

Invitation to Bid

Project: 2021 Kenai Municipal Airport Improved Airfield Drainage

Release: July 28, 2021

Last day for Questions: August 12, 2021 by 2:00 PM

Bids Due Date: August 19, 2021, no later than 2:00 PM

Kenai City Hall

210 Fidalgo Avenue

Kenai, AK 99611

ATTN: Director of Public Works

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Advertisement for Bid

Project Name: 2021 KENAI MUNICIPAL AIRPORT IMPROVED AIRFIELD DRAINAGE

Pre Bid Meeting: August 10, 2021 at 2:00pm details to follow Last Day for Questions: No later than 2:00pm August 12, 2021

Bid Due Date and Time: No later than 2:00pm August 19, 2021 at City Hall

Scope of Work: Replace approximately 500 lineal feet of existing failing storm water conveyance piping within the safety area of the Kenai Municipal Airport's Runway. This will require work hours of approximately 11pm-5am, and shall be conducted in full compliance with Federal Aviation Administration (FAA) requirements.

Bidders should contact the Public Works Department at (907) 283-8236 to be placed on the plans holders list. Questions may be submitted to publicworks@kenai.city.

Bids must be delivered in a sealed envelope clearly marked with the project name to the Public Works Department at the address above. Bid documents can be obtained on City of Kenai website at www.kenai.city or at City Hall for a non-refundable fee of \$60.00 including sales tax for each set of documents.

This contract will be subject to the provisions of the State of Alaska Title 36 Wage and Hour Administration Pamphlet Statutes and Regulations and will require 100% performance and payment bonds.

Publish: <u>Anchorage Daily News</u> - July 28, 2021

Peninsula Clarion - July 28, 2021 or 1st date after

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CITY OF KENAI INSTRUCTIONS TO BIDDER

1. GENERAL

These instructions specify the form and procedures for the submission of a complete and acceptable bid. To obtain addenda in a timely manner, you should be on the City of Kenai's plan holder's list. Downloading project specifications and drawings from the City website or other online plans rooms does not place you on the City's plan holder's list. To be added to the plan holder's list, please contact the Public Works Department Administrative Assistant by phone (907) 283-8236 or by email at PublicWorks@kenai.city.

Construction: 2021 Kenai Municipal Airport Improved Airfield Drainage

Pre-Bid Meeting: August 10, 2021 at 2:00pm via Zoom; details to follow on website

Last Day for Questions: August 12, 2021 by 2:00 PM Bid Due Date and Time: August 19, 2021 by 2:00 PM

2. EVIDENCE OF QUALIFICATIONS

Upon request of the City, a Bidder whose bid is under consideration for the award of the Agreement, shall submit promptly to the City, satisfactory evidence of the Bidder's financial resources, their experience, their performance in completing other projects of a similar nature, and the organization and equipment they have available for the performance of the Agreement.

3. BIDDER QUALIFICATIONS

Before the bid is considered for award, the City reserves the right to determine whether or not a Bidder is responsible and to require the Bidder to complete a Bidder Qualification Form and/or provide a current financial statement prepared by a Certified Public Accountant. The City shall determine whether a Bidder is responsible on the basis of the following criteria:

- The skill and experience demonstrated by the Bidder in performing Agreements of a similar nature.
- The Bidder's record for honesty and integrity.
- The Bidder's capacity to perform in terms of facilities, personnel, and financing.
- The Bidder's past performance under City Agreements. If the Bidder has failed in any material way to perform its obligations under any Agreement with the City, the Bidder may be determined as a non-responsible Bidder.
- A Bidder's representations concerning their qualifications will be construed as a covenant under the Agreement. Should it appear that the Bidder has made a material misrepresentation, the City shall have the right to terminate the Agreement for the Contractor's breach, and the City may then pursue such remedies as provided in the Agreement Documents or as provided by state statute, City code, or as appropriate.

Any final determination that a Bidder is non-responsible will be made by the City Manager. Such determination will be made in writing to the Bidder setting forth the reasons for such determination.

4. CONDITIONS AFFECTING THE WORK

The City assumes no responsibility for any understanding or representations concerning conditions made by any of its officers, agents, or employees prior to the execution of this Agreement, unless such understanding or representations are expressly stated in the bid documents or Addenda.

The Bidder shall include in their bid, sufficient sums to cover all items required by the Agreement and the conditions of the site(s), and shall rely entirely upon their own examination in making their bid. The submission of a bid shall be taken as prima facie evidence of compliance with this paragraph.

Each bidder shall thoroughly examine the technical specifications. The technical specifications for this project were adopted from the State of Alaska Department of Transportation and Public Facilities (DOT&PF) Statewide Standard Specifications for Airport Construction. The specifications are customized to the specific requirements of the Kenai Municipal Airport – 2021 Improve Airfield Drainage project. Modification to the Standard Specifications are identified in this Project Manual by bold, underline, or strikethrough fonts, with the exception of Method of Measurement and Basis of Payment; and when entire sections or items are deleted. Method of Measurement and Basis of Payment Sections were edited without changes tracked for clarity. In the case that entire sections or Pay Items are deleted, the text is deleted and replaced with the words "(Not Used)". The Contractor should read each specification carefully to thoroughly understand the requirements of this Contract.

If information or documentation required for submitting an accurate and complete bid is absent from these documents, the Bidder is required to notify the Public Works Director by facsimile (907) 283-3014, or by e-mail to PublicWorks@kenai.city.

5. SECURITY TO BE FURNISHED BY BIDDER

If the bid exceeds \$100.000, a certified check, bank cashier's check, or bid bond, made payable to the City of Kenai amount equal to five (5%) percent of the total bid, shall accompany each bid as evidence of good faith, a guarantee that if awarded the agreement, the Bidder will execute the agreement and give bond as required. All Bidder's checks or bid bonds will be retained until the successful Bidder has entered into a satisfactory agreement and furnished bonds, as required. The successful Bidder shall furnish the City a Performance and Payment bond in the full amount of the Agreement and shall maintain the Bond in force during the continuance of the Agreement. The bonds must be furnished prior to the City's execution of the Agreement. The Bond shall be for the faithful performance of the Agreement in all respects including, but not limited to, payments for all materials and labor. All alterations, extensions of time, additional work, and other changes authorized by the Agreement Documents may be made without securing the consent of the Surety or Sureties. Power-of-Attorney for the person signing the Bond for the Surety must be submitted with the Bond. These bonds, in whatever amount required by the specific agreement, shall be administered and deemed governed by the provisions of Alaska Statutes Title 36, Chapter 25, and shall comply with all requirements for payment and submission of claims as provided by that chapter.

6. LICENSING

Alaska State Statutes requires that all businesses wishing to engage in business in Alaska obtain license(s). All Bidders are required to furnish with their bid, the applicable, current licenses

required to perform the work. Applicable licenses may include the following: Contractor's License, Specialty Contractor License, and Alaska Business License. Failure to submit license(s) with the bid may result in rejection of the Contractor's bid.

7. TAX COMPLIANCE CERTIFICATE

No agreement will be awarded to any individual or entity that is in violation of the tax laws of the City of Kenai or the Kenai Peninsula Borough unless the violation is cured within ten business days of notice. The Tax Compliance Certificate must be signed by the Bidder only and submitted with the bid. The City will obtain verification of tax compliance from the Kenai Peninsula Borough for the successful bidder. Bids submitted without a completed Tax Compliance Certificate may be considered non-responsive.

8. INTERPRETATION OR CORRECTIONS OF BID DOCUMENTS

Bidders shall notify the Public Works Director promptly of any error, omission, or inconsistency that may be discovered during examination of the bid documents and the proposed work site(s). Requests from Bidders for interpretation or clarification of the bid documents shall be made in writing to the Public Works Director and shall arrive no later than the time and date specified in Section 1 of these Instructions to Bidders. Questions may be faxed to (907) 283-3014 or emailed to PublicWorks@kenai.city. The subject line of the email or fax must include the name of the project.

Oral questions may be presented at a pre-bid conference if one is provided for in Section 1 of these Instructions to Bidders. Interpretations, corrections, or changes, if any, to the bid documents shall be made by Addendum. Bidders shall not rely upon interpretations, corrections, and changes made in any other manner, including orally, at the pre-bid conference. Interpretations, corrections, and changes shall not be binding unless included in an Addendum. All Addenda issued during the time of bidding shall become part of the Agreement Documents. Questions or requests for clarifications shall be directed to the Public Works Director. Only written interpretations or corrections by Addendum shall be binding, and no other forms of interpretation or correction will be binding on the City of Kenai.

It is the Bidder's sole responsibility to ascertain that they have received all Addenda issued by the City of Kenai. Addenda will be issued electronically and/or by facsimile. All Addenda must be acknowledged in the space provided on the Bid Form. If no Addenda have been issued, write or type "zero" or "N/A" on the Bid Form in the space provided.

9. PREPARATION AND SUBMISSION OF BIDS

- Bids must be received at City Hall prior to the time and date specified in Section 1 of these Instructions to Bidders.
- Bids must be submitted on the Bid Form furnished. Bids must be completed in ink or by typewriter, and must be manually signed by an authorized person. If erasures or other changes appear on the forms, the person signing the bid must initial each erasure or change in ink.
- Bids shall specify a unit or lump sum price, typed or written in ink in figures, for each bid item called for. In case of error in the extension of prices, the unit price will govern. Bids may be rejected if they show any omissions, alteration of the forms, additions not called for, conditional or alternate bids not called for, qualified bids, or irregularities of any kind.

- It is expressly agreed that the quantities shown in the Bid Form, whether for a "Unit Price Bid" or in connection with a "Lump Sum Bid" on the Bid Form are approximate only for use as a basis for comparison of bids and are not to be taken to be either representations or warranties. The City does not expressly, nor by implication, agree that the actual amount of work will correspond therewith.
- The Bid Form invites bids on definite plans and specifications. Only the amounts and information asked for on the Bid Form will be considered as the bid. Each Bidder shall bid upon the work exactly as specified and as requested on the Bid Form, and Bidders shall bid upon all alternates as indicated. When bidding on an alternate for which there is no charge, Bidder shall write the words "No Charge" in the space provided.
- One (1) complete bid package shall be completely sealed in an envelope clearly marked with the Bidder's company name, and the "Project Name" and "Bid Due Date" specified in Section 1 of these Instructions to Bidders. A complete bid package shall include the documents identified in the "DOCUMENTS TO SUBMIT WITH THIS BID" section on the Bid Form.
- Bids received without all the required documents may be considered non-responsive.
 Bids received after the bid due date and time will be considered non-responsive and will not be accepted.
- No responsibility shall be attached to the City for the premature opening of, or the failure to open a bid not properly addressed and identified.
- Please note that overnight delivery from the Lower 48 States is generally not available.
 Prospective Bidders should anticipate a minimum of two to three days delivery time for express, priority or expedited delivery services.

10. MODIFICATION OF BIDS

Bid modifications will be accepted by the City at publicworks@kenai.city and binding upon the Bidder where the modification:

- is received at City Hall prior to the time and date specified in Section 1 of these Instructions to Bidders.
- does <u>not</u> identify the adjusted Bid Total price. Only adjustments to the sealed bid will be accepted. For example:
 - CORRECT Decrease the Unit Bid Price of Item 20.22 Leveling Course by \$2.50 per ton and the Bid Total by \$2.500.
 - o CORRECT Increase the Unit Bid Price of Item 90.16 Mobilization and Demobilization and the Bid Total by \$5,000.
 - o INCORRECT Decrease the Bid Total by \$5,000 for a new Total of \$95,000.
- is signed by the same individual who signed the original bid.

Should there be more than one bid modification from a Bidder, only the last modification received prior to the deadline shall be applied to the bid. All earlier modifications shall be disregarded.

Any modification which fails to meet any requirement of this section shall be rejected, and the bid shall be considered as if no modification had been attempted.

It is the Bidder's responsibility to confirm the City's receipt of any bid modification.

11. WITHDRAWAL OF BID

At any time prior to the scheduled closing time for receipt of bids, any Bidder may withdraw their bid, either personally or by written request.

After the scheduled closing time for receipt of bids, no Bidder will be permitted to withdraw their bid unless Notice of Award is delayed for a period exceeding forty-five (45) days.

A bid may not be withdrawn after opening without the written consent of the City.

12. ACCEPTANCE - REJECTION OF BIDS

The City reserves the right to reject any or all bids, to waive minor irregularities in any bids or in the bidding procedure, and to accept any bid presented which meets or exceeds said specifications and which is deemed to be in the best interest of the City. However, the requirements for timeliness and manual signatures shall not be waived. The City is not obligated to accept the lowest bid and is not responsible for bid preparation costs. AIP Grant requirements do require acceptance of the lowest bid, if the City chooses to move forward with the Project as Bid.

13. EXECUTION OF AGREEMENTS

The successful Bidder shall be required to execute an Agreement for the work within ten (10) days after receiving the Notice of Award and Agreement documents from City; if Contractor does not return executed copies within this time, then, at the option of City, the bid may be rejected.

14. AWARD OF AGREEMENT

It is the intent of the City to award the bid to the lowest, qualified, responsive and responsible Bidder. Unless otherwise stated in the bid documents, the Agreement, if awarded, shall be awarded to the responsible Bidder who submits the lowest responsive bid. When bid documents contain a base bid and alternates, the total of the base bid and the alternates to be awarded shall be used to determine the low Bidder.

The amount of the Agreement shall be the total sum of the amounts computed from the estimated quantities and unit prices and/or the lump sum awarded by the City and specified in the Agreement.

On all bids, Notice of Award or rejection will be given within forty-five (45) days of bid opening. The notice will be in writing and signed by the Public Works Director. A Notice of Intent to Award, and no other act of the City of Kenai or its representatives, constitutes an acceptance of a bid. The acceptance of a bid shall bind the successful Bidder to execute the Agreement.

15. AGREEMENT AND PERFORMANCE AND PAYMENT BOND SIGNATURE INSTRUCTIONS WHEN BONDS ARE REQUIRED

The successful Bidder shall insert the full name and business of the Contractor in the Agreement and on the Performance and Payment Bond, hereinafter the Bond.

Instructions to Bidders – KMA 2021 Improved Airfield Drainage

If the Contractor is a partnership or joint venture, all partners or joint ventures shall sign the Agreement and the Bond except that one partner or one joint venturer may sign for the partnership or joint venture when all other partners or joint venturers have executed a Power-of-Attorney authorizing one partner or joint venturer to sign. The Power-of-Attorney shall accompany the executed Agreement and the Bond.

If the Contractor is a Limited Liability Company (LLC), a person with appropriate authority to bind the LLC shall execute the Agreement and Bond unless a Power-of-Attorney or Corporate Resolution accompanies the executed Agreement and Bond.

If the Contractor is a corporation, the President or Vice-President and Secretary or Treasurer of the corporation shall execute the Agreement and the Bond unless a Power-of-Attorney or Corporate Resolution accompanies the executed Agreement and Bond.

The Bond shall be returned undated as to Agreement Date. The Agreement Date shall be inserted on the Agreement when the City signs the Agreement and the Bond shall be dated the same as the Agreement Date.

16. SPECIAL PROVISIONS

If funded in part or in whole by a grant or grants, the contractor and their subcontractors will be required to comply with the requirements of these grants, including insurance and purchasing requirements, if any. If any permits are included with the bid documents, e.g. a U.S Corp of Engineers wetland permit, all conditions of this permit must be met by the Contractor and their Subcontractors.

17. APPEAL PROCEDURE

KMC 7.15.120 Appeal procedures.

- (a) Any party submitting a bid or proposal for a contract with the City and who believes that they are adversely affected by the City's relevant ordinances, regulations, procurement process, or by any acts of the City in connection with the award of a City contract, may file a protest appeal with the City Clerk. All protest appeals must be to the City within five (5) calendar days of the issuance of the City's notice of its intent to award the contract. The appeal must be hand delivered, delivered by mail, or by facsimile and must comply with all requirements of this section. If the fifth day is a City-recognized holiday or a weekend, the deadline for appeal shall be the next work day. It is up to the protester to choose a method of delivery to assure timely receipt by the City.
- (b) Rejection of Appeal. The Clerk shall reject an untimely or incomplete appeals. Such rejection shall be final and may be appealed to the Superior Court pursuant to the Court Rules of Appellate Procedure.
- (c) The protest appeal must be in writing and shall include the following information:
- (1) The name, address, e-mail, and telephone (and facsimile if available) numbers of the protester;
- (2) The signature of the protester or the protester's representative:
- (3) Identification of the contracting agency and the solicitation or contract at issue;
- (4) A statement of the legal and factual grounds of the protest, including copies of relevant documents; and
- (5) The form of relief requested.
- (d) Stay of Award. If a timely and complete protest appeal is filed, the award of the contract shall be stayed until all administrative remedies have been exhausted, unless the City Manager

determines in writing that award of the contract pending resolution of the appeal is in the best interests of the City.

- (e) Notice and Response. Notice of the stay and protest appeal shall be delivered to any party who may be adversely affected by the City Manager's decision by facsimile, first class mail or in person within three (3) business days of receipt of a properly filed appeal.
- (f) City Manager Decision. The City Manager shall issue a written decision to the appellant within ten (10) business days of the date the appeal is filed. If multiple appeals have been filed, they may be consolidated for purposes of the decision. Copies of the appeal and decision shall be provided to any interested party requesting one. The decision may include any lawful action, including without limitation an amendment of all or any part of the recommended award. For good cause shown, the City Manager may extend the date for the decision for such additional period as may be necessary.
- (g) If the City Manager sustains a protest in whole or in part, the City Manager shall implement an appropriate remedy. In determining an appropriate remedy, the City Manager shall consider the circumstances surrounding the solicitation or procurement including the seriousness of the procurement deficiencies, the degree of prejudice to other interested parties or to the integrity of the procurement system, the good faith of the parties, the extent the procurement has been accomplished, costs to the agency and other impacts on the agency of a proposed remedy, and the urgency of the procurement to the welfare of the City.
- (h) Notwithstanding subsections (a) and (b) immediately above, if the City Manager sustains a bid protest appeal in whole or part, the protester's damages shall not exceed the reasonable bid or proposal preparation costs.
- (i) Appeal to Superior Court. Appeals may be taken from the written decision of the City Manager within thirty (30) days of the date of the decision pursuant to Part VI of the Alaska Rules of Appellate Procedure.

(Ord. 2852-2015)

18. COMPLIANCE OR ACCEPTED ALTERNATES TO SPECIFICATIONS

Bidder hereby agrees that the material offered will meet all the requirements of the specifications in this solicitation unless alternates have been deemed acceptable by the City. Manufacturer's names, trade names, brand names, model and catalog numbers used in these specifications are for the purpose of describing and establishing general quality levels. Such references are not intended to be restrictive. Alternates will be approved via addenda, and only via addenda. Request for alternates must be submitted no later than the Last Day for Questions in the Advertisement for Bid. An alternate must be requested via email sent to the addresses in section 1 with an explanation giving in detail the extent of the alternate, the reason for which it is requested, and why the City should approve the alternate. Provide as much detail as possible. If multiple models or options are provided with your submittal data clearly indicate which you are requesting. The City of Kenai will be the sole judge of whether an alternative is acceptable to the items specified.

19. FEDERAL AVIATION ADMINISTRATION (FAA) REQUIREMENTS

This contract shall comply with all Federal Aviation Administration (FAA) grant requirements. Specific requirements are detailed with the supplemental conditions attached to this contract and as follows.

Bidder Certifications. Bidders shall submit the Bidder Certifications in the Supplemental Conditions.

DBE Requirements. The requirements of 49 CFR Part 26, Regulations of the U.S. Department of Transportation, apply to this contract. It is the policy of the City of Kenai to practice Instructions to Bidders – KMA 2021 Improved Airfield Drainage

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nondiscrimination based on race, color, sex, or national origin in the award or performance of this contract. All firms qualifying under this solicitation are encouraged to submit bids/proposals. Award of this contract will be conditioned upon satisfying the requirements of this bid specification. These requirements apply to all bidder's/offeror's, including those who qualify as a DBE. The bidder/offeror shall make good faith efforts, as defined in Appendix A of 49 CFR Part 26, to meet the contract goal for DBE participation in the performance of this contract, if a contract goal is established. See Supplemental Conditions.

The bidder/offeror will be required to submit the following information: (1) the names and addresses of DBE firms that will participate in the contract; (2) a description of the work that each DBE firm will perform; (3) the dollar amount of the participation of each DBE firm participating; (4) Written documentation of the bidder's/offeror's commitment to use a DBE subcontractor whose participation it submits to meet the contract goal; (5) Written confirmation from the DBE that it is participating in the contract in the kind and amount of work provided in the commitment made under (4); and (6) if the contract goal, if any, is not met, evidence of good faith efforts.

The Bidder/offeror shall submit a completed interested bidder's list collection form with their bid.

A DBE contract goal has not been established for this contract; however, all other DBE requirements in the Supplemental Conditions apply.

