- A. ~~In addition to the insurance required to be provided by Contractor under Paragraph 13.03, Owner, at Owner's option, may purchase and maintain at Owner's expense Owner's own liability insurance as will protect Owner against claims which may arise from operations under the Contract Documents.~~
- B. ~~The Owner shall purchase and maintain such equipment breakdown insurance or additional property insurance as may be required by the Special Provisions or Laws and Regulations which will include the interests of Owner, Contractor, Subcontractors, Engineer, Engineer's Consultants and any other individuals or entities identified in the Special Provisions, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as a loss payee.~~

~~13.05 Contractor's Insurance Coverage. Refer to City of Kenai General Conditions.~~

~~13.06 Waiver of Rights~~

- A. ~~Owner and Contractor intend that all insurance policies purchased will protect Owner, Contractor, Subcontractors, Engineer, Engineer's Consultants, and all other individuals or entities identified in the Special Provisions as loss payees (and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them) in such policies and will provide primary coverage for all losses and damages caused by the perils or causes of loss covered thereby. All such policies shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any of the insureds or loss payees thereunder. Owner, Contractor, Subcontractors, Engineer, Engineer's Consultants and all other persons or entities identified in the Special Provisions to be~~

~~listed as insureds or additional insureds under such policies waive all rights against each other and their respective officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them for all losses and damages caused by, arising out of or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Subcontractors, Engineer, Engineer's Consultants, and all other individuals or entities identified in the Special Provisions as loss payees (and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them) under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by Owner as trustee or otherwise payable under any policy so issued.~~

~~B. Owner waives all rights against Contractor, Subcontractors, Engineer, Engineer's Consultants, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them for:~~

- ~~1. loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other perils whether or not insured by Owner; and~~
- ~~2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by Owner during partial utilization pursuant to General Provisions Section 50-14, after Substantial Completion pursuant to the General Conditions, or after final payment pursuant to the General Conditions.~~

~~C. Any insurance policy maintained by Owner covering any loss, damage or consequential loss shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against Contractor, Subcontractors, or Engineer, or Engineer's Consultants, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them.~~

13.07 Receipt and Application of Insurance Proceeds

~~A. Losses insured under the policies of insurance required by this section that include Owner as a named insured will be adjusted with Contractor and made payable to Contractor as fiduciary for the loss payees, as their interests may appear, subject to the requirements of any applicable mortgage clause and of Paragraph 13.07B. Contractor shall deposit in a separate account any money so received and shall distribute it in accordance with such agreement as the parties in interest may reach. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the moneys so received applied on account thereof, and the Work and the cost thereof covered by an appropriate Change Order.~~

~~B. Owner as first named insured shall have power to adjust and settle any loss with the insurers unless one of the parties in interest shall object in writing within 15 days after~~

~~the occurrence of loss to Owner's exercise of this power. If such objection be made, Owner shall make settlement with the insurers in accordance with such agreement as the parties in interest may reach. If no such agreement among the parties in interest is reached, Owner shall adjust and settle the loss with the insurers and, if required in writing by any party in interest, Owner shall give bond for the proper performance of such duties. Arbitrators shall be chosen as provided in paragraph 13.07.C. Owner shall in that case make settlement with the insurers in accordance with the direction of such arbitrators. If distribution of the insurance proceeds by arbitration is required, the arbitrators will direct such arbitration.~~

~~C. Arbitrators, if required, shall be selected in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association.~~

13.08 Acceptance of Insurance, Option to Replace

~~A. If either Owner or Contractor has any objection to the coverage afforded by or other provisions of the insurance required to be purchased and maintained by the other party in accordance with Section 13 of the General Conditions on the basis of non-conformance with the Contract Documents, the objecting party shall so notify the other party in writing within 14 days after receipt of the certificates (or other evidence requested) required by the Contract Documents. Owner and Contractor shall each provide to the other such additional information in respect of insurance provided as the other may reasonably request. If either party does not purchase or maintain all of the insurance required of such party by the Contract Documents, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage. Without prejudice to any other right or remedy, the other party may elect to obtain equivalent insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and a Change Order shall be issued to adjust the Contract Price accordingly.~~