20. FEDERAL AVIATION ADMINISTRATION (FAA) FUNDING

Funds for this Project are subject to the receipt of a FAA grant. If sufficient funds are not received, this project shall be canceled at no cost to the City.

CITY OF KENAI BID FORM

TO:	City	of	Kenai

Public Works Department 210 Fidalgo Avenue Kenai, Alaska 99611-7794

FROM:

Name of Bidder's Company or Business Entity

BIDDER'S DECLARATION & UNDERSTANDING

The undersigned, hereinafter called the Bidder, declares that the Bidder has carefully examined the Bid Documents including but not limited to: the Agreement, Addenda, Supplemental General Conditions, General Conditions, Drawings and Specifications including Appendices, Invitation to Bid, Instructions to Bidders, this Bid Form, Advertisement, Releases, Affidavits, and supplemental documentation (e.g. Grant documentation, Title 36 or other State Statues), and the location(s) where work is to be performed for the project, and that the Bidder has satisfied themselves as to the contractual requirements, and quantity and condition of work involved.

It is expressly agreed that the quantities shown in the Bid Form, whether for a "Unit Price Bid" or in connection with a "Lump Sum Bid" on the Bid Form are approximate only for use as a basis for comparison of Bids and are not to be taken to be either representations or warranties. The City does not expressly, nor by implication, agree that the actual amount of work will correspond therewith.

The Bidder further declares that the only person or parties interested in the Bid are those named herein, that this Bid is, in all respects, fair and without fraud, that it is made without collusion with any official of the City of Kenai, and that the Bid is made without any connection or collusion with any person submitting another Bid.

The Bidder agrees not to withdraw this bid within forty-five (45) days after the actual date of the bid opening.

DOCUMENTS TO SUBMIT WITH THIS BID

- 1. Bid Form
- 2. Bid Schedule
- 3. Tax Compliance Certificate
- 4. Applicable Licenses
- 5. Non-Collusion Affidavit
- 6. EEO-1 Certification
- 7. Bid Bond with Power-of-Attorney (If Bid exceeds \$100,000.00)
- 8. Bidder Certification Exhibit B1 Debarment and Suspension Certification
- 9. Bidder Certification Exhibit B2 Prohibition of Segregated Facilities Certification
- 10. Bidder Certification Exhibit B3 Trade Restriction Certification
- 11. Bidder Certification Exhibit B4 Certificate of Buy American Compliance for Manufactured Products
- 12. Bidder Certification Exhibit B5 Certificate Regarding Tax Delinquency and Felony Conviction
- 13. DBE Program Attachment 1 DBE Declaration
- 14. DBE Program Attachment 2 Bidder's Registration Form
- 15. DBE Program Attachment 3 Potential Subcontractors Form

Lowest responsive bidder shall provide additional forms as required to demonstrate DBE responsibility prior to award of the Contract in accordance with the DBE Program.

DOCUMENTS THE CITY OF KENAI IS TO RECEIVE WITHIN 10 DAYS AFTER NOTICE OF AWARD

The Bidder agrees that if this Bid is accepted he will deliver to the City of Kenai, within ten (10) calendar days of Notice of Award, the following:

- 1. Executed Agreement
- 2. Certificate(s) of Insurances*
- 3. Construction Schedule
- 4. List of Subcontractors
- 5. Performance and Payment Bond
- 6. Power of Attorney and/or Corporate Resolution (See Instructions to Bidders)
- 7. DBE Utilization Report, Bidder, (Exhibit C Attachment 4)
- 8. Letter of Intent, Prime Contractor or Subcontractors, (Exhibit C Attachment 5)
- 9. Summary of Good Faith, Bidder, (Exhibit C Attachment 6) if needed
- 10. Contact Report Form, Bidder, (Exhibit C Attachment 7) if needed
- 11. Bidder's Registration Form, Subcontractors, (Exhibit C Attachment 2)

TIME OF COMPLETION AND LIQUIDATED DAMAGES

Bidder agrees to commence and complete work as follows: Owner anticipates a Notice to Proceed on September 2, 2021 with Substantial Completion within 90 Calendar days from NTP.

<u>Liquidated Damages</u>. Liquidated damages will be charged at Five Hundred (\$500.00) for each calendar day that expires after the contract time required for substantial completion to the actual date of substantial completion as provided for in the Agreement Documents.

BID TABULATION AND SUMMARY

Bidder agrees to perform all of the work described and per the conditions in the Bid Documents for the prices stated on this Bid Form.

Prices are to be shown in both words and figures. In case of discrepancy, the amount shown in words will govern. In case of error in the extension of prices, the unit price will govern. Bidder understands that the City reserves the right to reject any or all bids and to waive irregularities in the bidding.

<u>BID GUARANTEE</u>: The Undersigned further agrees that the check or bid bond accompanying the bid is left in escrow with the City, that the amount of the check or bond is the measure of damages which the City will sustain by failure of the Undersigned to deliver said documents within ten (10) days after written notice of the award of contract to him or her, and that check shall become the property of the City, or the bid bond shall remain in full effect, should he or she so fail. But if this bid is not accepted within ninety (90) days of the date set for the opening thereof, or if accepted and the Undersigned delivers said Agreement, and performance, and labor, and material payment bonds as required, the check shall be returned to him or her and the bid bond shall become void.

^{*} Refer to the General Conditions for insurance requirements. Note the additional insured and waiver of subrogation requirements.

EXECUTION OF BID

Bidder shall complete and submit all pages of the I have received the Bid Documents for the Projection Airfield Drainage	e Bid Form. ect: Kenai Municipal Airport (KMA) 2021 Improved
I have received Addenda No(s).	and have included their provisions in my proposal.
I have examined both the Bid Documents and th understanding that I agree:	ne work locations, and submit the following bid with the
 To hold my bid open forty-five (45) consections. To accept the provisions of the Bid Documt. To enter into and execute an Agreement, To furnish all labor and materials and Documents. To accomplish Substantial Completion as 	ments. if awarded, on the basis of my Bid. to accomplish the work in accordance with the Bid
BASE BID TOTAL:	
\$	
	(Amount Written in Words)
	shall exist under the Agreement until the final Agreement commence work immediately upon full execution of the ice To Proceed.
If provided a Notice of Award, Bidder agrees to with the Bid Documents.	o execute and perform the Agreement in accordance
By executing this Bid I certify that I have a submitting this bid.	uthority to bind the Company or Business Entity
Name of Company or Business Entity	Date
Signature	Title
Print Name	Phone
Address	Fax
Address	Email address

Kenai Municipal Airport 2021 Improved Airfield Drainage BID SCHEDULE

Schedule A (Base Bid)

PAY ITEM NO.	SPEC NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	AMOUNT
A-1	A110.000.0000	Airport Safety Requirements	LS	1		
A-2	D701.010.0018	CPEP Pipe, 18-inch	LF	329		
A-3	D701.010.0020	CPEP Pipe, 20-inch	LF	164		
A-4	G100.010.0000	Mobilization and Demobilization	LS	1		
A-5	G135.010.0000	Construction Surveying by the Contractor	LS	1		
A-6	G200.010.0000	Contractor Quality Control Program	LS	1		
A-7	G300.010.0000	CPM Scheduling	LS	1		
A-8	P641.030.0000	Temporary Erosion, Sediment, and Pollution Control	LS	1		

TOTAL SCHEDULE A:

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned,
as Principal, and
as Surety, are hereby held and firmly bound unto
as the OWNER, in the penal sum of for the payment of which, well and truly made, we hereby jointly and severally bind ourselves, successors and assigns.
Signed this, 2021. The Principal has submitted to
, a certain BID, attached hereto and hereby made a part
hereof, to enter into a contract in writing for the
NOW, THEREFORE, (a) If said BID shall be rejected, or (b) If said BID shall be accepted and the principal shall execute and deliver a contract in the Form of Contract attached hereto (properly completed in accordance with said BID), and shall furnish a BOND for his faithful performance of said contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said BID, then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated. The Surety, for value received, hereby stipulates and agree that the obligations of said Surety and its BOND shall be in no way impaired or affected by any extension of the time within which the OWNER may accept such BID; and said Surety does hereby waive notice of any such extension. IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.
L.S.)
Principal
Surety
By:

IMPORTANT- - Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the project is located.

Bid Bond Rev 2013-03-04

Tax Compliance Certification Kenai Peninsula Borough Finance Department

144 N. Binkley Street

Phone: (907) 714-2197

Soldofna, Alaska 99669-/599 www.kpb.us		or: (907) 714-217 Fax: (907) 714-237	
1.) Fill in all information requested. 2	2.) Sign and date. 3.) Submit v	vith solicitation, or oth	er. For Official Use Only
Reason for Certificate:		For Department	:
☐ Solicitation ☐ Other:		Dept. Contact:	
Business Name:			·
Business Type:	☐ Individual ☐ Corpora	ition 🗌 Partnershi	o Other:
Owner Name(s):			
Business Mailing Address:			
Business Telephone:		Business Fax:	
Email:			
Peninsula Borough? (If yes, please Yes No Kenai Peninsu contracting to do business with th	supply the following account la Borough Code of Ordinan le Kenai Peninsula Borough b	numbers and sign be aces, Chapter 5.28.14 be in compliance with	r personal property within the Kenai elow. If no, please sign below.) 0, requires that businesses/individuals a Borough tax provisions. No contract Borough Code of Ordinances in the
REAL/PERSONAL/BUSINESS PROF	PERTY ACCOUNTS	TAX ACCOUNTS	S/STATUS (TO BE COMPLETED BY KPB)
ACCT. NO.	ACCT. NAME	YEAR LAST PAID	BALANCE DUE
			In Compliance Notice Compliance
KPB Finance Department (signature	required)	Date	In Compliance
SALES TAX ACCOU	NTS	TAX ACCOUNTS	/STATUS (TO BE COMPLETED BY KPB)
	ACCT. NAME	FILED THRU	M/F's BALANCE DUE
			In Compliance 🔲 Not in Compliance
KPB Sales Tax Division (signature rec	- ηuired)	Date	
CERTIFICATION: I,(Name o	the		, hereby certify that, to the
(Name o best of my knowledge, the above i		(Title) (Date)	

Signature of Applicant (Required)

NON - COLLUSION AFFIDAVIT

(To be executed and submitted with Bid Proposal)
l, of
I,of
being duly sworn, do depose and state:
I, or the firm, association, or corporation of which I am a member, who bid on the Contract to be executed by the City of Kenai, for the construction of that certain construction project designated as:
Kenai Municipal Airport 2021 Improved Airfield Drainage
located at Kenai, Alaska in the State of Alaska, have not, either directly or indirectly entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with such Contract.
Signature
Name
Title
Date
ACKNOWLEDGMENT
STATE OF ALASKA))ss THIRD JUDICIAL DISTRICT)
The foregoing instrument was acknowledged before me this day o
NOTARY PUBLIC for State of Alaska My Commission Expires:

EEO-1 CERTIFICATION Federal-Aid Contracts

This CERTIFICATION is required by the Equal Employment Opportunity Regulations of the Secretary of Labor [41 CFR 60-1.7(b)(1)] and must be completed by each Bidder and proposed Subcontractor in this contract.

PLEASE CHECK APPROPRIATE BOXES							
The [] Bidder [] proposed Subcontractor here	by CERTIFIES:						
PART A. Bidders and proposed Subcontractors with 50 or more employees and a federal contract amounting to \$50,000 or more are required to submit one federal Standard Report Form 100 during each year the two conditions (50 employees and a \$50,000 federal contract) exist. The company named below (Part C) is exempt from the requirements of submitting the Standard Report Form 100 this year. [] NO (go to PART B) [] YES (go to PART C) Instructions and blank Standard Report Form 100's may be obtained from a local U.S. Department of Labor office, or at: www.eeoc.gov/eeo1survey							
						PART B. The company named below has submitted the St	andard Report Form 100 this year.
						[]YES [] NO	
NOTE: Bidders and proposed Subcontractors who Report Form 100 and are not exempt from filing recontract or subcontract until Form 100 has been file.	equirements will not be awarded this						
PART C							
Signature of Authorized Representative of Company	Date						
	()						
Name of Company	Telephone						
Address of Company	Zip Code						
Project Name:							

CITY OF KENAI AGREEMENT BETWEEN OWNER AND CONTRACTOR

MADE AS OF THE	DAY OF	2021.			
BETWEEN the OWNER:	CITY OF k 210 Fidalg Kenai, Ala				
AND the CONTRACTOR:					
FOR the PROJECT: Kena	i Municipal Airport	(KMA) 2021 Improved A	Airfield Drainage		
The Owner and Contractor agree as set forth below.					
		CLE 1 WORK			

The Contractor shall perform all the work required by the contract documents.

ARTICLE 2 ENUMERATION OF THE CONTRACT DOCUMENTS

The additional documents which are specifically incorporated into this Agreement by reference and which form the contract documents are:

- A. Any and all later modifications, change orders, and written interpretations of the contract documents issued by the Owner
- B. This Agreement
- C. Addenda
- D. Supplemental General Conditions (if any)
- E. General Conditions
- F. Drawings and Specifications with Appendices Provided by Engineer. In the case of an inconsistency between Drawings and Specifications or within either Document not clarified by addendum, the better quality or greater quantity of Work shall be provided.
- G. Not used.
- H. The Request for Proposals / Invitation to Bid
- I. The Contractor's bid/proposal.

Any other attachments to this Agreement do not form a part of the Agreement but are for reference or proof of compliance with the requirements of the Agreement, except where the provisions of this Agreement provide such attachments will be or are a part of the Agreement.

These form the contract and what is required by any of the documents shall be as binding as if required by all. The intention of the contract documents is to require the furnishing of all labor, material, equipment, and other items necessary for the proper execution and completion of the work and to prescribe the terms and conditions of the contract and payment, so as to include work and materials which may be necessary to produce the intended results.

ARTICLE 3 TIME OF COMMENCEMENT AND COMPLETION

Work shall commence upon receipt of the Notice to Proceed. All work must be substantially completed within 90 days after the date of the Notice to Proceed. Liquidated damages will be charged against the Contractor as provided below.

ARTICLE 4 CONTRACT SUM

The Owner shall pay the Contractor as provided in this contract the total sum price of \$______ for the successful completion of the specified work.

ARTICLE 5 PROGRESS PAYMENT

Progress payments shall be made per the General Conditions.

ARTICLE 6 FINAL PAYMENT

Final payment shall be made per the General Conditions. The Contractor shall request the final inspection at least five (5) days in advance of the anticipated date of inspection. If all work has not been satisfactorily completed, the Contractor shall be liable for all costs incurred by the Owner in making such inspection.

ARTICLE 7 NOTICES

All legal notices relating to this contract, including changes of address, shall be mailed to the Owner and the Contractor at the following addresses:

OWNER
CITY OF KENAI
Public Works Director
210 Fidalgo Avenue
Kenai. AK 99611

CONTRACTOR

ARTICLE 8 INDEMNIFICATION

No provision in the contract documents lessens, alters, or makes inapplicable the requirement for indemnification stated in the General Conditions or other documents incorporated into the contract by this Agreement.

ARTICLE 9 JURISDICTION: CHOICE OF LAW

This contract shall be governed by the laws of the State of Alaska, and any lawsuit brought thereon shall be filed in the Third Judicial District at Kenai, Alaska.

ARTICLE 10 ATTACHMENTS

In the event there is any difference between an attachment to the original of this Agreement on file with the City of Kenai Public Works Department and any attachment to a copy of the Agreement, the attachments to the original filed with the Public Works Department shall control.

ARTICLE 11 LIQUIDATED DAMAGES

Owner and Contractor recognize that time is of the essence in performance of this contract and the Owner will suffer financial loss if the work is not substantially complete within the time specified above, plus any extensions thereof allowed in accordance with contract documents. They also recognize the delays, expense and difficulties involved in proving the actual loss suffered by Owner if the work is not substantially complete on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty) Contractor shall pay Owner Five Hundred Dollars (\$500.00) for each calendar day that expires after the contract time required for substantial completion to the actual date of substantial completion determined as set out in the Contract Documents. The Owner and Contractor agree that this amount is a reasonable forecast of just compensation for the harm that is caused by the delay.

ARTICLE 12 NO THIRD-PARTY BENEFICIARY

This Agreement is intended solely for the benefit of each party hereto. Nothing contained herein shall be construed or deemed to confer any benefit or right upon any third party.

OWNER and CONTRACTOR each binds themselves, their partners, successors, assigns and legal representatives in respect to all covenants, Agreements and obligations contained in the Contract Documents.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed in their respective names or by their duly authorized representatives as of the date and year above written.

OWNER:	CONTRACTOR:
CITY OF KENAI	
Ву:	By:
Name:	Name:
Title:	Title:
STATE OF ALASKA)	STATE OF ALASKA))ss.
THIRD JUDICIAL DISTRICT)	THIRD JUDICIAL DISTRICT)
THIS IS TO CERTIFY that on this day of, 2021 Paul Ostrander, City Manager, City of Kenai, Alaska, being personally known to me or having produced satisfactory evidence of identification, appeared before me and acknowledged the voluntary and authorized execution of the foregoing instrument on behalf of said City.	THIS IS TO CERTIFY that on this day of, 2021, (title), being personally known to me or having produced satisfactory evidence of identification, appeared before me and acknowledged the voluntary and authorized execution of the foregoing instrument on behalf of said corporation.
NOTARY PUBLIC FOR ALASKA My Commission Expires:	NOTARY PUBLIC FOR ALASKA My Commission Expires:
Approved by Legal: Approved by Finance:	

GENERAL CONDITIONS OF THE CONTRACT BETWEEN OWNER AND CONTRACTOR

ARTICLE 1 CONTRACT DOCUMENTS

- 1.1 The contract documents enumerated in the Agreement between Owner and Contractor form the final and completely integrated contract between the parties and supersede any prior statements, negotiations, agreements, documents or representations, written or oral. What is required by any one contract document is deemed to be required by all documents.
- 1.2 The contract documents consist of documents designated as contract documents and enumerated in the Agreement between Owner and Contractor.
- 1.3 The contract documents do not include any documents unless specifically enumerated in Agreement between Owner and Contractor.
- 1.4 Unless specifically provided otherwise in the contract documents the parties to this agreement intend that Contractor will obtain all permits, inspections, tests, bonds, and insurance required by state or federal law, rule, regulation or order, or local ordinance or rule or regulation or the contract documents, whichever requirement is greater, and provide all labor, equipment, transportation, water, heat, utilities, tools, scaffolding, materials, supplies, facilities, and services necessary for performance of the contract and that the cost of these requirements be included within the contract price. The parties further intend that the cost of all overhead, supervision, and other incidental expenses required or occasioned by the contract is included in the contract price. The parties also intend that minor items required to produce complete functional system(s) and sub-system(s) are deemed to be required by the contract documents at the contract price whether or not specifically expressed. The requirements stated in this provision apply whether or not the execution or completion of the work is temporary or permanent and whether or not it is incorporated or to be incorporated in the work or final product.
- 1.5 The requirements of the contract documents and the duties and rights of each party may be amended subsequent to execution of this contract only by:
 - 1. A written amendment to the contract signed by both parties; or,
 - A change order issued pursuant to ARTICLE 9.1
- 1.6 The term "Work" includes all procurement, labor, materials, products, equipment, erection, installation, and alterations necessary to complete the construction envisioned by this contract. The term "Project" refers to the overall construction, of which the work required by the contract may be the whole or may be a part. The term "Architect" also refers to Registered Engineers as appropriate.
- 1.7 The contract between Owner and Contractor shall be executed and returned by Contractor within the time required in the instructions to bidders. A written Notice to Proceed with the work will be issued to Contractor within five (5) days after Owner has executed the contract, except as provided in ARTICLE 4.1.3.
- 1.8 Should any provision or requirement of one portion of the contract documents conflict with any other portion of the contract documents, unless otherwise provided herein, the conflict will be resolved by reference to the contract documents in the following order of priority:
 - A. Any and all later modifications, Change Orders, and written interpretations of the Contract Documents issued by the Owner
 - B. The Agreement
 - C. Addenda
 - D. Supplemental General Conditions (if any)
 - E. General Conditions

¹ Unless otherwise stated, all references to an ARTICLE refer to the articles of these general conditions.

- F. Drawings and Specifications Provided by Engineer. In the case of an inconsistency between Drawings and Specifications or within either Document not clarified by addendum, the better quality or greater quantity of Work shall be provided.
- G. Drawings and Specifications in the latest edition of the Municipality of Anchorage Standard Specifications (M.A.S.S.) In the case of an inconsistency between Drawings and Specifications or within either Document not clarified by addendum, the better quality or greater quantity of Work shall be provided. Contractor is responsible for obtaining the latest edition of the M.A.S.S.
- H. The Request for Proposals / Invitation to Bid
- I. The contractor's bid/proposal.
- 1.9 In case of difference between small and large scale drawings, the large scale drawings shall govern. Schedules on any contract drawing shall take precedence over conflicting information on that or any other contract drawing. On any of the drawings where a portion of the work is detailed or drawn out and the remainder is shown in outline, the parts detailed or drawn out shall apply also to all other like portions of the work.
- 1.10 In the event Contractor believes a discrepancy exists in the contract documents, Contractor shall submit the issue to the Project Representative together with Contractor's proposed course of action for performance of the work. Project Representative shall respond within seven (7) working days or advise Contractor that a response cannot be given within that time. If response will take more than seven (7) working days, Project Representative shall take steps to provide a response within a reasonable time. Any action taken by Contractor prior to or without Owner's response shall be at Contractor's own risk and expense.
- 1.11 Words and abbreviations which are not defined in the contract documents, but which have well known technical or trade meanings, shall be construed in accordance with the common meaning established by sound architectural or engineering practice in the State of Alaska.
- 1.12 Drawings, Specifications, other documents prepared for this project, and copies of them that are furnished by Owner and/or Architect or Consultant for this project, whether or not the documents or project are completed, shall be the property of Owner. All rights of use are reserved to Owner for this project and any subsequent project in which Owner participates in construction. Owner specifically relieves Architect or Consultant of any responsibility or liability pertaining to any subsequent use of the documents, in whole or in part, where those documents bear the stamp of a subsequent Architect or Consultant and are used for a subsequent project.
- 1.13 An electronic version of contract documents, typically in pdf format on a disc, will be furnished to the Contractor without charge. Contractor shall check all documents furnished immediately upon receipt and shall promptly notify Owner of any discrepancies.
- 1.14 The contract documents shall not be construed in any way as limiting Contractor's responsibility to perform the work completely, nor shall any prior customs or trade practices be held to constitute a waiver of the requirements of the contract documents or any portion of them.
- 1.15 The individual(s) executing the contract represent that they have the legal authority to execute the contract as or on behalf of Contractor in accordance with the bid instructions and the contract documents.
- 1.16 Execution of the contract by Contractor is a representation that Contractor has visited the site, become familiar with the local conditions under which the work is to be performed, has correlated personal observations with the requirements of the contract documents and enters this contract with knowledge of those conditions.

ARTICLE 2 ADMINISTRATION OF THE CONTRACT

2.1 The term "Project Representative" shall mean a person or entity employed by or under contract to Owner to be Owner's on-site designated representative. The term Project Representative shall include the Project Representative's employees.

- 2.2 The terms "Architect" or "Engineer" (hereinafter used interchangeably) shall mean the person or entity contracted by the City of Kenai to provide design services for the project. Architect or Engineer also includes employees of the Architect or Engineer. Architect shall provide professional services during construction as described herein below or as authorized by Owner.
- 2.3 Project Representative will provide administration of this contract and all communication made to Owner, Architect or Engineer by Contractor shall be made through Project Representative.
- 2.4 Project Representative will be Owner's primary representative during construction until final payment has been made and the project has been closed out. Owner's instructions to Contractor shall be made through Project Representative, who shall have authority to act on behalf of Owner to the extent set forth in this contract.
- 2.5 Project Representative shall not have the authority to require additional work, changes in the work, modifications or waivers of the rights, work or duties required by the contract documents or the right to bind Owner to any change in specifications or drawings without the written consent of Owner except as provided herein.
- 2.6 Project Representative shall have authority to allow minor deviation in the requirements of the contract documents by Field Order to a maximum cumulative amount of \$5,000.00 per each additional work item, change in work, modification or waiver in the work. Field Orders are to be incorporated into a subsequent Change Order.
- 2.7 Project Representative will render interpretations of the contract documents necessary for the proper execution or progress of the project. All interpretations and decisions of Project Representative shall be consistent with the intent of the contract documents and shall be in writing.
- 2.8 Matters relating to design intent will be referred to the design Architect whose decisions will be final, consistent with the intent of the contract documents.
- 2.9 Project Representative, Architect, and authorized representatives of Owner shall have access to the project site and to the work at all times and shall be afforded every reasonable facility for ascertaining whether or not the work is in accordance with the requirements and intent of the contract documents.
- 2.10 All claims, disputes and other matters in question between Contractor and Owner relating to the execution or progress of the work shall be resolved pursuant to ARTICLE 12.
- 2.11 Project Representative shall have the authority: 1) to reject work which does not conform to the contract documents; 2) to require additional inspections or testing of any work during, prior to, or after fabrication, installation, or completion; 3) to specify both remedial work necessary to correct defective work and the time within which such work must be performed.
- 2.12 On the basis of on-site observations and inspections Project Representative will keep Owner informed of the progress of the work, and will endeavor to guard Owner against defects and deficiencies in the work. If Project Representative determines that any construction method, sequence, material, technique, safety precaution, act or omission of Contractor, Contractor's subcontractors, suppliers, or any of their agents, is detrimental to the progress, quality or safety of the work or to Owner's interest, then Project Representative shall inform Owner promptly, and Owner may, among other things, stop the work and order remedial measures. This provision shall not eliminate or reduce the responsibilities or requirements placed upon contractor and/or subcontractors by the contract documents and shall not place any liability upon the owner for action or omission in regard to this provision.
- 2.13 In accordance with the requirements of ARTICLE 8.5, Project Representative will determine amounts owing to Contractor and will recommend that Owner issue payment in the amount determined due.
- 2.14 Project Representative, with the concurrence of Owner, will determine the dates of Substantial Completion and Final Completion. The Architect will receive and forward to Owner for Owner's review, written warranties and related documents required by the contract and assembled by Contractor.

2.15 Project Representative's duties, responsibilities, and limitations of authority will not be modified without written consent of Owner and Project Representative.

ARTICLE 3 OWNER GENERAL RIGHTS AND DUTIES

- 3.1 At Owner's option, Owner may undertake any or all tasks of Project Representative described in ARTICLE 2.
- 3.2 Owner's directions to Contractor will be made in writing either directly or through Project Representative in accordance with ARTICLE 2. No verbal representation shall be binding upon any party unless confirmed in writing.
- 3.3 Owner shall have the right to perform work related to the project under separate contract(s) in accordance with the provisions of ARTICLE 6.
- Owner shall have the right to issue change orders from time to time which may alter the scope of work required by the contract documents. All change orders will be subject to provisions of ARTICLE 9.
- 3.5 Owner will have the authority to reject work which does not conform to the requirements of the contract documents and to require such remedial work at no charge to Owner as is necessary to correct the defective work. Where defective work is being performed by Contractor and Contractor fails to correct the defective work within a reasonable period of time as set out in ARTICLE 10, or repeatedly fails to carry out the work in accordance with the contract documents, Owner shall have the authority to order an immediate halt to all defective work. Any losses suffered by Contractor as a result of the halt shall be borne by Contractor without recourse to Owner. Issuance of a stop-work order shall not be construed as constituting a breach of the agreement nor authorize Contractor to refuse to perform other portions of the work which Owner has not halted.
- 3.6 Owner shall have the right to terminate the contract or suspend performance of the contract as set out in these general conditions or other contract documents.
- 3.7 Owner shall promptly pay Contractor all sums properly due as provided by ARTICLE 8. If Owner fails to issue payment for a period of forty-five (45) days after the certificate of payment has been approved by Project Representative, without a written statement indicating why payment is being withheld, then Contractor may terminate the contract upon seven (7) days written notice to Owner and may recover from Owner payment for all work executed and for any proven losses sustained upon any materials, equipment and tools, including a reasonable profit and overhead.
- 3.8 Owner and Contractor warrant that neither party will maintain an action against the other for punitive or exemplary damages.

ARTICLE 4 CONTRACTOR'S GENERAL RIGHTS AND DUTIES

4.1 EXAMINATION OF SITE AND CONTRACT DOCUMENTS

- 4.1.1 The term "Contractor" means the person or entity identified in the Agreement which has contracted with Owner to perform the work of the contract. This definition includes a responsible officer of Contractor's organization or its authorized representative who shall be made known to Owner.
- 4.1.2 Contractor represents by execution of the Agreement that Contractor has carefully examined the contract documents and the site upon which the work is to be performed and has developed familiarity with the nature, extent, site access, and risks involved in the work and with all local conditions and applicable statutes, ordinances and regulations that may affect the performance of the work. Contractor assumes full responsibility for having correlated Contractor's study of the contract documents and observation of the site. Contractor represents that Contractor has studied all available surveys and investigation reports of subsoil and latent physical conditions of the site and has made such additional surveys and investigations as Contractor deemed necessary for the performance of the work at the contract price, within the time specified and in accordance with the requirements of the contract documents.

- 4.1.3 Contractor shall not begin work until given a Notice to Proceed, which will be issued as promptly as possible after the Agreement has been executed by all parties. If Owner is required to delay issuance of a Notice to Proceed for more than five (5) working days because of fault of Contractor or other reasons which Owner deems sufficient, then Contractor shall be notified in writing of the delay and when issuance of the Notice to Proceed is anticipated.
- 4.1.4 Before commencing any part of the work, and prior to undertaking each subsequent phase of the work, Contractor shall carefully study the plans and specifications and check and verify all previous work and pertinent dimensions, figures and amounts shown in them and shall make all applicable field measurements. Contractor shall at once report in writing to Owner any apparent conflict, ambiguity, discrepancy, error or other omissions which Contractor may discover. Contractor shall be liable to Owner for failure to notify Owner of any conflict, ambiguity, discrepancy, error or other omissions which Contractor discovered, but failed to report to Owner and shall be responsible for providing a remedy.
- 4.1.5 Contractor shall lay out the work from established base lines and bench marks indicated on the drawings and shall be responsible for all measurements in connection therewith. Contractor will be held responsible for the execution of the work to such lines and grades. It shall be the responsibility of Contractor to maintain, preserve, or replace all stakes and other marks.
- 4.1.6 Drawings showing location of equipment, piping, etc., are diagrammatic and job conditions will not always permit installation in the location shown. If a situation occurs which may require relocation of an item or system which substantially differs from the location called for in the contract documents, it shall be brought to Owner's attention immediately and the relocation determined with the concurrence of Architect or Engineer. If Contractor relocates such items without approval, Contractor will be responsible for any cost or expense for removal or further relocation necessitated by installation without approval.

4.2 SUBMITTALS

- 4.2.1 Within 10 days after the effective date of the notice to proceed and prior to commencement of work, Contractor shall submit to Owner the construction progress schedule and schedule of values required in Articles 4.2.2, 4.2.3 and 4.2.4. The schedule of values and progress schedule must be acceptable to owner and provide reasonable divisions of contract work with corresponding payment. No payment will be made under this contract prior to completion of this requirement. In cases of a unit bid project, the bid schedule on the bid form will be the schedule of values.
- 4.2.2 In accordance with the requirements governing submittals as provided in the contract documents, Contractor shall prepare and submit to Owner a detailed progress schedule for the work which reveals and identifies the critical path of progress, which is consistent with the work and time required by the contract, and which shall provide for the most expeditious and practicable execution of the work. Float time between work items is part of the project and not property of the Contractor. Float time is defined as the amount of time that spans from completion of one previously scheduled activity and extends to the point at which the next scheduled activity is set to begin.
- 4.2.3 Contractor shall also provide Owner with a proposed schedule of values upon submittal of a detailed progress schedule for the work. The schedule of values shall be allocated to various portions of the work and be prepared in such a form and supported by such data to substantiate its accuracy as reasonably required by Owner. Each item of work shall include all applicable profit and overhead. This schedule of values, unless objected to by owner shall be the basis for progress payments made to Contractor and shall include specific lump sum amounts for "Final Payment." This line item shall be in conformance with guidelines specified in ARTICLE 8. Contractor, at the request of Owner, shall amend the progress schedule and the schedule of values as the work progresses.
- 4.2.4 The schedule of values must show a complete breakdown of all phases of the work required by the contract documents. Payment will be in accordance with ARTICLE 8. Pay requests, schedules of value and progress schedules must correspond.
- 4.2.5 Contractor shall submit for Architect's and Owner's approval all product data required by the contract documents in conformance with the dates specified in the detailed progress schedule. Such data include illustrations, standards, schedules, performance charts, instructions, brochures, diagrams, or other

- information necessary to assist Architect in determining whether a proposed product meets the intent of the contract documents.
- 4.2.6 Contractor shall also submit physical samples of materials, equipment or workmanship where required by the contract documents. After approval by Owner and Architect, the sample shall be established as the minimum standard of work, material, equipment or other quality which will be acceptable for work of which the sample is representative.
- 4.2.7 Submittal of shop drawings by contractor constitutes a representation by contractor that the submittal and work, or products required or to be used in accordance with that submittal, will meet or exceed the criteria and conditions of the contract documents and that performance of the work identified in those submittals will meet the progress schedule.
- 4.2.8 Before initiating any work for which shop drawings are required, Contractor shall obtain Architect's approval of the shop drawings, which include drawings, diagrams, schedules and other data specially prepared by Contractor, a subcontractor, a manufacturer, a supplier or distributor to illustrate in detail that portion of the work. Contractor shall review, approve, and submit all shop drawings, whether prepared by himself/herself or subcontractor or supplier. It shall be the duty of Contractor to provide a whole or complete system and to coordinate all work depicted by a particular shop drawing with the work required by other shop drawings for that portion of the work or for related or adjacent work.
- 4.2.9 Contractor shall provide a copy of all transmittal letters to Project Representative at the time the submittal is made to Architect. Architect will review Contractor's submittals only for conformance with the design concept of the work and the information given in the contract documents. Architect's approval of a specific item shall not indicate approval of an assembly of which the item is a component. Architect will return reviewed submittals to Contractor with written comments and forward one set to Project Representative with reasonable promptness so as to cause no delay. A minimum of five (5) sets of submittals shall be required.
- 4.2.10 Should Architect reject any proposed shop drawings, product data or sample, Contractor shall resubmit revised drawings, samples or product data and draw Architect's attention to any deviation or revisions other than those requested by Architect.
- 4.2.11 All of Contractor's submittals shall be made in conformance with the dates specified in the detailed progress schedule with reasonable promptness and in such sequence as to cause no delay in the work of Owner or any separate contractor.
- 4.2.12 The Contractor shall provide two (2) hard copies and an electronic .PDF file of the operation and maintenance manuals for equipment and systems incorporated in the work.

4.3 SAFETY AND CONTROL OF SITE

- 4.3.1 Contractor is deemed to be in physical control of the work site. Contractor shall confine Contractor's operations at the site to those areas described in the contract documents or permitted by applicable statutes, ordinances or permits.
- 4.3.2 Contractor shall not unreasonably encumber the site with materials, equipment or ancillary construction. Contractor shall be responsible for eliminating or minimizing to the extent reasonably possible, public hazards and inconveniences which might result from this work.
- 4.3.3 Contractor shall at all times keep the premises free from accumulation of excess snow, waste materials or rubbish and shall keep adjacent public road clear of mud and dust caused by Contractor's activities. At the completion of the work, Contractor shall remove all waste materials and rubbish from the project as well as Contractor's tools, equipment and surplus materials. The removal and disposal of waste materials, rubbish, or other material, shall be accomplished in accordance with all local, state and federal requirements.
- 4.3.4 Contractor shall be responsible for initiating, maintaining and supervising all necessary safety precautions in connection with this work and shall be responsible for ascertaining and adhering to all applicable federal, state, and local standards, laws, ordinances, regulations, requirements and any lawful order of any public authority bearing on the safety of persons or property or their protection from damage, injury, or loss.

- 4.3.5 Contractor's duty to maintain a safe and secure project site shall include all precautions necessary to assure the safety and protection against injury and damage, of all employees engaged in the work and any other person who may be affected by the work including Owner's agents and employees; Contractor's agents and employees; and members of the general public. Contractor shall assure the safety and protection of all work, materials and equipment which may be upon the site; utilities and other property of Owner including portions of structures and utilities not designated for removal or relocation, trees, shrubs, lawns, walks, pavements and roadways. Contractor duties include but are not limited to protection of project site from vandalism. Such precautions shall further include but not be limited to protection from dangers from hazardous materials.
- 4.3.6 Contractor shall take all necessary measures to prevent members of the general public from entering upon the site without the permission of Owner or Contractor.
- 4.3.7 Contractor shall comply with all OSHA requirements, give all safety notices, erect and maintain all reasonable safeguard notices and barriers, including danger signs and fences which may be required to protect the site and limit access to it.
- 4.3.8 In the event of an emergency, the Contractor will take all means necessary to minimize all damage to or exposure from effects of a catastrophic event. In such case, the Contractor may consult with Owner or seek Owner's assistance. The responsibility for protection of the site, work, and all material remains with the Contractor.
- 4.3.9 Contractor shall designate a person in Contractor's employ at the site to be primarily responsible for the prevention of accidents, identification of all applicable safety standards, statutes and regulations, including but not limited to those addressing hazardous material, and full compliance therewith. This person shall be Contractor's Superintendent unless otherwise designated by Contractor in writing to Owner.
- 4.3.10 Should Project Representative or other representative of Owner ascertain that a safety danger exists, Project Representative or Owner may order an immediate cessation of all dangerous activity and a correction of any safety hazard. Written notice of the order to stop work or to correct the safety hazard shall be made to Contractor as soon as practicable. Contractor shall have no recourse against Owner for any alleged losses or delays arising from this section unless the order to stop work or correct safety deficiency is wholly without basis.
- 4.3.11 Should Contractor elect to utilize explosives or other hazardous materials or equipment, or should Contractor be required to do so for the execution of the work, Contractor shall first give jurisdictional authorities and Owner notice of the intention to utilize hazardous materials, explosives or equipment at a particular time and date. Contractor shall use the utmost care in utilizing such materials and shall use only properly qualified and licensed personnel.
- 4.3.12 Contractor shall correct any damage to the property of Owner or other parties which arises out of the activities or omissions of Contractor, Contractor's agents, subcontractors, employees, personnel or suppliers. Contractor shall commence remedial activities within seven (7) days from the date of the damage. If Contractor fails to do so, Owner or the affected party may utilize his own forces to correct or replace the damaged property and Contractor shall promptly reimburse Owner or the affected party for all losses and costs thereupon. In the event Contractor fails to reimburse Owner as set forth herein, Owner may set off the amount due Owner from any amount due Contractor.

4.4 SUPERVISION AND QUALITY OF THE WORK

4.4.1 Contractor shall supervise and direct the work using the best skill and attention. Contractor is responsible for, and agrees to comply with all applicable local, state and federal ordinances, laws, regulations and statutes. Contractor shall be solely responsible for all construction means, methods, techniques, sequences and procedures, and for the schedule and coordination of all portions of the work to be performed under the contract. Contractor shall also be required to coordinate the work with that of any other contractor working on the project so as to minimize delay, inconvenience, and expense to both. Where identified in writing by Owner at any time, Contractor shall be required to coordinate the work with any partial use of the site that Owner deems necessary.

- 4.4.2 All materials and equipment shall be applied, installed, connected, erected, used, cleaned, prepared or conditioned in accordance with the instructions of the applicable manufacturer, fabricator or processor except as otherwise provided in the plans and specifications.
- 4.4.3 Contractor shall keep on the job site at all times during work progress, a competent resident superintendent capable of reading and thoroughly understanding the plans and specifications. The superintendent will be Contractor's representative at the site and all communications given to the superintendent shall be as binding as if given to Contractor directly. In the event Contractor decides to replace the superintendent, Contractor shall submit to Owner a written notice including the proposed new superintendent's qualifications. The superintendent shall not be replaced without this written notice and a statement of non-objection by the Owner.
- 4.4.4 Contractor shall provide sufficient, competent, and suitable qualified personnel to survey and lay out the work and to perform all construction required by the contract documents. Contractor is responsible for maintaining good discipline and order at the job site at all times and shall not employ any unfit person or anyone not skilled in the task assigned to that person.
- 4.4.5 Contractor shall be fully responsible to Owner for the acts and omissions of Contractor's employees and agents, Contractor's subcontractors and their employees and agents, and any other persons performing any of the work for the benefit of Contractor.
- 4.4.6 Contractor shall not permit the possession or use of alcohol or controlled substances on the site, and shall remove from the site any person who possesses, uses, or is under the influence of alcohol or controlled substances. Contractor shall require all Contractor's agents, subcontractors, employees or suppliers who perform work on site to sign a statement that they have been informed and will abide by the above policy. A copy of all such statements shall be kept at the job site throughout the duration of Contractor's work.
- 4.4.7 Contractor warrants to Owner that all work will be free from faults and defects and meeting or exceeding the requirements of the contract documents and all local, state, and federal legal requirements. All work not so conforming to these standards will be considered defective, and Owner may require its correction.

4.5 DIVISION OF THE WORK

4.5.1 The division of the work into various specialties and divisions in the contract specifications and drawings shall not bind Contractor in apportioning the work among various subcontractors, specialty contractors or workers, and Contractor's own employees.