13.09 Partial Utilization, Acknowledgement of Property Insurer

~~If Owner finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in the General Conditions, no such use or occupancy shall commence before the insurers providing the property insurance pursuant to Paragraph 13.05 have acknowledged notice thereof and in writing effected any changes in coverage necessitated thereby. The insurers providing the property insurance shall consent by endorsement on the policy or policies, but the property insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy~~

14.00 SUBMITTALS

14.01 Initial Submittal: Prior to the first application for payment, the Contractor shall submit the following information:

- A. Schedule of Amounts for Contract Payment: This form shall contain a breakdown of the labor, materials and other costs associated with the various portions of the work and shall be the basis for the progress payments to the Contractor (Summary of Project Costs).
- B. Subcontractor List: The Contractor shall list all Subcontractors doing work in excess of \$5,000.00 and their current Contractors Registration Number.
- C. Copies of all Subcontracts.
- D. Progress Schedule: The Contractor shall prepare a progress schedule, using a form of his choosing, that is acceptable to the Engineer. The schedule show the estimated progress of the entire project through the time period allowed for completion.

14.02 Shop Drawings: See Special Provision 19.00 regarding Buy American Requirement and required timing of submittals.

- A. Shop Drawings: The term "shop drawings" includes drawings, diagrams, layouts, schematics, descriptive literature, illustrations, schedules, performance and test data, and similar materials requested by the Engineer to be furnished by the Contractor to explain in detail specific portions of the work required by the Contract.
- B. Contractor's Review and Approval: The Contractor shall coordinate all submittals and review them for accuracy, completeness, and compliance with contract requirements and shall indicate his approval thereon as evidence of such coordination and review. Items submitted to Engineer without evidence of the Contractor's approval may be returned for resubmission.
- C. Buy American Certification. The contractor shall provide with each product to be used on the project the "Buy American Certification" form or letter from the supplier or manufacturer certifying that the products meet the Buy American Requirements. The letter shall specifically state that the product complies with 49 USC § 50101 for steel and manufactured goods used on AIP projects.

14.03 Procedure:

- A. Date and Number: Unless required otherwise due to Buy American requirements, at least ten (10) days prior to their need for approval, Contractor shall forward to Engineer all items required by the individual sections of the specifications. Unless a different method is called for in the individual sections, submittals shall be provided in electronic PDF format via e-mail and/or the number of hard copies provided that are desired to be returned to the Contractor.
- B. Cover Letter: All submittals shall be forwarded with a cover letter from the Contractor, identifying the project and the portion of the project to which it applies. Submittals that are related to or affect each other shall be forward simultaneously as a package to facilitate a coordinated review. Uncoordinated submittals will be rejected. The Engineer reserves the right to require submittals in addition to those called for in individual sections.

14.04 Engineer's Approval:

- A. Engineer's Approval: The Engineer will indicate his approval and disapproval of each submittal and, if he does not approve the submittal as submitted, will indicate his reasons therefore. Any work done prior to approval shall be at the Contractor's own risk. Approvals shall not relieve the Contractor from responsibility for complying with the requirements of this Contract. If submittals show variations from the Contract requirements, the Contractor shall describe such variations in writing, within the before mentioned cover letter at the time of submission. Approval of such variations shall be accompanied with a Contract Modification. Minor variations not involving a change in price or time of performance will not be issued a modification.

15.00 DISPUTE RESOLUTION (MEDIATION)

~~Mediation must be initially used for dispute resolution for Claims for Adjustment, Disputes, Acceptance and Final Payment.~~

~~OWNER and CONTRACTOR agree that if a dispute arises out of or relates to the Contract Documents, or a breach thereof, and if the dispute cannot be settled through direct discussions, the parties agree to first endeavor to settle the dispute by non-binding mediation administered by the American Arbitration Association under its Construction Industry Mediation Rules before having recourse to a judicial forum.~~

~~OWNER and CONTRACTOR further agree to include a similar mediation provision in all agreements with independent Contractors, design professionals and consultants retained for the project and to require all independent Contractors, design professionals and consultants also to include a similar mediation provision in all agreements with Subcontractors, subconsultants, suppliers or fabricators so retained, thereby providing for mediation as the first method for dispute resolution between the parties to those agreements.~~

~~When a written decision of the Engineer states that the decision is final but subject to mediation, a demand for mediation of a dispute concerning such decision must be made within 30 days after the date on which the party making the demand receives the final written decision. Failure to demand mediation within said 30 day period shall result in the Engineer's decision becoming final and binding upon the Owner and Contractor.~~

16.00 FEDERAL AID RELATIONSHIP (FAA GRANT) TO INSTRUCTIONS TO BIDDERS

Since a Federal Grant from the Federal Aviation Administration is involved in this project, any provision of Alaska law giving preference to an Alaska resident over a non-resident bidder **does not** apply to this Federal Aid Project.