4.6 TITLE 36 AND OTHER STATUTORY REQUIREMENTS

- 4.6.1 Contractor shall give and post all notices and comply with all federal, state, and local laws, ordinances, regulations, requirements and any lawful order of any public authority bearing on the performance of the work, and shall notify Owner in writing if the drawings and specifications or the contract documents are at variance therewith. If Contractor knows or should know that Contractor is performing work contrary to such legal requirements without giving written notice to Owner in time for Owner to give a stop work order, the Contractor shall bear all costs to remedy that work and to bring it into conformance with the applicable requirements. In the event Contractor fails to reimburse Owner as set forth herein, Owner may set off the amount due Owner from any amount due Contractor. This requirement does not lessen or alter the requirement for indemnification stated in ARTICLE 4.13.
- 4.6.2 Contractor and subcontractors shall strictly comply with all requirements of Title 8, Chapter 30 of the Alaska Administrative Code and Title 36 of the Alaska Statutes as applicable to this contract.
- 4.6.3 Contractor or subcontractors of the contractor shall pay all employees unconditionally as required by AS 36.05.040 and any other applicable laws or regulations. Wages may not be less than those stated in the advertised specifications, regardless of the contractual relationship between the Contractor or subcontractors and laborers, mechanics, or field surveyors. The wages are determined for the region in which the work is done and the rates are issued by the Alaska State Department of Labor (see attached Title 36 wage schedule). The scale of wages to be paid shall be posted by Contractor in a prominent and easily accessible place at the site of the work. If it is found that a laborer, mechanic or field surveyor employed by the Contractor or subcontractor has been or is being paid a rate of wages less than the rate

of wages required by this contract, Owner may, on written notice to Contractor hold Contractor in immediate default and terminate Contractor's right to proceed with the work or that part of the work for which there is a failure to pay the required wages, and Owner may prosecute the remaining work to completion by contract or otherwise, holding Contractor and Contractor's sureties liable for any costs in excess of the contract price. In the event Owner permits Contractor to pursue further work under the contract, Owner shall withhold so much of the accrued payments as is necessary to pay to laborers, mechanics, or field surveyors employed by the Contractor or subcontractors the difference between the rates of wages required by the contract to be paid laborers, mechanics, or field surveyors on the work and the rates of wages in fact received by laborers, mechanics, or field surveyors.

4.6.4 A copy of certified payrolls shall be provided to the Project Representative with each Progress Payment Request.

4.7 PROJECT RECORDS

- 4.7.1 Contractor shall maintain at the project site copies of plans and technical specifications, approved shop drawings and manufacturers' information sheets, and other contractor documents which are necessary for the expeditious and correct execution of the work.
- 4.7.2 Contractor shall maintain at the project site a complete daily job report showing job conditions, work activities started, in progress, interrupted and completed; work force, including identification and number of Contractor's employees and subcontractors by craft; receipt and disposition of materials and equipment; tests performed, visiting personnel and any accidents on a particular day. Owner shall have access to the daily report at all times. A copy of each daily report shall be provided to Project Representative at the end of each week.
- 4.7.3 Contractor shall keep one record copy of all specifications, drawings, addenda, modifications, and shop drawings at the job site in good order and annotated to show all changes made during the construction process. These shall be available to Owner during construction and turned over to Owner prior to final completion of the work.

4.8 ALLOWANCES

4.8.1 Contractor shall include in the contract sum all allowances stated in the specifications or plans, and all items covered by these allowances shall be supplied in such amounts, or by such a person, as Owner may direct. The allowance shall include the cost to Contractor, less applicable trade discounts, of materials and equipment required by the allowance; delivery at the site, applicable taxes; Contractor's cost for unloading and handling on the site, for labor, installation, overhead, profit and other expenses incurred by Contractor. Whenever the cost of the allowed item exceeds or is less than the allowance, the contract sum shall be adjusted equitably by change order.

4.9 NONDISCRIMINATION

- 4.9.1 Contractor must comply with all federal and state laws, rules, regulations and orders, and all local ordinances, regulations and rules concerning wages, taxes, social security, workers' compensation, nondiscrimination, licenses, registration requirements, and similar provisions governing employment of individuals.
- 4.9.2 Contractor will not discriminate against any employee or applicant for employment or refuse employment to a person, or bar a person from employment, or discriminate against a person in compensation or in a term, condition, or privilege of employment because of the person's race, religion, color, or national origin, or because of the person's age, physical or mental disability, sex, marital status, changes in marital status, pregnancy, or parenthood when the reasonable demands of the position do not require distinction on the basis of age, physical or mental disability, sex, marital status, changes in marital status, pregnancy, parenthood, or political affiliation. Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause. Contractor further agrees to insert this provision in all subcontracts hereunder and to require the subcontractors to insert this provision in their subcontracts.

Notwithstanding the prohibition against employment discrimination on the basis of marital status or parenthood stated above, an employer may, without violating this provision, provide greater health and retirement benefits to employees who have a spouse or dependent children than are provided to other employees.

- 4.9.3 Contractor shall state, in all solicitations or advertisements for employees to work on contract jobs, that all qualified applicants will receive consideration for employment in accordance with the above referenced nondiscrimination clause.
- 4.9.4 Contractor shall comply with the reporting requirements which the State of Alaska may establish by regulation.
- 4.9.5 Contractor shall include the provisions of these paragraphs in this section in every subcontract or purchase order under this contract so as to be binding upon every such subcontractor or vendor of Contractor under this contract.

4.10 TAXES

- 4.10.1 Contractor shall pay all sales, consumer, use and other taxes for the work or portions thereof provided by Contractor which are legally enacted at the time bids are received, whether or not yet effective.
- 4.10.2 Contractor shall comply with Owner's requirements for payment of taxes. This contract is specifically subject to the provisions of City of Kenai Code, as it now stands or as it may be amended, including but not limited to termination of the contract for non-compliance. If the violation arises from failure to file or remit sales taxes, no payment will be made to Contractor until all filings have been made and all amounts due are paid.

4.11 PERMITS, FEES, AND NOTICES

- 4.11.1 Contractor shall secure the building permit from the City of Kenai at no cost. Unless otherwise provided in contract documents, Contractor shall secure and pay for all other legally required permits and government fees, licenses and inspections necessary for the proper execution and completion of the work. These are customarily secured after execution of the contract. These costs are part of the contract price. This provision does not lessen the requirements set out in ARTICLE 1.4.
- 4.11.2 Contractor is required to comply with all permits obtained by Owner for project, if any. Contractor is responsible for requesting information from Owner regarding any applicable permits obtained by Owner.

4.12 ROYALTIES AND PATENTS

4.12.1 Contractor shall pay for all royalties and license fees. Contractor shall defend all suits or claims for infringement of any patent rights and shall save Owner harmless from loss on account thereof.

4.13 INDEMNIFICATION

4.13.1 The contractor shall indemnify, hold harmless, and defend the City at its own expense from and against any and all claims, losses, damages or expenses, including reasonable attorney's fees, of, or liability for, any wrongful or negligent acts, errors, or omissions of the contractor, its officers, agents or employees, or any subcontractor under this contract. The contractor shall not be required to defend or indemnify the City for any claims of, or liability for, any wrongful or negligent act, error, or omission solely due to the independent negligence of the City. If there is a claim of, or liability for, the joint negligence of the contractor and the independent negligence of the City, the indemnification and hold harmless obligation shall be apportioned on a comparative fault basis. Apportionment shall be determined upon final determination of percentage of fault. If any such determination is by settlement, the percentage of fault attributed to each party for purposes of this indemnification provision shall only be binding upon the parties included in the settlement agreement. "Contractor" and "City" as used in this article include the employees, agents, officers, directors, and other contractors who are directly responsible, respectively, to each. The term "independent negligence of the City" is negligence other than in the City's selection, administration, monitoring, or controlling of the contractor and in approving or accepting the contractor's work.

ARTICLE 5 SUBCONTRACTORS AND SUPPLIERS

5.1 DEFINITIONS AND RESPONSIBILITIES

- 5.1.1 A subcontractor is a person or entity having a direct contractual relationship with Contractor, or with one of Contractor's subcontractors, to perform any of the work at the site. A supplier is any manufacturer or person or firm providing materials, equipment or assemblies to Contractor or to one of the subcontractors for inclusion in this project.
- 5.1.2 All contracts between Contractor, subcontractors and suppliers (whether or not in privity with Contractor) shall be in accordance with the terms of this contract and shall incorporate the General Conditions of this contract. Contractor shall include in such contracts, and require its inclusion in any subcontracts, a provision holding any subcontractor or supplier (whether or not in privity with Contractor) directly accountable to Owner for work which fails to meet the requirements of the contract documents, or which prevents Contractor or any subcontractor from performing work. This direct accountability to the Owner shall be in addition to Contractor's liability for any such failure.
- 5.1.3 The provisions in this ARTICLE shall not be construed as creating a right of recourse, or any direct contractual relationship, between Owner or Owner's agents and any subcontractor, supplier, or manufacturer (whether or not in privity with Contractor).
- 5.1.4 Contractor shall make all necessary copies of these contract documents available to Owner and to each subcontractor and shall require each subcontractor to make copies of these contract documents available to each of Contractor's subcontractors, if any.
- 5.1.5 Contractor shall be fully responsible for enforcing discipline among subcontractors, their employees and their subcontractors, and for insuring that each subcontractor performs the work in accordance with the contract documents and all safety regulations.
- 5.1.6 Contractor shall have the discretion to require subcontractor(s) to provide payment or performance bonds for work of the subcontractor(s).

5.2 AWARDS TO SUBCONTRACTORS AND SUPPLIERS

- 5.2.1 At Owner's request Contractor shall submit to Owner a list of all principal subcontractors and material suppliers and shall not contract with any proposed person or organization to whom Owner voices a reasonable objection. This provision applies to substitution of subcontractors or suppliers subsequent to Owner's initial objection to a proposed person or entity. Such list shall be submitted in accordance with Division 1 requirements as provided in the contract specifications.
- 5.2.2 Rejection of a proposed subcontractor or material supplier shall not entitle Contractor to any increase in the contract sum or time.
- 5.2.3 At Owner's request Contractor shall submit to Owner a copy of any subcontract and any purchase orders for materials and equipment prior to purchase of such items.

5.3 CONTRACTOR PAYMENTS TO SUBCONTRACTORS AND SUPPLIERS

- 5.3.1 Recognizing the importance of maintaining the integrity of a public contract, Contractor warrants that Contractor will pay all subcontractors and material suppliers at least monthly on or about the 20th day of each month upon approval of the subcontractors' and materials suppliers' billing, for all apparently acceptable work performed on the site during the preceding month and for all apparently acceptable material incorporated into the project or delivered and properly stored at the site during any month for which Contractor has received payment from Owner. If Owner retains a percentage of sums due, Contractor may retain a like percentage, but when retainage is paid, Contractor must pay to the subcontractor or supplier interest on retainage equal to interest rate paid to Contractor by Owner.
- 5.3.2 In furtherance of Contractor's warranty under this ARTICLE and ARTICLE 8, Owner, may require Contractor to declare Contractor's status of accounts with any or all the subcontractors and suppliers. A proof of payment to subcontractors and suppliers shall be made in a form acceptable to Owner. If Contractor

breaches this warranty and fails to pay each subcontractor and materials supplier within 45 days after a monthly billing has been presented, then Owner reserves the right to withhold sufficient sums from Progress Payments due to Contractor and to issue payment to the subcontractors or material suppliers directly. This ARTICLE shall not be construed as creating a right in the subcontractors or material suppliers to have direct recourse against Owner for payment. Contractor expressly agrees that Owner will not be liable for any exercise of Owner's discretionary right under this section, and Contractor agrees to release and indemnify Owner for any claims arising therefrom, either by Contractor directly or by any subcontractor or material supplier. Likewise, this ARTICLE shall not be construed as creating a right in Contractor's surety or any other subrogated party to have direct recourse against Owner for failure to withhold sums pursuant to this section.

ARTICLE 6 SEPARATE CONTRACTS

- 6.1 Owner has the right to award separate contracts for work on the project that is not included in this contract.
- 6.2 When separate contracts are awarded for different portions of the Project or other work on the site, the term Contractor in the contract documents in each case shall mean the Contractor who executes each separate contract.
- 6.3 Contractor shall afford other contractors and Owner's own forces reasonable opportunity for the introduction and storage of materials and equipment and for the execution of their work and shall properly connect and coordinate Contractor's work with theirs as required by the contract documents.
- Any costs caused by defective or ill-timed work under separate contracts shall be borne by the party responsible thereof and shall be paid promptly.
- When separate contracts are let within the limits of any one project, each Contractor shall conduct the work so as not to interfere with or hinder the progress of completion of the work being performed by other Contractors. Contractors working on the same project shall cooperate with each other as directed.
 - Each Contractor involved shall assume all liability, financial or otherwise, in connection with his or her contract and shall protect and save harmless the Owner from any and all damages or claims that may arise because of inconvenience, delays, or loss experienced because of the presence and operations of other Contractors working within the limits of the same project.
- If any part of Contractor's work depends upon work performed by Owner or any separate contractor, prior to proceeding with the work, Contractor is required to report to Owner any apparent discrepancies, defects or delays in the other work which impede proper execution of the work required by this contract. If Contractor fails to report such unsuitable work by another contractor to Owner, then Contractor shall be deemed to have accepted the unsuitable work and any liability for all deficiencies, damages and costs which arise as a result of the defective work or of Contractor's use or covering of the unsuitable work.
- 6.7 Should Contractor or any subcontractor delay or cause damage to the work or property of any other contractor or person, Contractor shall repair the damage or settle the claim and shall further, to the extent allowed by law, indemnify, defend, and hold Owner harmless from any and all claims, costs, expenses, injury, damages, or loss of any kind, including attorneys' fees, court costs, or arbitration costs, which arise out of such delay or damage.
- 6.8 Should a dispute arise between Contractor and separate contractors as to the responsibility for completing, finishing or cleaning up particular work or a portion of the work, Owner may complete, finish or clean up the disputed portion and apportion the cost among Contractors responsible as Owner shall determine to be equitable.

ARTICLE 7 BONDS AND INSURANCE

7.1 PERFORMANCE AND PAYMENT BONDS

7.1.1 For contracts with a contract sum of one hundred thousand dollars (\$100,000) or greater, or as otherwise specified in the request for bid, Contractor shall provide as part of the basic contract sum, a performance bond and a payment bond, each in the amount of 100% of the contract amount, prior to Owner's execution

of the contract. Contractor shall have no recourse of any kind against Owner, if Owner declines to award a contract due to Contractor's failure to provide the required bonds. These bonds, in whatever amount required by the specific contract, shall be administered and deemed governed by the provisions of Alaska Statutes Title 36, Chapter 25 and shall comply with all requirements for payment and submission of claims as provided by that chapter.

- 7.1.2 All bonds shall name Owner as the beneficial party and shall protect Owner for a period of at least one year subsequent to the date of final payment upon this contract. All bonds shall be executed upon a form acceptable to Owner and by a surety company licensed to do business within the State of Alaska and acceptable to Owner. The form of the bond shall provide that Owner shall have at least thirty (30) days prior notice of any lapse in bond coverage. The bond payment shall be applicable to all subcontractors or material suppliers (whether or not in privity with Contractor) who might attempt to assert a claim against Owner.
- 7.1.3 Owner may inform the surety as to the general progress and status of the work. A copy of all communications with the surety company shall be provided promptly to Contractor upon request.
- 7.1.4 In the event Contractor refuses, or is unable to make payments to laborers, subcontractors or material suppliers, or to complete the work, or to correct defective work, within the times provided by this contract, Owner may elect to call upon Contractor's surety to rectify Contractor's default. Contractor shall first be given seven (7) calendar days written notice (effective when mailed) of Owner's intentions to call upon the surety company and Owner shall specify to Contractor the basis for the proposed course of action. If Contractor fails to correct the default within the time provided, Owner shall promptly call upon the surety.
- 7.1.5 Prior to final payment or reduction in retainage, Contractor shall provide written consent of each affected surety releasing Owner from any further claims arising from payment to Contractor and obligating the surety company to rectify any default, nonpayment, defective work, error, omission or deficiency of Contractor.
- 7.1.6 Contractor and Owner expressly agree that Owner shall be entitled to retain from payments to Contractor amounts in excess of normal retainage if these additional amounts may be necessary to indemnify Contractor's surety for any payment or corrective work which the surety might be required to undertake. This additional retainage will be made only upon written directive by Contractor's surety specifying the reason for retaining extra amounts, the amounts to be retained and agreement of the surety to reimburse Owner for any interest which may be due Contractor under the provisions of the Alaska Statutes.

7.2 CONTRACTOR'S INSURANCE

- 7.2.1 The services to be rendered under this contract are those of an independent Contractor.
- 7.2.2 Contractor and all subcontractors, if any, shall be responsible for the purchase and maintenance of all insurance required by law and at a minimum purchase the insurance coverage as specified in ARTICLE 7.2.5 and 7.2.6 below, and any other insurance coverage as may be specified in ARTICLE 7.2.11 SUPPLEMENTARY GENERAL CONDITIONS OF INSURANCE, if attached and forming a part of this contract. Such insurance shall be by a company/corporation currently rated "A-" or better by A.M. Best.
- 7.2.3 This insurance coverage required by ARTICLE 7.2.5 and 7.2.6, and ARTICLE 7.2.11 if attached, shall be in acceptable form, and for the amounts specified by the City of Kenai, or as required by law, whichever is greater.
- 7.2.4 The insurance policies shall remain in force for the life of the contract and shall be a part of the contract price.
- 7.2.5 Commercial general liability with minimum coverage of \$1,000,000 and automobile liability insurance with minimum coverage of \$1,000,000 combined single limit bodily injury and property damage per occurrence. This insurance shall be primary and exclusive of any other insurance carried by the City of Kenai. The commercial general liability insurance shall be without limitation on the time within which the resulting loss, damage, or injury is actually sustained.
- 7.2.6 Per Alaska State Statutes, Worker's Compensation and Employers Liability Insurance shall be provided for all employees who are performing work under this contract.

- 7.2.7 Certificate(s) of Insurance shall be provided by Contractor and all subcontractors, or their Insurance Companies and/or their Agents, naming the City of Kenai as an additional insured for the work specified in this contract with a waiver of subrogation for commercial general liability insurance and automobile liability insurance. The certificates of insurance must reference the specific contract by name. Workers compensation insurance must be endorsed for waiver of subrogation against the City. Certificates of Insurance, acceptable in form and content, will be delivered to Owner at the address designated for legal service in the agreement, at or prior to presentation of the contract for execution by owner.
- 7.2.8 There shall be no cancellation or material change of the insurance coverage, or intent not to renew the insurance coverages as specified in this contract, without thirty (30) days prior written notice to the City of Kenai. Notice of cancellation, material change in coverage, or intent not to renew will be delivered to the address designated for legal notice in the agreement.
- 7.2.9 Upon renewal or change in policies during the contract, Certificates of Insurance shall be delivered to the address designated for legal notice in the agreement.
- 7.2.10 Owner shall have the option to purchase and maintain such insurance as will protect Owner against property losses or liability claims, which may arise from operations under the contract. Insurance providing coverage against fire and extended coverage perils, may, at Owner option, provide coverage to the full insurable value of the project and insure the interests of Contractor and all subcontractors as their interests may appear. Any recovery for loss insured pursuant to this General Condition is to be adjusted to Owner and made payable to Owner as trustee for the insured, as their interests may appear. This section does not modify the contractor or subcontractors' responsibility to provide insurance as required in ARTICLE 7.
- 7.2.11 May be added in supplementals as Supplementary General Conditions of Insurance.

ARTICLE 8 MEASUREMENT, PAYMENT AND COMPLETION

8.1 SCOPE OF PAYMENT

8.1.1 Unless altered by change order, Contractor shall be paid only that sum set forth in the agreement between Owner and Contractor as Contractor's compensation for performance of all work required by the contract documents.

8.2 LUMP SUM PAY ITEMS

- 8.2.1 Each bid item is characterized as either a lump sum item or a unit price item in the bid documents. Where the item is bid at a lump sum price, no additional compensation shall be paid to Contractor for additional work required because Contractor failed to include items or quantities in Contractor's estimate or a subcontractor's estimate, or failed to utilize proper construction means, methods, procedures or sequence or by virtue of any decision of Contractor.
- 8.2.2 Contractor is required to provide and pay for all requirements necessary for the proper execution and completion of the contract unless specifically excluded by the contract documents. The costs are part of the contract price. The requirements include but are not limited to the requirements stated in ARTICLE 1.4.
- 8.2.3 All materials and equipment incorporated in the work shall be new except as otherwise provided in the contract documents. All materials and equipment shall meet or exceed the requirements of the plans and specifications and Contractor shall furnish, if requested, satisfactory evidence as to the source, kind and quality of any materials and equipment.

8.3 UNIT COST ITEMS

8.3.1 Quantities appearing in the bid schedule are approximate and are prepared for comparison of bids. Payment to Contractor will be for actual quantities of work performed and materials furnished in accordance with the contract documents. Scheduled quantities of work and materials may be increased, decreased or eliminated as provided herein.

8.4 APPLICATION FOR PAYMENT

- 8.4.1 Applications for payment shall be based on Contractor's submitted schedule of values, as approved by Owner per Section 4.2. Schedule of values shall be prepared in such form and supported by such data as may be required by Owner to substantiate its accuracy prior to Contractor's first application for payment.
- 8.4.2 The schedule of values shall include quantities of work, unit prices and other items comprising the contract price. It shall subdivide the work into each component part in sufficient detail to serve as the basis for progress payments during construction.
- 8.4.3 With each subsequent application for progress payment, Contractor shall provide a schedule of values to Owner showing all work which has been performed to date together with the value thereof, and the percentage of work completed.

8.5 PROGRESS PAYMENTS

- 8.5.1 Progress Payments shall be made monthly, based upon the amount of apparently acceptable work performed at the site and apparently acceptable materials purchased for the project and properly stored at the site during the previous month. Disbursement of progress payments will not effect a transfer of the risk of loss from the Contractor to the Owner for invoiced equipment or material. The risk of loss of the work and all material and equipment not yet incorporated in the work is the liability of the Contractor until substantial or final completion, whichever is earlier.
- 8.5.2 The value of work performed and materials stored shall be set forth in Contractor's revised schedule of values. If requested by Owner, Contractor shall promptly provide Owner any additional information necessary to ascertain the value of the work performed or the cost of materials stored at the site during the previous month. Each updated Schedule of Values shall be in the form of a notarized affidavit. Proof of certified payroll shall be provided per ARTICLE 4.
- 8.5.3 By application for payment, Contractor warrants and guarantees to Owner that title to all work, materials, and equipment for which payment is requested will pass to Owner either by incorporation in the construction and after substantial completion or upon receipt of payment, whichever occurs later, that such title will be clear of all liens, claims, security interests, and other encumbrances, except for liens to be released later prior to final payment and specifically identified on the application for payment, and that all such work, materials, and equipment are of acceptable quality.
- 8.5.4 Each application for payment shall be made no later than the tenth day of each month for work performed during the preceding month. Progress Payment requests shall be submitted to Project Representative for analysis and recommendation to Owner.
- 8.5.5 Project Representative will review Contractor's application for payment within seven (7) working days after receipt and if Project Representative ascertains that the amounts set forth therein are properly due and owing to Contractor, then Project Representative shall issue a Certificate of Payment to Owner. If Project Representative determines that only a portion of the sum requested is then properly due and owing to Contractor, then Project Representative may issue a Certificate of Payment in a lesser amount or may reject the application altogether. Project Representative will notify in writing both Contractor and Owner of the reasons for reduction or rejection of any application for Progress Payment.
- 8.5.6 Project Representative's issuance of a Certificate of Payment constitutes a representation that the work has progressed to the point indicated and that to the best of Project Representative's professional knowledge and information, Contractor is entitled to payment in the amounts certified.

8.6 RETAINAGE

8.6.1 After receipt from Project Representative of the Certificate for Payment, Owner shall make payment to Contractor within thirty (30) days. Owner shall have the option to retain up to 10% of the full amount of the Certificate for Payment plus lump sum amounts for material and equipment not properly stored, or subject to damage prior to use. Amounts retained by Owner may be held by Owner until project completion. If the project involves grant money or the City has entered into a written contract with the state to provide state funds, payment will be made in accordance with AS 36.90.200-270.

8.6.2 Owner may withhold additional sums of money from progress payments in an amount sufficient to safeguard and protect Owner against any apparently meritorious claims against Contractor by any party other than Owner, and for any work which Owner ascertains to be defective or not meeting the requirements of the contract documents.

8.7 CONDITIONS OF PAYMENT

- 8.7.1 Project Representative may refuse to approve all or any part of any request for progress payment if, in Project Representative's opinion, it would be incorrect to make the representation to Owner set out in ARTICLE 8. Project Representative may also refuse to approve all or any part of any request for progress payment, if subsequently discovered evidence or the results of subsequent inspections or tests nullify any payment previously approved.
- 8.7.2 Owner may withhold payment to the extent necessary to protect Owner from loss resulting from:
 - Defective or damaged work;
 - B. Claims or liens which have been filed or may be reasonably expected;
 - C. Contract price reduction by modifications or change orders;
 - D. Owner cost to correct or complete defective work;
 - E. Unsatisfactory prosecution of the work by Contractor, including but not limited to failure to furnish adequate submittals or to clean up the work or site;
 - F. Reasonable evidence that the work cannot be completed for the unpaid balance of the contract sum;
 - G. Failure of Contractor to make payment properly due to subcontractors, employees, suppliers or utilities;
 - H. Reasonable evidence to believe the work cannot be completed within the contract time.
 - I. Damage to Owner's property not replaced or repaired in timely manner.

When the grounds for withholding payment are removed, payment shall be made for amounts withheld.

8.7.3 Neither the issuance of a Certificate of Payment, nor the making of any progress payment, nor the partial or entire use of the project by Owner shall constitute an acceptance of any work not in accordance with the contract documents nor shall it constitute a waiver of any right accruing to Owner or of any duty of Contractor.

8.8 SUBSTANTIAL COMPLETION

- 8.8.1 Substantial Completion is defined as the state of construction at which the work is sufficiently complete and in accordance with the contract documents, so that Owner could occupy and utilize the work or a specific portion of it, for its intended use.
- 8.8.2 When Contractor considers the work substantially complete Contractor shall notify Project Representative in writing and request a Substantial Completion inspection. The request shall be made a minimum of three business days in advance. The notice shall include a comprehensive list of items to be completed, reasons they are not completed and a date of anticipated completion. The notice shall also include copies of all code compliance inspections, the Certificate of Occupancy, if applicable, and any other documents required by the contract.
- 8.8.3 Project Representative shall schedule the Substantial Completion inspection and notify Contractor. The inspection will be performed by Project Representative, Architect, Design Engineers, and Owner personnel in the presence of Contractor. Should this inspection find the work not substantially complete, Owner may terminate the inspection and promptly notify Contractor in writing of the conditions for reinspection. Any deficiencies identified by this inspection will be listed and promptly furnished to Contractor for remedial action.
- 8.8.4 If Contractor has requested that Project Representative and Owner make an inspection to ascertain Substantial Completion, and if the work is not then substantially complete, Contractor shall be liable for all costs Owner, Architect, and Project Representative have incurred in making the inspection.

- 8.8.5 If it is determined on the basis of inspection that the work is substantially complete, Project Representative will issue a Certificate of Substantial Completion. Included in the certificate shall be a list of items which must be completed or corrected before final payment and the time within which such items shall be complete and corrected. Failure to include an item on this list does not alter the responsibility of Contractor to complete all work in accordance with contract requirements.
- 8.8.6 Certificate of Substantial Completion shall state the date of Substantial Completion and the respective responsibilities of Owner and Contractor for the maintenance, insurance and security of the work. Certificate of Substantial Completion shall specifically authorize Owner to take possession of the premises and utilize them for their intended purpose. Owner's beneficial occupancy of the premises shall make reasonable allowance for the performance of the work which Contractor must complete prior to final completion.
- 8.8.7 If Contractor fails to complete or correct work required by the Certificate of Substantial Completion within the time allowed, then the Certificate of Substantial Completion shall be voided and the contract time expended by Contractor shall be counted, and the acceptability of the work shall be inspected as if a Certificate of Substantial Completion had not been issued.
- 8.8.8 Upon Substantial Completion of the work and upon application by Contractor and certification by Project Representative, Owner shall make payment, reflecting adjustment in retainage, if any, for such work as provided in the contract documents.

8.9 FINAL COMPLETION AND WARRANTY PERIOD

- 8.9.1 The terms Final Completion and Warranty Period refer to, respectively, the finalization of the construction phase and a one-year warranty period following the Substantial Completion. Final Completion shall be represented by a lump sum dollar amount identified on the schedule of values. Final Payment represents a sum of money to perform all tasks necessary from Substantial Completion to Final Completion, including completion of final punch list, completion of as-built data, turnover of all warranty information, notarized acknowledgments of payments, and relinquishment of claims against Owner.
- 8.9.2 When Contractor considers the work ready for Final Completion, Contractor shall forward to Project Representative an application for final payment including (1) an affidavit that all payrolls, bills for materials and equipment, and other indebtedness connected with the work have been paid or otherwise satisfied, (2) consent of surety, if any, to payment, (3) irrevocable, notarized proof of payment and relinquishment of claim against Owner, issued by every subcontractor (whether or not in privity with Contractor), material supplier and other party who might assert a claim against Owner, and (4) all other documentation required by the contract documents. Project Representative and Owner shall promptly inspect the work to see that it is fully performed and complete, that all portions of the work are acceptable and that the contract is fully performed aside from completion of the Warranty Period. After Project Representative has made a determination that these requirements have been met, Project Representative shall prepare and recommend that Owner issue a Certificate of Final Completion and Final Payment.
- 8.9.3 Project Representative's approval of Final Payment constitutes an additional representation by Project Representative to Owner that to the best of Project Representative's knowledge and information, all conditions which Contractor must fulfill prior to being entitled to Final Payment have in fact been fulfilled in accordance with the contract documents.
- 8.9.4 If any party refuses to relinquish its claim, or if Owner considers that any item or portion of the work: (1) is of doubtful acceptability under the contract documents; or (2) may diminish the value of the work; or (3) may prove to be ultimately unreliable; or (4) may prove to be less functional than required by the intent of the contract, then Owner, in lieu of refusing Final Payment to Contractor, may allow Contractor to furnish a bond in a form and in an amount satisfactory to indemnify Owner against losses occasioned thereby. If any additional costs to settle the claim or to correct work of doubtful quality accrue to Owner in excess of the indemnity available to Owner, Contractor shall refund to Owner all differences and costs which Owner might be compelled to pay, including all litigation costs and reasonable attorney fees.
- 8.9.5 Acceptance of final payment by Contractor constitutes an explicit waiver of all claims which Contractor might assert against Owner except those previously made in writing and identified by Contractor as unsettled at the time of the Application for Final Payment.

- 8.9.6 Final Payment to Contractor shall constitute a waiver of all claims which Owner might assert except those arising from: (1) unsettled claims; (2) faulty or defective work (3) failure of the work to comply with the requirements of the contract documents; (4) warranties required by this contract or that by their terms do not expire upon completion of the contract.
- 8.9.7 If, after Substantial Completion, Warranty Completion is delayed through no fault of Contractor, or by the issuance of change orders affecting Final Completion, Owner may, upon recommendation of the Project Representative, extend the contract time by a reasonable period and accept certified applications for further Progress Payments.
- 8.9.8 Upon completion of all requirements identified in ARTICLE 8 as "Final" the funds representing Final Payment shall be released to Contractor along with the Certificate of Final Completion. Upon issuance of Certificate of Final Completion all contract sums shall be accounted for to Contractor and shall be paid to Contractor. However, any and all applicable bonds shall not be released until after the Warranty Period.

8.10 TIME AND LIQUIDATED DAMAGES

- 8.10.1 The time permitted for construction of the work will run from issuance of Notice to Proceed through the dates for Substantial Completion as specified in Agreement between Owner and Contractor, unless a specific completion date is specified.
- 8.10.2 The term "day" as used in this contract shall mean "calendar day" unless specifically stated otherwise.
- 8.10.3 All warranty periods and obligations accruing to Contractor through completion of the work shall be considered to begin on the date of Substantial Completion, unless otherwise agreed to separately in writing by Owner and Contractor.
- 8.10.4 Contractor shall begin the work as soon as possible after the date identified in Notice to Proceed and shall prosecute the work expeditiously and with adequate labor and materials.
- 8.10.5 Liquidated damages will be applied in the amount set out in the Agreement.
- 8.10.6 Claims for extension of time will be considered only if they affect "critical path" items specifically identified in the detailed progress schedule or in any applicable Supplementary Conditions. Claims for extension of the contract time must be made in writing to Owner not more than twenty (20) days after the reason for requested extension appears.

ARTICLE 9 CHANGES IN THE WORK, CONTRACT PRICE, AND TIME

9.1 CHANGE ORDERS

- 9.1.1 Without invalidating this contract, Owner may, at any time, order additions, deletions, or revisions in the work. All such changes must be authorized by written change order. Upon receipt of a change order, Contractor shall proceed with the work in accordance with applicable requirements of the contract documents. If any change order entails an increase or decrease in the contract price or an extension or curtailment of the contract time, adjustment will be made as provided herein.
- 9.1.2 Extra work will be paid for either at a fixed price specified in the change order (using unit prices or a lump sum amount) or on a time and materials basis.
- 9.1.3 Project Representative may authorize minor changes, alterations or deviations in the work in accordance with ARTICLE 2. These changes shall be authorized by written Field Order to be included in a subsequent Change Order.
- 9.1.4 Any additional work performed by Contractor without a properly executed change order will not entitle Contractor to an increase in the contract amount or to an extension of the contract time, except in the case of emergency threatening life, safety or property.

9.2 ISSUANCE OF CHANGE ORDER

- 9.2.1 The contract sum constitutes the total compensation to Contractor for the work required by this contract. The contract price may be changed only by a properly executed change order. Any request for increase in the contract price shall be based upon written notice delivered to Project Representative within ten (10) days after the reason for the proposed increase appears. Change order proposals must be accompanied by all pertinent data and documentation, including a detailed estimate showing costs, quantities, unit prices and markups for overhead and profit.
- 9.2.2 Project Representative shall analyze Contractor's change order proposal and shall make a recommendation to Owner within a reasonable period of time. If Owner accepts the proposal, Project Representative shall prepare the change order for execution by Contractor and Owner.
- 9.2.3 The value of any work added or deleted by change order shall be determined by one of the following methods:
 - A. Application of unit prices set forth in the bid: unit prices shall include all direct and indirect costs of the work, including labor, equipment (whether owned or rented), materials, home office expense, all overhead and profit.
 - B. Application of mutually accepted unit prices for work not covered by bid unit prices: unit prices shall include all direct and indirect costs of the work, including labor, equipment (whether owned or rented), materials, home office expense, all overhead and profit.
 - C. Mutual acceptance of a lump sum: Contractor's lump sum proposal must include an itemized breakdown of all costs of Contractor, subcontractors and suppliers. Breakdowns shall show quantities and prices of labor, materials, equipment and other direct costs. To direct costs shall be added the allowable combined overhead and profit as provided in ARTICLE 9.4.
 - D. At Owner's option, Contractor may be directed to proceed with additional work on a "time and materials" basis which may also stipulate a maximum "not to exceed" amount. Contractor will be required to maintain and submit detailed records showing all quantities and prices of labor, materials, equipment and other direct costs. To direct costs shall be added the allowable combined overhead and profit as provided in ARTICLE 9.4.
- 9.2.4 When both additions and credits for related work or substitutions are involved in any one change, the allowance for overhead and profit shall be based on the net change. All related items within a proposal shall be considered as a single item for purposes of computing overhead and profit.
- 9.2.5 When Contractor is directed to proceed on a time and materials basis, costs of the work shall be submitted daily for approval by Project Representative and may only include:
 - A. Actual payroll costs for employees, as substantiated by certified payroll, in the direct employ of Contractor for the times actually utilized in prosecution of the additional work, including allowance for benefits which Contractor customarily provides its employees;
 - B. The actual substantiated cost to Contractor for all material and equipment incorporated into the work, including transportation and storage expenses;
 - C. The actual substantiated amounts of payments by Contractor to subcontractors for work performed by the subcontractors;
 - D. Any costs of special consultants to the extent authorized by Owner:
 - E. Substantiated equipment rental costs at reasonable market rates;
 - F. Additional supervision and travel costs reasonably related to the work performed;
 - G. Increased bond premiums:
 - H. Additional license fees, permits, or applicable taxes;

I. Minor incidental expenses such as telegrams and long distance telephone charges.

To these direct costs shall be added the allowable combined overhead and profit as provided in ARTICLE 9.4.

- 9.2.6 Unless specifically agreed to by Owner in writing, the cost of additional work shall not include any portion of Contractor's general overhead, nor any sum attributable to Contractor's prosecution and supervision of the principal work at the site, nor any overtime expense, unless specifically agreed to by Owner in writing. Contractor shall not be compensated for any casualty or other losses or expenses attributable to negligence of Contractor or any person in its employ or any subcontractor or supplier.
- 9.2.7 Payment to Contractor shall be made only for the actual quantities of work performed and accepted or materials furnished, in conformance with the contract or applicable change order. When the accepted quantities of work or materials vary from the quantities stated in the bid schedule, Contractor shall accept as payment in full, payment at the original contract unit prices for the quantities of work and materials furnished, completed and accepted; except as provided in the contract documents.

9.3 UNIT PRICES

- 9.3.1 When unit prices are used, and where the final quantity of a major contract item varies more than 25% above or below the bid quantity, either party to the contract may request an equitable adjustment in the contract unit price of that item. A major contract item is an item equal to 10% or more of the total contract.
- 9.3.2 When the final quantity of work is less than 75% of the bid quantity, the equitable adjustment shall be made for those units of work done and accepted, except that the total payment for the item shall not exceed 75% of the total amount bid for the item.
- 9.3.3 To determine unit prices for authorized changes or additions in the work that alter the quantity of work under a lump sum pay item, adjustment to the pay item will be determined by multiplying the added or deleted quantity by the quotient of the contract lump sum price and the estimated quantity shown on the original plans. Payment will be made under a new contract item established for that purpose. Adjustments will be made as a change order to the contract.
- 9.3.4 No allowance shall be made for any increased expenses, loss of expected reimbursement or loss of anticipated profits suffered or claimed, either directly from such alterations in quantities or indirectly from unbalanced allocations among the contract items by Contractor, or any other causes.

9.4 ALLOWABLE OVERHEAD AND PROFIT

- 9.4.1 When the value of change order work is determined by the lump sum method or by the time and materials method, the following definitions and percentages shall apply.
- 9.4.2 Direct costs are defined as the net cost to Contractor to accomplish a given change. Costs of bonds and insurance associated with the change shall be applied after addition of indirect costs.
- 9.4.3 Indirect costs are defined as general operational charges relating to the accomplishment of a given change, including but not limited to small tools, incidental job burdens and general office expense.
- 9.4.4 Overhead and Profit: Allowances for all indirect costs shall be identified as combined overhead and profit and shall not exceed the percentages in the following schedule:

A. Additive work:

- (1) Prime Contractor:
 - (a) 15% of the direct costs of own work in excess of \$1,000.00; 20% when the total value of own work is equal to or less than \$1,000.00.
 - (b) 8% of the direct costs of work performed by subcontractors not including subcontractor's overhead and profit.
 - (c) 8% of the direct costs of equipment.
- (2) Subcontractors: percentages represented in subsections (a) and (b) are a maximum percentage

- allowed regardless of the tier or number of subcontractor(s) performing the work:
- (a) 15% total of the work performed by subcontractors in excess of \$1,000.00; 20% total of the work performed by subcontractor equal to or less than \$1,000.00.
- (b) 8% of the direct costs of equipment.
- (3) In no case shall overhead and profit exceed 23% of the direct costs of work or 16% of the direct costs of equipment when the cost of the work exceeds \$1,000.00. In no case shall overhead and profit exceed 28% of the direct costs of work or 16% of the direct costs of equipment when the cost of the work is equal to or less than \$1,000.00.

B. Deductive work:

(1) Prime Contractor: 4% of the direct cost of deleted own work.

9.5 CONCEALED CONDITIONS

- 9.5.1 This ARTICLE applies only when concealed conditions substantially at variance with the conditions set forth in the contract documents are encountered and these conditions were not foreseeable by Contractor or reasonably inferable from information provided by Architect or Owner in the bidding documents.
- 9.5.2 If it is determined the Contractor could not predict the concealed conditions as set forth under ARTICLE 9.5.1, Owner may issue a change order for the performance of additional work required with an equitable adjustment in the contract sum. Contractor shall not begin work upon any concealed condition until Owner has approved a written change order

ARTICLE 10 TESTING AND CORRECTION OF WORK

10.1 TESTS AND INSPECTIONS

- 10.1.1 Contractor shall be responsible for securing permits and approvals from entities having jurisdiction over the work. Contractor will provide any special testing or inspections required by the contract documents. Contractor shall notify Owner 48 hours prior to performing testing. Contractor shall not cover work that requires testing, inspection or approval until such testing, inspection, or approval has been completed. Owner reserves the right to approve the testing agency.
- 10.1.2 Neither observation by Owner nor inspections, tests, or approvals by Owner or Owner's testing agency shall relieve Contractor from Contractor's obligation to perform the work in accordance with the contract documents.