17.00 UNDERGROUND UTILITIES

The Contractor shall be responsible for checking with the Owners of underground utilities as to

the location of their underground lines. The Contractor shall be solely responsible for any damage done to these installations due to failure to locate them or to properly protect them when their location is known.

It shall be solely the responsibility of the Contractor to fully coordinate his work with the agencies and to keep them informed of his construction activities so that these vital installations are fully protected at all times.

The following is a list of Owners and Contact Persons who are known to have utilities at the Airport. This list may not be complete and the Contractor is urged to communicate and coordinate his activities with all involved parties.

18.00 - RECORD DRAWINGS AND MATERIALS TESTING SUMMARY

The Contractor's Superintendent shall maintain at the project site, a "Record Set of Drawings" showing field changes, as-built elevations, unusual conditions encountered during construction, the manufacturer and manufacturer's catalog number of equipment supplied, and such other data as required to provide the Owner with an accurate "as constructed" set of record drawings.

The Contractor shall furnish this "Record Set" to the Engineer following the Final Inspection of the Project.

The Contractor shall furnish the "Materials Testing Summary" as described in paragraph 8.00 of these Special Provisions, to the Engineer following the Final Inspection of the Project.

The Contractor's final estimate and final payment will not be processed until the "Record Set" of drawings and the material testing summary are received and approved by the Engineer.

19.00 BUY AMERICAN REQUIREMENT-SUPPLEMENTAL INFORMATION

In submitting a proposal on the project the contractor is certifying that they will not acquire (or permit any subcontractor) to use any steel or manufactured products produced outside the United States on any portion of the project, unless otherwise approved by the FAA. Therefore, for the contractors shall either:

1. Certify, in writing, all products are wholly produced in the US of US materials, or
2. Request a waiver to use non-US produced products, or
3. Certify that all equipment that is being used on the project is on the Nationwide Buy American conformance list.

The contractor is required to submit with each submittal a certification that the material or equipment meets the Buy American Requirements or is listed on a National Waiver List or is an excluded material. Forms are available in the project manual or available from the engineer.

19.01 Types of Waivers

There are four types of waivers to Buy American:

1. Public interest waiver;
2. Insufficient quantity or quality.
3. 60% or more of the components and subcomponents in the facility or equipment are of US origin and final assembly is in the US; or
4. Applying Buy American increases the cost of the overall project by more than 25%.

Many pieces of equipment are constructed with some non-US produced components or subcomponents. Therefore, it is expected that the majority of grants will have waivers issued unless the project is constructed of materials that already have a nationwide waiver.

19.02 Nationwide Waiver

Much of the equipment that is frequently used on AIP projects has been reviewed by FAA Headquarters and a nationwide waiver has been issued. The Nationwide Buy American conformance list is posted on the www.faa.gov website at the following address:

http://www.faa.gov/airports/aip/procurement/federal_contract_provisions/
by clicking the tab, "Equipment Meeting Buy American Requirements"

If the equipment is on the nationwide waiver list, no additional waiver is required, however the appropriate forms shall be filled out as provided in the project manual.

19.03 Who can Issue Waivers

Only FAA headquarters may issue waivers for reasons 1 and 2. FAA field offices (Regional Offices and/or Airports District Offices) may issue waivers for reasons 3 and 4.

Waiver request forms are available in the project manual or from the engineer.

19.04 Defining the Project, Facility and Equipment, and Final Assembly Location in the 60%/US final assembly waiver

The waiver can be considered if "at least 60% of the cost of the components and subcomponents in the **facility or equipment** are produced in the United States and the final assembly of the facility or equipment has occurred in the United States." The correct application of the terms is discussed below.