10.2 UNCOVERING OF WORK

- 10.2.1 If any work is covered or buried contrary to contract requirements or Owner's written request, such work shall be uncovered at Owner's request for inspections, tests or approvals. Uncovering and recovering shall be at Contractor's expense, unless Contractor has given notice of intent to cover the work and Owner has not acted with reasonable promptness to provide any necessary tests, inspections or approvals.
- 10.2.2 If any work has been covered which Owner has not specifically requested to observe prior to covering, or if Owner considers it necessary or advisable that covered work be inspected or tested by others, then Contractor shall, at Owner's request, uncover, expose or otherwise make available for observation, inspection, or testing, that portion of the work as Owner may require. Contractor shall furnish all necessary labor, materials and equipment. If such work is found to be defective, Contractor shall bear all expenses, including compensation for any additional professional services and testing. If, however, the uncovered work is found not to be defective, Contractor shall be allowed an equitable adjustment in the contract price or the contract time. Only Contractor's direct costs attributable to the uncovering of work and its recovering shall be allowed.

10.3 DEFECTIVE WORK

- 10.3.1 All work not meeting the requirements of the contract documents shall be considered defective.
- 10.3.2 Contractor shall promptly correct or replace any defective work. Any and all costs associated with correction or replacement shall be borne by Contractor. Contractor shall also bear the expense of making good all

- work of others destroyed or damaged or required to be redone because of the correction or replacement of defective work.
- 10.3.3 If, after seven (7) days written notice to Contractor, Contractor fails to correct deficiencies or to provide Owner with an approved schedule for correcting defective work, Owner may, without prejudice to any other remedy it may have, make good deficiencies and deduct the cost thereof from the payment then or thereafter due Contractor. No extensions of time shall be allowed for correction of work that is defective.

ARTICLE 11 WARRANTIES

- 11.1 Contractor unconditionally warrants for a period of one year from issuance of the Certificate of Substantial Completion the usability and quality of all work, labor and materials incorporated into the project, unless otherwise provided in the contract documents. After the approval of Final Payment and prior to the expiration of one year after the date of Final Completion, any work found to be defective shall be remedied promptly by Contractor within fourteen (14) days of written notice without cost to Owner and in accordance with Owner's written instructions. Contractor shall either correct such defective work, or, if it has been rejected by Owner, remove it from the site and replace it with acceptable work. If Contractor does not promptly comply with the terms of Owner's instructions, Owner may have the defective work corrected or the rejected work removed and replaced, and all direct and indirect costs of such removal and replacement, including compensation for additional professional services, shall be deducted from Warranty Period Payment, unless the surety elects to remedy deficiency.
- 11.2 In addition to other warranties set forth in this contract and in accordance with requirements stated in the contract documents, Contractor shall obtain and transmit to Architect all warranties on material and equipment incorporated into the work and either provided by the supplier or otherwise required by the contract documents. Transmittal of warranties to Owner shall be a prerequisite of the Certificate of Final Completion.
- 11.3 All material and equipment installed by Contractor shall have a manufacturer's warranty for a period of one year, except as otherwise provided by the contract documents. The period of warranty shall begin on the date of Substantial Completion unless otherwise noted on the Certificate of Substantial Completion. This article does not limit any manufacturer's warranty which extends for a period of time longer than that specified as minimum in the contract documents.
- 11.4 If a warranty period in excess of one year on a particular item or part of the work is required by the contract documents, the longer warranty period shall govern warranty obligations of Contractor.
- Owner may accept defective work or materials found during the warranty period instead of requiring correction or removal and replacement. If acceptance occurs prior to approval of final payment, a change order shall be issued to reduce the contract price. If acceptance occurs after approval of final payment, an appropriate amount shall be paid by Contractor to Owner.
- The provisions of this ARTICLE shall not be construed as limiting the right of Owner to make a claim against Contractor for work not constructed in accordance with the contract documents. Where a defect attributable to Contractor's or subcontractor's materials or workmanship appears after expiration of the one-year warranty period, Owner shall notify Contractor of the appearance of damages due to defective work or materials and shall offer Contractor the right to replace or repair all defective work and other work using Contractor's forces. If Contractor fails to correct the work and any consequentially damaged work within a reasonable time, or if Contractor refuses to correct the work, Owner may correct the work utilizing Owner's own forces. Contractor shall pay Owner all costs attributable to correction of the defective work and any consequential damages occasioned by the defective work.
- 11.7 Should Owner and Contractor agree to delay completion of any items, the one-year warranty period for those items shall commence upon written acceptance of each item by Owner.

ARTICLE 12 CLAIMS AND LITIGATION

12.1 This contract shall be governed by the laws of the State of Alaska, and any lawsuit brought thereon shall be filed in the Third Judicial District at Kenai, Alaska.

- 12.2 No controversy or claim arising out of this contract shall be subject to binding arbitration unless both Owner and Contractor agree in writing to submit the question to arbitration at the time when the controversy arises.
- 12.3 All claims, disputes and other matters in question between Contractor and Owner relating to the execution or progress of the work shall be referred initially to Project Representative, who shall render a recommendation in writing to Owner within a reasonable time.
- During pendency of any claim arising out of this contract, Contractor shall carry on the work and maintain the Progress Schedule approved by Owner unless otherwise agreed by Contractor and Owner in writing. Should Contractor cease work, Contractor shall be in breach of this contract and Owner shall have the right to terminate the contract and to prosecute the work to completion with Owner's own forces or with a replacement Contractor. Contractor shall be responsible for any increase in costs to Owner above the contract price.
- 12.5 Contractor may make claims for additional costs only if the additional cost involved has occurred because of:
 - A. A change order issued by Owner, where the additional sum due Contractor set forth in the change order is in dispute.
 - B. An order by Owner to stop the work where Contractor was not at fault.
 - C. Concealed conditions as set out in ARTICLE 9.
 - D. Failure of payment by Owner pursuant to ARTICLE 3.
 - E. Additional costs or delays caused by separate contractors' or Owner's forces in accordance with ARTICLE 6.
- 12.6 Contractor shall not make a claim for additional costs where the basis of the claim lies in an oversight or mistake made by Contractor during the bidding process or by reason of negligent acts or omissions of Contractor or any mistake in judgment or improper selection of construction means, methods, sequences and materials during the course of construction.
- 12.7 If Contractor is entitled to make claim for an increase in the contract sum, Contractor shall deliver to Owner written notice of Contractor's intention to assert each claim within twenty (20) days after occurrence of each event giving rise to the claim. Contractor must give this notice of claim and specify the full extent and nature of the claim(s) to Owner before proceeding to execute the work upon which a claim might be asserted. No claim for additional costs or compensation shall be valid unless the prior twenty (20) day notice has been given. Adherence to this provision shall be strict. Any adjustment in the contract sum resulting from settlement of claims shall be authorized by change order.

ARTICLE 13 TERMINATION OF THE CONTRACT OR SUSPENSION OF THE WORK

13.1 TERMINATION BY OWNER

- 13.1.1 Owner shall have the right to terminate the contract if Contractor should file for bankruptcy, reorganization, otherwise be declared insolvent, or if Contractor makes a general assignment for the benefit of creditors. Exercise of these rights, where required by law, is contingent upon relief from the automatic stay provisions of the United States Bankruptcy Court or through other appropriate court order. This right of termination is in addition to the right of Owner to terminate for cause outlined below and other rights of termination as stated in the contract documents.
- 13.1.2 Termination for cause: If Contractor: (1) repeatedly refuses or fails to supply enough proper skilled workmen; or (2) fails to pay promptly all subcontractors, suppliers, or other parties as set out in the contract documents; or (3) fails to adhere in all respects to the provisions of Title 8, Chapter 30, of the Alaska Administrative Code and Title 36 of the Alaska Statutes as applicable to this contract and all other pertinent statutes, ordinances or regulations or orders of any local, state, or federal authority concerning payment; or (4) allows insurance to lapse; or (5) if after seven (7) days written notice, without prejudice to any other remedy of Owner, Contractor fails to correct to Owner's satisfaction deficiencies in work that does not conform to the contract documents; or (6) allows a situation that creates a danger to person or property to arise. Where an emergency situation creating a danger to person or property arises, Owner may at its option terminate the contract and take possession of the site and any of Contractor's equipment and material necessary to complete an emergency response or hire a separate contractor to complete the

emergency response. Contractor shall be paid the contract rate for the material used and shall be paid for the use of Contractor's equipment at the price shown in the contract documents or at the rate for such equipment listed in <u>RENTAL RATE BLUE BOOK FOR CONSTRUCTION EQUIPMENT</u>, published by Machinery Information Division of K-III Directory Corporation, 1735 Technology Drive, Suite 410, San Jose, California 95110. If the rate for such equipment is not so listed, reliable sources will be used to determine a reasonable rate.

- 13.1.3 In the event of termination for cause, Owner shall have the right of set-off, from any payment due Contractor, of all expenses, costs, and damages including but not limited to all professional and legal expenses and attorneys' fees and costs or other additional expenditures necessary to complete the projects that are occasioned by the termination. In the event such amounts exceed the amount of payment withheld, Contractor shall be liable to Owner for such amounts. No payment shall be made to Contractor prior to determination that a balance is due Contractor after the amount of set-off is determined.
- 13.1.4 Owner may terminate this contract at any time for the convenience of Owner for any reason deemed by Owner to be in the best interest of Owner.
- 13.1.5 If this contract is terminated for convenience, Contractor will be directed to make all necessary preparations for closing out the project and for safeguarding Owner's materials and the work already completed. Contractor will be paid for all conforming work done to date and for all materials delivered to the site and already paid for by Contractor, together with all reasonable costs directly attributed to termination, including fixed overhead. Contractor shall be responsible for minimizing the extent of such expenses and shall not be paid for expenses which could have been reasonably avoided. On the date that notice of termination or suspension for convenience is issued, Contractor shall immediately take all actions necessary to stop orders of material, rental of equipment or premises, employment of persons on the project, and shipment of materials not yet delivered to the site. The notice of termination or suspension for convenience shall specify a date by which all steps necessary for termination shall be completed and by which Contractor shall have removed any unused material and all Contractor's equipment and forces. Contractor shall leave the premises in a clean and safe condition on or prior to the date specified in the notice. Owner shall certify that all termination procedures have been completed and that the premises have been turned over to the possession of Owner. Within fifteen (15) days after that certification by Owner, Contractor shall render to Owner a bill for all expenses incurred in termination and for all work done subsequent to the last progress payment. Owner shall pay Contractor all sums properly due, together with any retainage not necessary to cover apparently nonconforming work or other changes, within fifteen (15) working days after the bill has been received by Owner, provided that Owner has received releases for all liens.
- 13.1.6 If Contractor is terminated for cause or default on this contract, the performance bond surety shall commence performance within fourteen (14) days of the termination or default. If the surety does not arrange for or commence performance by that date, Owner shall have the option to complete or arrange for performance and the surety shall not be relieved of any responsibility for payment of costs of performance.
- 13.1.7 Should Owner elect to terminate Contractor's services prior to final completion of the work, such termination shall not affect any rights Owner might assert against Contractor at time of termination or thereafter. Any retention or payment of monies by Owner to Contractor shall not release Contractor from that liability.

13.2 SUSPENSION OF THE WORK

13.2.1 Owner may, at any time and for any reason, suspend the work or any portion of it for a period not to exceed ninety (90) days, by written notice delivered to Contractor thirty (30) days prior to the date fixed for suspension. The notice of suspension shall fix the date on which the work is to be resumed and Contractor shall resume the work on the date so fixed. Equitable adjustment in the contract price, the contract time, or both shall be made for cost or delay directly attributable to suspension of the work.

13.3 TERMINATION BY CONTRACTOR

13.3.1 If through no act or fault of Contractor, Owner orders a suspension of work for a period of more than ninety (90) days, Contractor may, upon thirty (30) days written notice to Owner, terminate this contract and recover from Owner payment for work accepted to date plus purported overhead and profit in the manner provided in ARTICLE 9.4. Contractor shall also have the right to terminate this contract if Owner fails within forty-

five (45) days to pay amounts properly due Contractor for satisfactorily accomplished work, so certified by Project Representative, as due and payable. The provisions of this section do not include amounts ordinarily retained from Contractor's Application for Payment or amounts retained because of unsatisfactory, defective, or incomplete work, or for any other reason provided in the contract documents.

ARTICLE 14 MISCELLANEOUS PROVISIONS

- 14.1 Whenever any provision of the contract documents requires written notice, such notice shall be deemed to have been given and binding when given by certified mail to the respective party at the address provided in the Legal Notice provision of the agreement section of the contract documents.
- 14.2 Neither party may assign this contract without the written consent of the other party and Contractor may not delegate duties under this contract other than as provided in the contract documents without the prior written consent of Owner.
- 14.3 In the event a provision of the contract documents is found to be unenforceable or void for any reason, it shall be considered as severed from the contract documents, and the remaining portions of the contract documents shall stand as if that provision had never been included in the contract documents. In the event the unenforceable or void provision is legally essential to the continuing existence of the contract, the parties shall attempt to substitute a reasonable replacement provision.
- 14.4 No general condition stated in these provisions or other provision in the contract documents lessens, alters, or makes inapplicable the requirement for indemnification stated in ARTICLE 4.13. In the event of conflict between any contract provisions, the requirements set out in ARTICLE 4.13 control.

END GENERAL CONDITIONS

SUPPLEMENTAL GENERAL CONDITIONS OF THE CONTRACT

The following supplemental general conditions modify the General Conditions:

Delete Paragraph 1.8 Item G.

Replace Paragraph 4.2.3 with the following:

4.2.3 Contractor shall also provide Owner with a proposed schedule of values for lump sum items upon submittal of a detailed progress schedule for the work. Each item of work shall include all applicable profit and overhead. The schedule of values, unless objected to by owner shall be the basis for progress payments for lump sum bid items made to Contractor and shall include specific lump sum amounts for "Final Payment." This line item shall be in conformance with guidelines specified in ARTICLE 8. Contractor, at the request of Owner, shall amend the progress schedule and the schedule of values for lump sum items as the work progresses.

Add the following Paragraph 4.3.13:

4.3.13 AIRPORT SAFETY REQUIREMENTS

The Contractor shall develop a COVID-19 Management Plan meeting the requirements of federal, state, and local regulations for this project.

The DOT&PF has developed a COVID-19 Management Plan that has been approved by the Alaska Department of Commerce, Community and Economic Development for utilization by DOT&PF contractors and consultants. A copy of this plan may be downloaded at:

http://dot.alaska.gov/stwddes/dcsconst/assets/pdf/covid response master.pdf

The Contractor must either adopt the pre-approved COVID-19 Management Plan, or develop their own plan. Contractors who fail to do so may have work on their projects suspended until such time as they demonstrate compliance.

Add the following Paragraph 4.3.14:

4.3.14 STAGING AREAS

If the Contractor determines that the Owner-provided staging area is inadequate for his purposes, the Contractor shall, at his own expense, provide additional staging areas as needed to complete the project. Contractor shall submit to the Owner and Engineer any agreements made with land owners for additional staging and stockpile areas.

Add the following Paragraph 4.6.5:

4.6.5 In addition to State of Alaska Title 36 minimum wage requirements, the Contractor shall comply with federal Davis-Bacon Act minimum wage requirements and the federal wage requirements as set forth in Supplemental Conditions for FAA Compliance. Wage determinations can be found at http://www.wdol.gov/dba.aspx. The Contractor shall be responsible for determining the proper employee classification and rates of pay of the most stringent wage determination and complying with all provisions, including payroll submission to the proper authority, of the wage determinations contained herein. Use the federal wage rates that are in effect 10 days before Bid Opening.

Add the following Paragraph 4.11.3:

4.11.3 Contractor shall comply with permits and environmental limitations per Section A-120 "Permits and Environmental Limitations".

Add the following Paragraph 5.1.7:

5.1.7 The Contractor shall insert the following provisions in each of his subcontracts and include a clause requiring the subcontractor to include these provisions in any lower tier subcontracts which they enter into. The Contractor shall also include a clause requiring this insertion in any further subcontracts that may in turn be made:

- A. General Conditions
- B. Supplemental General Conditions and Exhibits
- C. Section A-110 "Airport Safety Requirements"
- D. Section A-120 "Permits and Environmental Limitations"

Replace Paragraph 5.3.1 with the following:

5.3.1 Recognizing the importance of maintain the integrity of a public contract, Contractor warrants that Contractor will pay all subcontractors and material suppliers under this contract for satisfactory performance of its contract no later than eight (8) working days from the receipt of each payment the prime Contractor receives from Owner. The prime Contractor agrees further to return retainage payments to each subcontractor within eight (8) working 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 Owner. If Owner retains a percentage of sums due, Contractor may retain a like percentage, but when retainage is paid, Contractor must pay the subcontractor or supplier interest on retainage equal to interest rate paid to Contractor by Owner.

Delete Section 8.4 Application for Payment in its Entirety and Replace with the following:

8.4 APPLICATION FOR PAYMENT

8.4.1 The Contractor shall submit to the Project Representative an Application for Payment, on the forms furnished, supported by such data as the Owner/Project Representative may require substantiating the Contractor's right to payment for Work done during the preceding calendar month.

Replace Paragraph 8.5.2 with the Following:

8.5.2 The value of work performed and materials stored shall be accurately reflected in the Application for Payment. If requested by Owner, Contractor shall promptly provide Owner any additional information necessary to ascertain the value of the work performed or the cost of materials stored at the site during the previous month. Proof of certified payroll shall be provided per ARTICLE 4.

Add the following Paragraph 8.5.7:

8.5.7 The Contractor shall provide an updated, accurate CPM Construction Schedule with each progress payment. The Owner reserves the right to withhold progress payments until such time as the Contractor's schedule is received and is determined by the Engineer to accurately represent the Contractor's plan to complete the work within the contract time.

Add the following Paragraphs after Paragraph 8.7.2.1:

- J. Failure of the Contractor to submit an updated CPM schedule with each pay request.
- K. Failure of the Contractor to submit a satisfactory Contractor Quality Control Plan and/or perform the work in accordance with the requirements of the approved Contractor Quality Control Plan.

Add the following Paragraph 8.8.9:

8.8.9 All work must be substantially complete within 90 days after the date of the Notice to Proceed.

Replace Paragraph 8.9.1 with the Following:

8.9.1 The terms Final Completion and Warranty Period refer to, respectively, the finalization of the construction phase and a one-year warranty period following the Substantial Completion. Final Completion shall be represented by a dollar amount determined by the Owner/Project Representative. Final Payment represents a sum of money to perform all tasks necessary from Substantial Completion to Final Completion, including completion of final punch list, completion of as-built data, turnover of all warranty information, notarized acknowledgments of payments, and relinquishment of claims against Owner.

Add the following Paragraph 8.9.9:

8.9.9 Final acceptance of the work (Final Completion) shall be within 30 days of Substantial Completion.

Replace Paragraph 8.10.5 with the Following:

8.10.5. Per the agreement, liquidated damages shall be \$500.00 for each calendar day that expires after the contract time required for substantial completion to the actual date of substantial completion determined as set out in the Contract Documents. Liquidated damages shall be \$250.00 for each calendar day that expires after the work is substantially complete but not finally accepted after the specified Final Completion date.

Add the following Paragraph 8.10.7:

8.10.7 EXTENSION OF TIME

Should the completion of the construction required under the contract be delayed beyond the time herein specified for completion, the Owner may grant the Contractor additional time for completion by executing a change order modifying the construction time and construction schedule. If the failure of the Contractor to complete the construction within said specified time results from unavoidable delay as hereinafter defined, the construction time shall be extended by the number of days lost as a result of the unavoidable delay, provided, however, that the Contractor shall make a claim to the Owner in writing for such extension of time as herein provided. In considering applications for extension of time, the project representative will classify delays according to the following definitions:

- A. Unavoidable delays in the prosecution or completion of the construction shall include all delays which result from causes beyond the control of the Contractor and which could not have been avoided by the exercise of reasonable care, prudence, foresight and diligence on the part of the Contractor or its subcontractors. Delay in completion due to contract modifications ordered by the Owner, unforeseeable delays in the completion of the construction of other Contractors employed by the Owner, floods, fire, labor strikes, war, the public enemy and acts of God will be considered unavoidable delays, insofar as they necessarily interfere with the Contractor's completion of the construction.
- B. Avoidable delays in the prosecution or completion of the construction shall include all delays which in the opinion of the project representative could have been avoided by the exercise of care, prudence, foresight and diligence on the part of the Contractor or its subcontractors. Delays in the prosecution of parts of the construction which may in themselves be unavoidable but do not necessarily prevent or delay the prosecution of other parts of the construction nor the completion of the whole construction within the time herein specified; reasonable loss of time resulting from the necessity of submitting shop drawings to the architect/engineer for review and from the making of surveys, measurements, and observations; and such interruptions as may occur in the prosecution of the work on account of the reasonable interference of other Contractors employed by the Owner which do not necessarily prevent the completion of the whole construction within the time agreed upon, shall constitute avoidable delays within the meaning of the contract.
- C. The Contractor agrees to make no claim from damages for delay from any cause whatsoever, including but not limited to the above, and agrees that such a claim shall be fully compensated for by an extension of time to complete the performance under the Contract.