Project

The "**Project**" is generally the project that is being bid. The "**Project**" does not extend over multiple grants or phases, even though the overall project may be phased or may be built in multiple bid packages.

Facility or Equipment

- For a building, the portion of the building that is being funded under the AIP or ARRA grant is the "facility" listed in the waiver.
- For other projects, the bid items as described in the latest edition of FAA Advisory Circular 5370-10 will generally be the "equipment" referred to in the waiver except for airfield electrical equipment.

- For airfield electrical equipment, the "L-" items listed in the Addendum to FAA Advisory Circular 5345-53C, latest edition will generally be the "equipment" referred to in the waiver.
- For a vehicle or single piece of equipment like a snow plow or ARFF vehicle, the single vehicle itself is the "equipment."

Final Assembly Location and Labor Exclusion

Final assembly is the substantial transformation of the various components and subcomponents into the equipment. For a building, the final assembly is actual construction of the building.

- For any project other than a building project, the final assembly location is the location where the equipment is assembled, not the project site itself.
- For a building, the final assembly location is the airport building site.

In any calculation of Buy American percentage, the labor for the final assembly is excluded. This is because the Buy American statute is based on the cost of materials and equipment, not labor. For a building, this means that only the costs of the materials as they are delivered to the airport site are considered when calculating US and non-US component and subcomponent costs. For equipment, the costs of the final assembly at the manufacturing site are excluded.

Component calculation forms or sheets are available from the Engineer.

19.05 Common Materials that are waived or excluded from Buy American - Cement, Concrete, Asphalt and Steel

Cement and concrete is excluded from the Buy American preference requirements (although the steel used for reinforcement, ties, stirrups, etc. must meet Buy American.)

Asphalt and other petroleum products are waived as an excepted item under AMS Guidance T3.6.4.1.e: Foreign Acquisition – Definitions identifying Asphalt as a petroleum product.

Steel is specifically identified in the statute. Therefore, all rebar and discrete, identifiable steel components must be manufactured in the United States.

19.06 FAA Waiver

After the FAA has determined that the final assembly location is in the US and the percent of US components and subcomponents is above 60%, a waiver may be issued. **The waiver is for the single project – not a nationwide waiver.**

19.07 What Information is required to Issue a Waiver

For waiver type 3, a waiver can be considered if "at least 60% of the cost of the components and subcomponents in the **facility or equipment** are produced in the United States and the final assembly of the facility or equipment has occurred in the United States."

Contractors must request waivers from the Owner in writing, with sufficient supporting information. The Owner will forward the request to the FAA. Contractors are responsible for ensuring their waiver request is complete and accurate using project specific information.

The FAA will conduct its review and approval based on the information provided by the Contractor.

The information that must be provided for either equipment or for a building:

- Project Number
- Project Name
- Airport Name
- Total Project Cost (excluding labor)
- Total Equipment or Bid Item Cost for which the waiver is being requested
- Total Equipment or Bid Item Cost excluding labor for final assembly.
- For equipment, the following additional information is required:
- The equipment or bid item for which the waiver is being requested
- The manufacturer and country of origin of the equipment or bid item.
- The location of the final assembly of the equipment or bid item (not the airport site)

For equipment, the following additional information is required:

- The equipment or bid item for which the waiver is being requested
- The manufacturer and country of origin of the equipment or bid item.
- The location of the final assembly of the equipment or bid item (not the airport site)
- The cost of the US components and subcomponents for the equipment or bid item for which the waiver is being requested
- The cost of the non-US components and subcomponents for the equipment or bid item for which the waiver is being requested
- The resulting percent of US and non-US components

For a building, the following additional information is required:

- The building (called the facility in the Buy American statute) for which the waiver is being requested
- The manufacturer and country of origin of the US and non-US materials that will be used in the building,
- For a building, the location of the final assembly is the airport site
- The cost of the US components and subcomponents for the equipment or bid item for which the waiver is being requested
- The cost of the non-US components and subcomponents for the equipment or bid item for which the waiver is being requested
- The resulting percent of US and non-US components

19.08 Common Misconceptions

- Belief that if a manufacturer is "FAA-certified" that Buy America has been satisfied. This is not true. The FAA certification certifies that technical standards have been met. However, FAA-certified equipment manufactured outside the U.S. does not meet Buy America provisions of the AIP unless a waiver has been issued.
- Misconception that the North America Free Trade Act (NAFTA) exempts equipment manufactured in Mexico or Canada from "Buy America" requirements. This is not true for AIP.
- The Buy American Requirements for other Federal Grant programs may be different

than AIP grant programs. The Buy American Requirements for the ARRA, FHWA, and other federal grant programs reference different section of federal code as it relates to the Buy American Requirements for the AIP grant program.

19.09 LIST OF SUPPLIES/MATERIALS THAT THE U.S. GOVERNMENT HAS DETERMINED ARE NOT PRODUCED IN THE UNITED STATES IN SUFFICIENT AND REASONABLY AVAILABLE QUANTITIES AND OF SUFFICIENT QUALITY (JANUARY 1991).

Acetylene, black	Fibers of the following types:
Agar, bulk	abaca, abace, agave, coir, flax,
Anise	jute, jute burlaps, palmyra and
Antimony, as metal or oxide	sisal
Asbestos, amosite, chrysolite, and crocidolite	Goat and kidskins
Bananas	Graphite, natural, crystalline, crucible grade
Bauxite	Handsewing needles
Beef, corned, canned	Hemp yarn
Beef extract	Hog bristles for brushes
Bephenium Hydroxynapthoate	Hyoscine, bulk
Bismuth	Ipecac, root
Books, trade, text, technical, or scientific; newspapers; pamphlets; magazines, periodicals; printed briefs and films; not printed in the United States and for which domestic editions are not available	Iodine, crude
Brazil nuts, unroasted	Kaurigum
Cadmium ores and flew dust	Lac
Calcium cyanamide	Leather, sheepskin, hair type
Capers	Lavender oil
Cashew nuts	Manganese
Castor beans and castor oil	Menthol, natural bulk
Chalk, English	Mica
Chestnuts	Microprocessor chips (brought onto a construction site as separate units for incorporation into building systems during construction or repair and alternation of real property
Chicle	Nickel, primary, in ingots, pigs, shots, cathodes, or similar forms; nickel oxide and nickel salts
Chrome ore or chromite	Nitroguanidine (also known as picrite)
Cinchona bark	Nux vomica, crude
Cobalt, in cathodes, rondelles, or primary ore and metal forms	Oiticica oil
Cocoa beans	Olive oil
Coconut and coconut meat, unsweetened, in shredded, desiccated or similarly prepared form	Olives (green, pitted or unpitted, or stuffed, in bulk
Coffee, raw or green bean	Opium, crude
Colchicine alkaloid, raw	Oranges, mandarin, canned
Copra	Petroleum, crude oil, unfinished oils, and finished products (see definitions below)
Cork, wood or bark and waste	Pine needle oil
Cover glass, microscope slide	
Cryolite, natural	
Dammar gum	
Diamonds, industrial, stones, and abrasives	
Emetine, bulk	
Ergot, crude	
Erthrityl tetranitrate	
Fair linen, altar	

LIST OF SUPPLIES/MATERIALS THAT THE U.S. GOVERNMENT HAS DETERMINED ARE NOT PRODUCED IN THE UNITED STATES IN SUFFICIENT AND REASONABLY AVAILABLE QUANTITIES AND OF SUFFICIENT QUALITY (JANUARY 1991).

Platinum and related group metals,
refined, as sponge, powder, ingots,
or cast bars
Pyrethrum flowers

Quartz crystals
Quebracho
Quinidine
Quinine

Rabbit fur felt
Radium salts, source and special
nuclear materials
Rosettes
Rubber, crude and latex
Rutile

Santonin, crude
Secretin
Shellac
Silk, raw and unmanufactured
Spare and replacement parts for
equipment of foreign manufacture,
and for which domestic parts are
not available
Spices and herbs, in bulk
Sugars, raw
Swords and scabbards

Talc, block, steatite

Tantalum
Tapioca flour and cassava
Tartar, crude; tartaric acid and
cream of tartar in bulk
Tea in bulk
Thread, metallic (gold)
Thyme oil
Tin in bars, blocks, and pigs
Triprolidine hydrochloride
Tungsten

Vanilla beans
Venom, cobra

Wax, canauba
Woods; logs, veneer, and lumber of
the following species:
Alaskan yellow cedar, angelique,
balsa, ekki, greenhart, lignum,
vitae, mahogany, and teak

Yarn, 50 Denier rayon

"Crude oil" means crude petroleum, as it is
produced at the wellhead, and liquids (under atmospheric
conditions) that have been recovered from mixtures of
hydrocarbons that existed in a vaporous phase in a reservoir
and that are not natural gas products.