Replace Paragraph 9.2.1 with the Following:

9.2.1. The contract sum constitutes the maximum total compensation to Contractor for the work required by this contract. The contract price may be changed only by a properly executed change order. Any request for increase in the contract price shall be based upon written notice delivered to Project Representative within ten (10) days after the reason for the proposed increase appears. Change order proposals must be accompanied by all pertinent data and documentation, including a detailed

estimate showing costs, quantities, unit prices, markups for overhead and profit, and request for time extension.

Add the following Paragraphs after Paragraph 14.4:

- 14.5 The City of Kenai anticipates a federal grant for the construction of this project and the City of Kenai, its Contractors, subcontractors, agents, and consultants are therefore bound to comply with the federal requirements set forth in these Articles, as well as other federal requirements, which may apply. Federal contract provisions are set forth in Exhibit A of these Supplemental Conditions and are hereby incorporated into the Contract. All bidders shall submit the required Bidder Certifications with each bid in accordance with Exhibit B of these Supplemental Conditions.
- 14.6 FAA Specifically Excluded from Contract. The work covered by the Contract is anticipated to be included in Airport Improvement Program Project No. 3-02-0142-069-2021, which is being accomplished by the City of Kenai in accordance with the terms and conditions of a Grant Agreement between the City of Kenai and the United States, under the Airport and Airways Improvement Act of 1982, pursuant to which the United States has agreed to pay a certain percentage of the costs. The United States is not a party to this Contract and no reference in this Contract to the FAA or any representative thereof, or to any rights granted to the FAA or any representative thereof, or to the United States, by the Contract makes the United States a party to this Contract.
- 14.7 Officials Not to Benefit. No member of, or delegate to, Congress, or Resident Commissioner shall be admitted to any share or part of this Contract or to any benefit that may arise therefrom, but this provision shall not be construed to extend to this Contract if made with a corporation for its general benefit.
- 14.8 Convict Labor. No convict labor may be employed under this Contract.
- 14.9 Inspection and Review. The Engineer, his representative, the Owner representative, the FAA representative, or the Department of Labor representative shall be allowed access to 100% of all parts of the project to review or inspect work or materials used in the performance of this Contract.
- 14.10 DBE Requirements. Comply with DBE Requirements in Exhibit C of these Supplemental Conditions.

14.11 UTILITIES

The City of Kenai and FAA have various navigational aids and other equipment in operation at the Kenai Municipal Airport. The location of the power cables, control cables, and some equipment is not known. There may be cables and equipment that are not shown on the Plans. Contact the City of Kenai and FAA for locates prior to excavation.

Contractor shall coordinate activities with utility owners, Kenai Municipal Airport Maintenance and Operations personnel, and contact the FAA for locates in the area prior to beginning work.

14.12 PUBLIC CONVENIENCE AND ACCESS

The Contractor shall perform all work in a manner that minimizes inconvenience to Kenai Municipal Airport Operations personnel, airport users, and general public. Contractor shall provide for clear and continuous access to all aspects of operating runways, taxiways, and aprons.

14.13 COORDINATION OF WORK

Other work may be occurring at the Airport during execution of this project. Contractor should expect City of Kenai, KMA, and other contractor the personnel operating in and around the identified staging area and haul route throughout duration of the project. The Contractor shall coordinate and schedule his work cooperatively and harmoniously with all other projects. Delays due to other work in the vicinity shall not be sufficient cause for a delay claim. Submit a plan and schedule to the Engineer prior to the preconstruction conference that shows how the Contractor intends to interact with others working in the project area.

The Contractor shall coordinate and sequence the work with other contractors working within the same project limits, haul routes, and staging areas. The Contractor shall properly join the work with work performed by other contractors and shall perform the work in the proper sequence to that of the others. The Contractor shall arrange, place, and dispose of materials without interfering with the operations of other contractors. The Contractor shall defend, indemnify and save harmless the City of Kenai from any damages or claims caused by inconvenience, delay, or loss that the Contractor causes to other contractors.

The City of Kenai/Kenai Municipal Airport may, at any time, contract for and perform other or additional work on or near the Project. The Contractor shall allow other contractors reasonable access across or through the Project.

EXHIBIT A

Supplemental Conditions for FAA Compliance

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ACCESS TO RECORDS AND REPORTS

The Contractor must maintain an acceptable cost accounting system. The Contractor agrees to provide the Owner, the Federal Aviation Administration and the Comptroller General of the United States or any of their duly authorized representatives access to any books, documents, papers and records of the Contractor which are directly pertinent to the specific contract for the purpose of making audit, examination, excerpts and transcriptions. The Contractor agrees to maintain all books, records and reports required under this contract for a period of not less than three years after final payment is made and all pending matters are closed.

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION to ENSURE EQUAL EMPLOYMENT OPPORTUNITY

- 1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.
- 2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Timetables

Goals for minority participation for each trade: 15.1% Goals for female participation in each trade: 6.9%

These goals are applicable to all of the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the Contractor also is subject to the goals for both its federally involved and non-federally involved construction.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a) and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs (OFCCP) within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address, and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

4. As used in this notice and in the contract resulting from this solicitation, the "covered area" is Kenai, AK 99611 within the Kenai Peninsula Borough.

BREACH OF CONTRACT TERMS

Any violation or breach of terms of this contract on the part of the [Contractor | Consultant] or its subcontractors may result in the suspension or termination of this contract or such other action that may be necessary to enforce the rights of the parties of this agreement.

Owner will provide [Contractor | Consultant] written notice that describes the nature of the breach and corrective actions the [Contractor | Consultant] must undertake in order to avoid termination of the contract. Owner reserves the right to withhold payments to Contractor until such time the Contractor corrects the breach or the Owner elects to terminate the contract. The Owner's notice will identify a specific date by which the [Contractor | Consultant] must correct the breach. Owner may proceed with termination of the contract if the [Contractor | Consultant] fails to correct the breach by the deadline indicated in the Owner's notice.

The duties and obligations imposed by the Contract Documents and the rights and remedies available thereunder are in addition to, and not a limitation of, any duties, obligations, rights and remedies otherwise imposed or available by law.

BUY AMERICAN PREFERENCE

The Contractor agrees to comply with 49 USC § 50101, which provides that Federal funds may not be obligated unless all steel and manufactured goods used in AIP funded projects are produced in the United States, unless the Federal Aviation Administration has issued a waiver for the product; the product is listed as an Excepted Article, Material Or Supply in Federal Acquisition Regulation subpart 25.108; or is included in the FAA Nationwide Buy American Waivers Issued list.

A bidder or offeror must complete and submit the Buy America certification included herein with their bid or offer. The Owner will reject as nonresponsive any bid or offer that does not include a completed Certificate of Buy American Compliance.

CERTIFICATE OF BUY AMERICAN COMPLIANCE FOR TOTAL FACILITY

As a matter of bid responsiveness, the bidder or offeror must complete, sign, date, and submit this certification statement with its proposal. The bidder or offeror must indicate how it intends to comply with 49 USC § 50101 by selecting one of the following certification statements. These statements are mutually exclusive. Bidder must select one or the other (i.e. not both) by inserting a checkmark (\checkmark) or the letter "X".

- ☐ Bidder or offeror hereby certifies that it will comply with 49 USC § 50101 by:
 - a) Only installing steel and manufactured products produced in the United States; or
 - b) Installing manufactured products for which the Federal Aviation Administration (FAA) has issued a waiver as indicated by inclusion on the current FAA Nationwide Buy American Waivers Issued listing; or

c) Installing products listed as an Excepted Article, Material or Supply in Federal Acquisition Regulation Subpart 25.108.

By selecting this certification statement, the bidder or offeror agrees:

- To provide to the Owner evidence that documents the source and origin of the steel and manufactured product.
- To faithfully comply with providing U.S. domestic products.
- To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.
- The bidder or offeror hereby certifies it cannot comply with the 100 percent Buy American Preferences of 49 USC § 50101(a) but may qualify for either a Type 3 or Type 4 waiver under 49 USC § 50101(b). By selecting this certification statement, the apparent bidder or offeror with the apparent low bid agrees:
 - a) To the submit to the Owner within 15 calendar days of the bid opening, a formal waiver request and required documentation that supports the type of waiver being requested.
 - b) That failure to submit the required documentation within the specified timeframe is cause for a non-responsive determination that may result in rejection of the proposal.
 - c) To faithfully comply with providing U.S. domestic products at or above the approved U.S. domestic content percentage as approved by the FAA.
 - d) To furnish U.S. domestic product for any waiver request that the FAA rejects.
 - e) To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

Required Documentation

Type 3 Waiver – The cost of components and subcomponents produced in the United States is more than 60 percent of the cost of all components and subcomponents of the "facility". The required documentation for a Type 3 waiver is:

- a) Listing of all manufactured products that are not comprised of 100 percent U.S. domestic content (excludes products listed on the FAA Nationwide Buy American Waivers Issued listing and products excluded by Federal Acquisition Regulation Subpart 25.108; products of unknown origin must be considered as non-domestic products in their entirety).
- b) Cost of non-domestic components and subcomponents, excluding labor costs associated with final assembly and installation at project location.
- c) Percentage of non-domestic component and subcomponent cost as compared to total "facility" component and subcomponent costs, excluding labor costs associated with final assembly and installation at project location.

Type 4 Waiver – Total cost of project using U.S. domestic source product exceeds the total project cost using non-domestic product by 25 percent. The required documentation for a Type 4 of waiver is:

- a) Detailed cost information for total project using U.S. domestic product
- b) Detailed cost information for total project using non-domestic product

False Statements: Per 49 USC § 47.	126, this certification concerns a matter within the jurisdiction of					
the Federal Aviation Administration and the making of a false, fictitious or fraudulent certification may						
render the maker subject to prosecution	on under Title 18, United States Code.					
Date	Signature					
Company Name	Title					

of

GENERAL CIVIL RIGHTS PROVISIONS

The Contractor agrees to comply with pertinent statutes, Executive Orders and such rules as are promulgated to ensure that no person shall, on the grounds of race, creed, color, national origin, sex, age, or disability be excluded from participating in any activity conducted with or benefiting from Federal assistance.

This provision binds the Contractor and subcontractors from the bid solicitation period through the completion of the contract. This provision is in addition to that required by Title VI of the Civil Rights Act of 1964.

Title VI Solicitation Notice:

The (Name of Sponsor), in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 USC §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders or offerors that it will affirmatively ensure that any contract entered into pursuant to this advertisement, [select disadvantaged business enterprises or airport concession disadvantaged business enterprises] will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

Compliance with Nondiscrimination Requirements:

During the performance of this contract, the Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "Contractor"), agrees as follows:

- 1. Compliance with Regulations: The Contractor (hereinafter includes consultants) will comply with the Title VI List of Pertinent Nondiscrimination Acts and Authorities, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
- 2. Nondiscrimination: The Contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The Contractor will not participate directly or indirectly in the discrimination prohibited by the Nondiscrimination Acts and Authorities, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR part 21.
- 3. Solicitations for Subcontracts, including Procurements of Materials and Equipment: In all solicitations, either by competitive bidding or negotiation made by the Contractor for work to be performed under a subcontract, including procurements of materials, or leases of

- equipment, each potential subcontractor or supplier will be notified by the Contractor of the contractor's obligations under this contract and the Nondiscrimination Acts and Authorities on the grounds of race, color, or national origin.
- 4. **Information and Reports:** The Contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the sponsor or the Federal Aviation Administration to be pertinent to ascertain compliance with such Nondiscrimination Acts and Authorities and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the Contractor will so certify to the sponsor or the Federal Aviation Administration, as appropriate, and will set forth what efforts it has made to obtain the information.
- 5. **Sanctions for Noncompliance:** In the event of a Contractor's noncompliance with the non-discrimination provisions of this contract, the sponsor will impose such contract sanctions as it or the Federal Aviation Administration may determine to be appropriate, including, but not limited to:
 - a. Withholding payments to the Contractor under the contract until the Contractor complies; and/or
 - b. Cancelling, terminating, or suspending a contract, in whole or in part.
- 6. **Incorporation of Provisions:** The Contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations, and directives issued pursuant thereto. The Contractor will take action with respect to any subcontract or procurement as the sponsor or the Federal Aviation Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the Contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the Contractor may request the sponsor to enter into any litigation to protect the interests of the sponsor. In addition, the Contractor may request the United States to enter into the litigation to protect the interests of the United States.

Title VI List of Pertinent Nondiscrimination Acts and Authorities

During the performance of this contract, the Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "Contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

- Title VI of the Civil Rights Act of 1964 (42 USC § 2000d *et seq.*, 78 stat. 252) (prohibits discrimination on the basis of race, color, national origin);
- 49 CFR part 21 (Non-discrimination in Federally-assisted programs of the Department of Transportation—Effectuation of Title VI of the Civil Rights Act of 1964);
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 USC § 4601) (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Section 504 of the Rehabilitation Act of 1973 (29 USC § 794 *et seq.*), as amended (prohibits discrimination on the basis of disability); and 49 CFR part 27;
- The Age Discrimination Act of 1975, as amended (42 USC § 6101 *et seq.*) (prohibits discrimination on the basis of age);

- Airport and Airway Improvement Act of 1982 (49 USC § 471, Section 47123), as amended (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987 (PL 100-209) (broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, the Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, subrecipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act of 1990, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 USC §§ 12131 12189) as implemented by U.S. Department of Transportation regulations at 49 CFR parts 37 and 38;
- The Federal Aviation Administration's Nondiscrimination statute (49 USC § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures nondiscrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 USC 1681 et seq).

CLEAN AIR AND WATER POLLUTION CONTROL

Contractor agrees to comply with all applicable standards, orders, and regulations issued pursuant to the Clean Air Act (42 USC § 740-7671q) and the Federal Water Pollution Control Act as amended (33 USC § 1251-1387). The Contractor agrees to report any violation to the Owner immediately upon discovery. The Owner assumes responsibility for notifying the Environmental Protection Agency (EPA) and the Federal Aviation Administration.

Contractor must include this requirement in all subcontracts that exceeds \$150,000.

CONTRACT WORKHOURS AND SAFETY STANDARDS ACT REQUIREMENTS

1. Overtime Requirements.

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic, including watchmen and guards, in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; Liability for Unpaid Wages; Liquidated Damages.

In the event of any violation of the clause set forth in paragraph (1) of this clause, the Contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this clause, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this clause.

3. Withholding for Unpaid Wages and Liquidated Damages.

The Federal Aviation Administration (FAA) or the Owner shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this clause.

4. Subcontractors.

The Contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraphs (1) through (4) and also a clause requiring the subcontractor to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1) through (4) of this clause.

COPELAND "ANTI-KICKBACK" ACT

Contractor must comply with the requirements of the Copeland "Anti-Kickback" Act (18 USC 874 and 40 USC 3145), as supplemented by Department of Labor regulation 29 CFR part 3. Contractor and subcontractors are prohibited from inducing, by any means, any person employed on the project to give up any part of the compensation to which the employee is entitled. The Contractor and each Subcontractor must submit to the Owner, a weekly statement on the wages paid to each employee performing on covered work during the prior week. Owner must report any violations of the Act to the Federal Aviation Administration.

DAVIS-BACON REQUIREMENTS

1. Minimum Wages.

(i) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by the Secretary of Labor under the Copeland Act (29 CFR Part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalent thereof) due at time of payment computed at rates not less than those contained in the wage

determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR Part 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided* that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under (1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the Contractor and its subcontractors at the site of the work in a prominent and accessible place where it can easily be seen by the workers.

- (ii)(A) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
- (1) The work to be performed by the classification requested is not performed by a classification in the wage determination;
- (2) The classification is utilized in the area by the construction industry; and
- (3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
- (B) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- (C) In the event the Contractor, the laborers, or mechanics to be employed in the classification, or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized

representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

- (D) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(ii) (B) or (C) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- (iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- (iv) If the Contractor does not make payments to a trustee or other third person, the Contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program: *Provided* that the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding.

The Federal Aviation Administration or the sponsor shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the Contractor under this contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the Contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of work, all or part of the wages required by the contract, the Federal Aviation Administration may, after written notice to the Contractor, Sponsor, Applicant, or Owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and Basic Records.

(i) Payrolls and basic records relating thereto shall be maintained by the Contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in 1(b)(2)(B) of the Davis-Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the Contractor shall maintain records that show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and that show the costs anticipated or

the actual costs incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

- (ii)(A) The Contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the Federal Aviation Administration if the agency is a party to the contract, but if the agency is not such a party, the Contractor will submit the payrolls to the applicant, Sponsor, or Owner, as the case may be, for transmission to the Federal Aviation Administration. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g. the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at www.dol.gov/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker and shall provide them upon request to the Federal Aviation Administration if the agency is a party to the contract, but if the agency is not such a party, the Contractor will submit them to the applicant, sponsor, or Owner, as the case may be, for transmission to the Federal Aviation Administration, the Contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the sponsoring government agency (or the applicant, Sponsor, or Owner).
- (B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
- (1) The payroll for the payroll period contains the information required to be provided under 29 CFR § 5.5(a)(3)(ii), the appropriate information is being maintained under 29 CFR § 5.5 (a)(3)(i), and that such information is correct and complete;
- (2) Each laborer and mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations 29 CFR Part 3;
- (3) Each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
- (C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (3)(ii)(B) of this section.

- (D) The falsification of any of the above certifications may subject the Contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.
- (iii) The Contractor or subcontractor shall make the records required under paragraph (3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the sponsor, the Federal Aviation Administration, or the Department of Labor and shall permit such representatives to interview employees during working hours on the job. If the Contractor or subcontractor fails to submit the required records or to make them available, the Federal agency may, after written notice to the Contractor, Sponsor, applicant, or Owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and Trainees.

(i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the Contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the Contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- (ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination that provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate that is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the Contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
- (iii) Equal Employment Opportunity. The utilization of apprentices, trainees, and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.
- 5. Compliance with Copeland Act Requirements.

The Contractor shall comply with the requirements of 29 CFR Part 3, which are incorporated by reference in this contract.

6. Subcontracts.

The Contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR Part 5.5(a)(1) through (10) and such other clauses as the Federal Aviation Administration may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR Part 5.5.

7. Contract Termination: Debarment.

A breach of the contract clauses in paragraph 1 through 10 of this section may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act Requirements.

All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes Concerning Labor Standards.

Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the Contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

- 10. Certification of Eligibility.
- (i) By entering into this contract, the Contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- (ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- (iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 USC 1001.

CERTIFICATION OF OFFERER/BIDDER REGARDING DEBARMENT

By submitting a bid/proposal under this solicitation, the bidder or offeror certifies that neither it nor its principals are presently debarred or suspended by any Federal department or agency from participation in this transaction.

CERTIFICATION OF LOWER TIER CONTRACTORS REGARDING DEBARMENT

The successful bidder, by administering each lower tier subcontract that exceeds \$25,000 as a "covered transaction", must verify each lower tier participant of a "covered transaction" under the project is not presently debarred or otherwise disqualified from participation in this federally assisted project. The successful bidder will accomplish this by:

- 1. Checking the System for Award Management at website: http://www.sam.gov.
- 2. Collecting a certification statement similar to the Certification of Offerer /Bidder Regarding Debarment, above.
- 3. Inserting a clause or condition in the covered transaction with the lower tier contract.

If the Federal Aviation Administration later determines that a lower tier participant failed to disclose to a higher tier participant that it was excluded or disqualified at the time it entered the covered transaction, the FAA may pursue any available remedies, including suspension and debarment of the non-compliant participant.

DISADVANTAGED BUSINESS ENTERPRISES

The Owner's award of this contract is conditioned upon Bidder or Offeror satisfying the good faith effort requirements of 49 CFR §26.53.

As a condition of bid responsiveness, the Bidder or Offeror must submit the following information with its proposal on the forms provided herein:

- 1) The names and addresses of Disadvantaged Business Enterprise (DBE) firms that will participate in the contract;
- 2) A description of the work that each DBE firm will perform;
- 3) The dollar amount of the participation of each DBE firm listed under (1)
- 4) Written statement from Bidder or Offeror that attests their commitment to use the DBE firm(s) listed under (1) to meet the Owner's project goal; and
- 5) If Bidder or Offeror cannot meet the advertised project DBE goal, evidence of good faith efforts undertaken by the Bidder or Offeror as described in appendix A to 49 CFR part 26.

Contract Assurance (§ 26.13) –

The Contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of Department of Transportation-assisted contracts. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the Owner deems appropriate, which may include, but is not limited to:

- 1) Withholding monthly progress payments;
- 2) Assessing sanctions;
- 3) Liquidated damages; and/or
- 4) Disqualifying the Contractor from future bidding as non-responsible.

Prompt Payment (§26.29) – The prime contractor agrees to pay each subcontractor under this prime contract for satisfactory performance of its contract no later than [8] days from the receipt of each payment the prime contractor receives from the City of Kenai. The prime contractor agrees further to return retainage payments to each subcontractor within [8] 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 City of Kenai. This clause applies to both DBE and non-DBE subcontractors.