"Finished products" means any one or more of the following petroleum oils, or a mixture or combination of these oils, to be used
without further processing except blending by mechanical means:

A. "Asphalt" - a solid or semi-solid cementations material that (1) gradually liquefies when heated, (2) has bituminous as its
predominating constituents, and (3) is obtained in refining crude oil.

B. "Fuel oil" - a liquid or liquefiable petroleum product burned for lighting or for the generation of heat or power and derived
directly or indirectly from crude oil, such as kerosene, range oil, distillate fuel oils, gas oil, diesel fuel, topped crude oil, or residues.

C. "Gasoline" - a refined petroleum distillate that, by its consumption, is suitable for use as a carburant in internal combustion
engines.

D. "Jet fuel" - a refined petroleum distillate used to fuel jet propulsion engines.

E. "Liquefied gases" - hydrocarbon gases recovered from natural gas or produced from petroleum refining and kept under
pressure to maintain a liquid state at ambient temperatures.

F. "Lubricating oil" - a refined petroleum distillate or specially treated petroleum residue used to lessen friction between
surfaces.

G. "Naphtha" - a refined petroleum distillate falling within a distillation range overlapping the higher gasoline and lower
kerosene.

H. "Natural gas products" - liquids (under atmospheric conditions) including natural gasoline, that:
1. are recovered by a process of absorption, adsorption, compression, refrigeration, cycling, or a combination of
these processes, from mixtures of hydrocarbons that existed in a vaporous phase in a reservoir, and
2. when recovered and without processing in a refinery, definitions of products contained in subdivision (B), (C),
and (G) above.

I. "Residual fuel oil" - a topped crude oil or viscous residuum that, as obtained in refining or after blending with other fuel oil,
meets or is the equivalent of MILSPEC Mil-F-859 for Navy Special Fuel Oil and any more viscous fuel oil, such as No. 5 or Bunker
C.

"Unfinished oils" means one or more of the petroleum oils listed under "Finished products" above, or a mixture or combination of
these oils, that are to be further processed other than by blending by mechanical means."

20.00 WORK AREA CLEANUP

Sufficient time should be provided at the end of each work period to allow for cleanup and inspection of the work area before it is opened to traffic. All construction debris should be totally removed from the work area. All construction materials that must be left onsite should be secured so that they cannot be dislodged by wind. The Contractor's superintendent will accompany the project manager on an inspection of the work area before it is opened to traffic. The Contractor should have the necessary manpower and equipment standing by to perform any additional cleanup that may be identified during this inspection.

Any haul roads that cross vegetated areas shall be composted, seeded and hydromulched at the completion of construction at the contractor's expense. This includes those haul road across vegetated area that are designated on the plans.

21.00 CONTRACTOR'S CERTIFICATE AND RELEASE.

Contractor's Certificate and Release shall be required to be provided to the Owner, on the forms as provided in the construction documents, or on forms approved for use by the Engineer.

The Final Application for Payment shall be accompanied with all releases and waivers in the Contractor's possession for obligations for labor, equipment, materials, subcontracts, taxes, fees, professional services, rent and royalties arising out of or related to the Work.

The Contractor shall also provide an affidavit certifying and warranting to Owner that all obligations for labor, equipment, materials, subcontracts, taxes, fees, professional services, rent and royalties arising out, or related to the Work will be fully paid and satisfied on receipt of final payment, and agreeing that the Contractor will indemnify, hold harmless, and defend Owner against any and all claims, liabilities, demands, and expenses for any obligation, or asserted obligation for labor, equipment, materials, subcontracts, taxes, fees, professional services, rent or royalties, arising out of the related work.

(BLANK)