TEXTING WHEN DRIVING

In accordance with Executive Order 13513, "Federal Leadership on Reducing Text Messaging While Driving", (10/1/2009) and DOT Order 3902.10, "Text Messaging While Driving", (12/30/2009), the Federal Aviation Administration encourages recipients of Federal grant funds to adopt and enforce safety policies that decrease crashes by distracted drivers, including policies to ban text messaging while driving when performing work related to a grant or subgrant.

In support of this initiative, the Owner encourages the Contractor to promote policies and initiatives for its employees and other work personnel that decrease crashes by distracted drivers, including policies that ban text messaging while driving motor vehicles while performing work activities associated with the project. The Contractor must include the substance of this clause in all sub-tier contracts exceeding

\$3,500 that involve driving a motor vehicle in performance of work activities associated with the project.

ENERGY CONSERVATION REQUIREMENTS

Contractor and Subcontractor agree to comply with mandatory standards and policies relating to energy efficiency as contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (42 USC 6201et seq).

EQUAL OPPORTUNITY CLAUSE

During the performance of this contract, the Contractor agrees as follows:

- (1) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, sexual orientation, gender identify, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff, or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- (2) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, or national origin.
- (3) The Contractor will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the Contractor's commitments under this section and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (4) The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- (5) The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- (6) In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(7) The Contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: *Provided, however*, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS

- 1. As used in these specifications:
 - a. "Covered area" means the geographical area described in the solicitation from which this contract resulted:
 - b. "Director" means Director, Office of Federal Contract Compliance Programs (OFCCP), U.S. Department of Labor, or any person to whom the Director delegates authority;
 - c. "Employer identification number" means the Federal social security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941;
 - d. "Minority" includes:
 - (1) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
 - (2) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin regardless of race);
 - (3) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
 - (4) American Indian or Alaskan native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
- 2. Whenever the Contractor, or any subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
- 3. If the Contractor is participating (pursuant to 41 CFR part 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors shall be able to demonstrate their participation in and compliance with the provisions of any such Hometown

Plan. Each contractor or subcontractor participating in an approved plan is individually required to comply with its obligations under the EEO clause and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other contractors or subcontractors toward a goal in an approved Plan does not excuse any covered contractor's or subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.

- 4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7a through 7p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered construction contractors performing construction work in a geographical area where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.
- 5. Neither the provisions of any collective bargaining agreement nor the failure by a union with whom the Contractor has a collective bargaining agreement to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.
- 6. In order for the non-working training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees shall be employed by the Contractor during the training period and the Contractor shall have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees shall be trained pursuant to training programs approved by the U.S. Department of Labor.
- 7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully and shall implement affirmative action steps at least as extensive as the following:
 - a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other onsite supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
 - b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.
 - c. Maintain a current file of the names, addresses, and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source, or

community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefore along with whatever additional actions the Contractor may have taken.

- d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or female sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
- e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.
- f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
- g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination, or other employment decisions, including specific review of these items, with onsite supervisory personnel such superintendents, general foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
- h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other contractors and subcontractors with whom the Contractor does or anticipates doing business.
- i. Direct its recruitment efforts, both oral and written, to minority, female, and community organizations, to schools with minority and female students; and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations, such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
- j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer, and vacation employment to minority and female youth both on the site and in other areas of a contractor's workforce.

- k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR part 60-3.
- l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel, for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
- m. Ensure that seniority practices, job classifications, work assignments, and other personnel practices do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
- n. Ensure that all facilities and company activities are non-segregated except that separate or single user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
- o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
- p. Conduct a review, at least annually, of all supervisor's adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
- 8. Contractors are encouraged to participate in voluntary associations, which assist in fulfilling one or more of their affirmative action obligations (7a through 7p). The efforts of a contractor association, joint contractor union, contractor community, or other similar groups of which the Contractor is a member and participant may be asserted as fulfilling any one or more of its obligations under 7a through 7p of these specifications provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.
- 9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, if the particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally), the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized.
- 10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.
- 11. The Contractor shall not enter into any subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
- 12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination, and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its

implementing regulations, by the Office of Federal Contract Compliance Programs. Any contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.

- 13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR part 60-4.8.
- 14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government, and to keep records. Records shall at least include for each employee, the name, address, telephone number, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.
- 15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g. those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

FEDERAL FAIR LABOR STANDARDS ACT (FEDERAL MINIMUM WAGE)

All contracts and subcontracts that result from this solicitation incorporate by reference the provisions of 29 CFR part 201, the Federal Fair Labor Standards Act (FLSA), with the same force and effect as if given in full text. The FLSA sets minimum wage, overtime pay, recordkeeping, and child labor standards for full and part-time workers.

The [Contractor | Consultant] has full responsibility to monitor compliance to the referenced statute or regulation. The [Contractor | Consultant] must address any claims or disputes that arise from this requirement directly with the U.S. Department of Labor – Wage and Hour Division.

FOREIGN TRADE RESTRICTION CERTIFICATION

By submission of an offer, the Offeror certifies that with respect to this solicitation and any resultant contract, the Offeror –

 is not owned or controlled by one or more citizens of a foreign country included in the list of countries that discriminate against U.S. firms as published by the Office of the United States Trade Representative (USTR);

- 2) has not knowingly entered into any contract or subcontract for this project with a person that is a citizen or national of a foreign country included on the list of countries that discriminate against U.S. firms as published by the USTR; and
- 3) has not entered into any subcontract for any product to be used on the Federal project that is produced in a foreign country included on the list of countries that discriminate against U.S. firms published by the USTR.

This certification concerns a matter within the jurisdiction of an agency of the United States of America and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under Title 18 USC Section 1001.

The Offeror/Contractor must provide immediate written notice to the Owner if the Offeror/Contractor learns that its certification or that of a subcontractor was erroneous when submitted or has become erroneous by reason of changed circumstances. The Contractor must require subcontractors provide immediate written notice to the Contractor if at any time it learns that its certification was erroneous by reason of changed circumstances.

Unless the restrictions of this clause are waived by the Secretary of Transportation in accordance with 49 CFR 30.17, no contract shall be awarded to an Offeror or subcontractor:

- 1) who is owned or controlled by one or more citizens or nationals of a foreign country included on the list of countries that discriminate against U.S. firms published by the USTR or
- 2) whose subcontractors are owned or controlled by one or more citizens or nationals of a foreign country on such USTR list or
- 3) who incorporates in the public works project any product of a foreign country on such USTR list.

Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by this provision. The knowledge and information of a contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

The Offeror agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification without modification in all lower tier subcontracts. The Contractor may rely on the certification of a prospective subcontractor that it is not a firm from a foreign country included on the list of countries that discriminate against U.S. firms as published by USTR, unless the Offeror has knowledge that the certification is erroneous.

This certification is a material representation of fact upon which reliance was placed when making an award. If it is later determined that the Contractor or subcontractor knowingly rendered an erroneous certification, the Federal Aviation Administration (FAA) may direct through the Owner cancellation of the contract or subcontract for default at no cost to the Owner or the FAA.

CERTIFICATION REGARDING LOBBYING

The Bidder or Offeror certifies by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the Bidder or Offeror, to any person for influencing or attempting to influence an officer or employee of an

agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970

All contracts and subcontracts that result from this solicitation incorporate by reference the requirements of 29 CFR Part 1910 with the same force and effect as if given in full text. The employer must provide a work environment that is free from recognized hazards that may cause death or serious physical harm to the employee. The employer retains full responsibility to monitor its compliance and their subcontractor's compliance with the applicable requirements of the Occupational Safety and Health Act of 1970 (20 CFR Part 1910). The employer must address any claims or disputes that pertain to a referenced requirement directly with the U.S. Department of Labor – Occupational Safety and Health Administration.

PROHIBITION OF SEGREGATED FACILITIES

- (a) The Contractor agrees that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The Contractor agrees that a breach of this clause is a violation of the Equal Employment Opportunity clause in this contract.
- (b) "Segregated facilities," as used in this clause, means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing

facilities provided for employees that are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, sex, or national origin because of written or oral policies or employee custom. The term does not include separate or single-user rest rooms or necessary dressing or sleeping areas provided to assure privacy between the sexes.

(c) The Contractor shall include this clause in every subcontract and purchase order that is subject to the Equal Employment Opportunity clause of this contract.

PROCUREMENT OF RECOVERED MATERIALS

Contractor and subcontractor agree to comply with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, and the regulatory provisions of 40 CFR Part 247. In the performance of this contract and to the extent practicable, the Contractor and subcontractors are to use products containing the highest percentage of recovered materials for items designated by the Environmental Protection Agency (EPA) under 40 CFR Part 247 whenever:

- 1) The contract requires procurement of \$10,000 or more of a designated item during the fiscal year; or
- 2) The contractor has procured \$10,000 or more of a designated item using Federal funding during the previous fiscal year.

The list of EPA-designated items is available at www.epa.gov/smm/comprehensive-procurement-guidelines-construction-products.

Section 6002(c) establishes exceptions to the preference for recovery of EPA-designated products if the contractor can demonstrate the item is:

- a) Not reasonably available within a timeframe providing for compliance with the contract performance schedule;
- b) Fails to meet reasonable contract performance requirements; or
- c) Is only available at an unreasonable price.

RIGHTS TO INVENTIONS

Contracts or agreements that include the performance of experimental, developmental, or research work must provide for the rights of the Federal Government and the Owner in any resulting invention as established by 37 CFR part 401, Rights to Inventions Made by Non-profit Organizations and Small Business Firms under Government Grants, Contracts, and Cooperative Agreements. This contract incorporates by reference the patent and inventions rights as specified within 37 CFR §401.14. Contractor must include this requirement in all sub-tier contracts involving experimental, developmental, or research work.

SEISMIC SAFETY

The Contractor agrees to ensure that all work performed under this contract, including work performed by subcontractors, conforms to a building code standard that provides a level of seismic safety substantially equivalent to standards established by the National Earthquake Hazards Reduction Program (NEHRP). Local building codes that model their code after the current version of the International Building Code (IBC) meet the NEHRP equivalency level for seismic safety.

CERTIFICATION OF OFFERER/BIDDER REGARDING TAX DELINQUENCY AND FELONY CONVICTIONS

The applicant must complete the following two certification statements. The applicant must indicate its current status as it relates to tax delinquency and felony conviction by inserting a checkmark (\checkmark) in the space following the applicable response. The applicant agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification in all lower tier subcontracts.

Certifications

- 1) The applicant represents that it is () is not () a corporation that has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.
- 2) The applicant represents that it is () is not () is not a corporation that was convicted of a criminal violation under any Federal law within the preceding 24 months.

Note

If an applicant responds in the affirmative to either of the above representations, the applicant is ineligible to receive an award unless the sponsor has received notification from the agency suspension and debarment official (SDO) that the SDO has considered suspension or debarment and determined that further action is not required to protect the Government's interests. The applicant therefore must provide information to the owner about its tax liability or conviction to the Owner, who will then notify the FAA Airports District Office, which will then notify the agency's SDO to facilitate completion of the required considerations before award decisions are made.

Term Definitions

Felony conviction: Felony conviction means a conviction within the preceding twentyfour (24) months of a felony criminal violation under any Federal law and includes conviction of an offense defined in a section of the U.S. code that specifically classifies the offense as a felony and conviction of an offense that is classified as a felony under 18 U.S.C. § 3559.

Tax Delinquency: A tax delinquency is any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

TERMINATION FOR CONVENIENCE (CONSTRUCTION & EQUIPMENT CONTRACTS)

The Owner may terminate this contract in whole or in part at any time by providing written notice to the Contractor. Such action may be without cause and without prejudice to any other right or remedy of Owner. Upon receipt of a written notice of termination, except as explicitly directed by the Owner, the Contractor shall immediately proceed with the following obligations regardless of any delay in determining or adjusting amounts due under this clause:

- 1. Contractor must immediately discontinue work as specified in the written notice.
- 2. Terminate all subcontracts to the extent they relate to the work terminated under the notice.
- 3. Discontinue orders for materials and services except as directed by the written notice.
- 4. Deliver to the Owner all fabricated and partially fabricated parts, completed and partially completed work, supplies, equipment and materials acquired prior to termination of the work, and as directed in the written notice.
- 5. Complete performance of the work not terminated by the notice.
- 6. Take action as directed by the Owner to protect and preserve property and work related to this contract that Owner will take possession.

Owner agrees to pay Contractor for:

- 3) completed and acceptable work executed in accordance with the contract documents prior to the effective date of termination;
- 4) documented expenses sustained prior to the effective date of termination in performing work and furnishing labor, materials, or equipment as required by the contract documents in connection with uncompleted work;
- 5) reasonable and substantiated claims, costs, and damages incurred in settlement of terminated contracts with Subcontractors and Suppliers; and
- 6) reasonable and substantiated expenses to the Contractor directly attributable to Owner's termination action.

Owner will not pay Contractor for loss of anticipated profits or revenue or other economic loss arising out of or resulting from the Owner's termination action.

The rights and remedies this clause provides are in addition to any other rights and remedies provided by law or under this contract.

VETERAN'S PREFERENCE

In the employment of labor (excluding executive, administrative, and supervisory positions), the Contractor and all sub-tier contractors must give preference to covered veterans as defined within Title 49 United States Code Section 47112. Covered veterans include Vietnam-era veterans, Persian Gulf veterans, Afghanistan-Iraq war veterans, disabled veterans, and small business concerns (as defined by 15 USC 632) owned and controlled by disabled veterans. This preference only applies when there are covered veterans readily available and qualified to perform the work to which the employment relates.

EXHIBIT B BIDDER CERTIFICATIONS

EXHIBIT B1 DEBARMENT AND SUSPENSION CERTIFICATION

The Bidder/Offeror certifies that neither it nor its principals are presently debarred or suspended by any Federal department or agency from participation in this transaction.

The Bidder further agrees that:

Each lower tier subcontract that exceeds \$25,000 as a "covered transaction" under the project is not presently debarred or otherwise disqualified from participation in this federally assisted project.

Where the Bidder or any lower tier participant is unable to certify to this statement, they shall attach an explanation to this form which shall be submitted with the bid proposal.

Date	Authorized Signature
Bidder / Offeror Name	Title

PROHIBITION OF SEGREGATED FACILITIES CERTIFICATION

The Contractor agrees that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The Contractor agrees that a breach of this clause is a violation of the Equal Opportunity clause in this contract.

"Segregated facilities," as used in this clause, means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees, that are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, sex, or national origin because of written or oral policies or employee custom. The term does not include separate or single-user rest rooms or necessary dressing or sleeping areas provided to assure privacy between the sexes.

The Contractor shall include this clause in every subcontract and purchase order that is subject to the Equal Opportunity clause of this contract.

Date	Authorized Signature
Bidder / Offeror Name	Title

TRADE RESTRICTION CERTIFICATION

By submission of an offer, the Offeror certifies that with respect to this solicitation and any resultant contract, the Offeror -

- a. is not owned or controlled by one or more citizens of a foreign country included in the list of countries that discriminate against U.S. firms as published by the Office of the United States Trade Representative (U.S.T.R.);
- b. has not knowingly entered into any contract or subcontract for this project with a person that is a citizen or national of a foreign country included on the list of countries that discriminate against U.S. firms as published by the U.S.T.R; and
- c. has not entered into any subcontract for any product to be used on the Federal on the project that is produced in a foreign country included on the list of countries that discriminate against U.S. firms published by the U.S.T.R.

This certification concerns a matter within the jurisdiction of an agency of the United States of America and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code, Section 1001.

The Offeror/Contractor must provide immediate written notice to the Owner if the Offeror/Contractor learns that its certification or that of a subcontractor was erroneous when submitted or has become erroneous by reason of changed circumstances. The Contractor must require subcontractors provide immediate written notice to the Contractor if at any time it learns that its certification was erroneous by reason of changed circumstances.

Unless the restrictions of this clause are waived by the Secretary of Transportation in accordance with 49 CFR 30.17, no contract shall be awarded to an Offeror or subcontractor:

- (1) who is owned or controlled by one or more citizens or nationals of a foreign country included on the list of countries that discriminate against U.S. firms published by the U.S.T.R. or
- (2) whose subcontractors are owned or controlled by one or more citizens or nationals of a foreign country on such U.S.T.R. list or
- (3) who incorporates in the public works project any product of a foreign country on such U.S.T.R. list;

Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by this provision. The knowledge and information of a contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

The Offeror agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification without modification in all lower tier subcontracts. The contractor may rely on the certification of a prospective subcontractor that it is not a firm from a foreign country included on the list of countries that discriminate against U.S. firms as published by U.S.T.R, unless the Offeror has knowledge that the certification is erroneous.

This certification is a material representation of fact upon which reliance was placed when making an award. If it is later determined that the Contractor or subcontractor knowingly rendered erroneous certification, the Federal Aviation Administration may direct through the Own cancellation of the contract or subcontract for default at no cost to the Owner or the FAA				
Date	Authorized Signature			
Bidder / Offeror Name	Title			

BUY AMERICAN CERTIFICATION

Certificate of Buy American Compliance for Manufactured Products

As a matter of bid responsiveness, the bidder or offeror must complete, sign, date, and submit this certification statement with their proposal. The bidder or offeror must indicate how they intend to comply with 49 USC \S 50101 by selecting one on the following certification statements. These statements are mutually exclusive. Bidder must select one or the other (not both) by inserting a checkmark (\checkmark) or the letter "X".

- ☐ Bidder or offeror hereby certifies that it will comply with 49 USC § 50101 by:
 - a) Only installing steel and manufactured products produced in the United States, or;
 - b) Installing manufactured products for which the FAA has issued a waiver as indicated by inclusion on the current FAA Nationwide Buy American Waivers Issued listing, or;
 - c) Installing products listed as an Excepted Article, Material or Supply in Federal Acquisition Regulation Subpart 25.108.

By selecting this certification statement, the bidder or offeror agrees:

- 1. To provide to the Owner evidence that documents the source and origin of the steel and manufactured product.
- 2. To faithfully comply with providing US domestic product
- 3. To furnish US domestic product for any waiver request that the FAA rejects
- 4. To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.
- ☐ The bidder or offeror hereby certifies it cannot comply with the 100% Buy American Preferences of 49 USC § 50101(a) but may qualify for either a Type 3 or Type 4 waiver under 49 USC § 50101(b). By selecting this certification statement, the apparent bidder or offeror with the apparent low bid agrees:
 - 1. To the submit to the Owner within 15 calendar days of the bid opening, a formal waiver request and required documentation that support the type of waiver being requested.
 - 2. That failure to submit the required documentation within the specified timeframe is cause for a non-responsive determination may result in rejection of the proposal.
 - 3. To faithfully comply with providing US domestic products at or above the approved US domestic content percentage as approved by the FAA.

4. To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

Required Documentation

Type 3 Waiver - The cost of the item components and subcomponents produced in the United States is more that 60% of the cost of all components and subcomponents of the "item". The required documentation for a type 3 waiver is:

- a) Listing of all product components and subcomponents that are not comprised of 100% US domestic content (Excludes products listed on the FAA Nationwide Buy American Waivers Issued listing and products excluded by Federal Acquisition Regulation Subpart 25.108; products of unknown origin must be considered as non-domestic products in their entirety).
- b) Cost of non-domestic components and subcomponents, excluding labor costs associated with final assembly at place of manufacture.
- c) Percentage of non-domestic component and subcomponent cost as compared to total "item" component and subcomponent costs, excluding labor costs associated with final assembly at place of manufacture.

Type 4 Waiver – Total cost of project using US domestic source product exceeds the total project cost using non-domestic product by 25%. The required documentation for a type 4 of waiver is:

- a) Detailed cost information for total project using US domestic product
- b) Detailed cost information for total project using non-domestic product

False Statements: Per 49 USC § 47126, this certification concerns a matter within the jurisdiction of the Federal Aviation Administration and the making of a false, fictitious or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code.

Date	Authorized Signature
	Ç
Ridder / Offeror Name	

TAX DELINQUENCY AND FELONY CONVICTION

The applicant must complete the following two certification statements. The applicant must indicate its current status as it relates to tax delinquency and felony conviction by inserting a checkmark () in the space following the applicable response. The applicant agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification in all lower tier subcontracts

	lower tier subcontracts.	ation, it will incorporate this provision for certification
Certi	fications	
a)	unpaid Federal tax liability that has b	<u> </u>
b)) is not () is not a corporation that was any Federal law within the preceding 24
	Date	Authorized Signature
	Bidder / Offeror Name	Title

EXHIBIT C DBE REQUIREMENTS

CITY OF KENAI DISADVANTAGED BUSINESS ENTERPRISE (DBE) PROGRAM INDEX

DBE Contract Specifications	BB:1-8
DBE List of Submittals	BB:9
DBE Utilization Declaration	Attachment 1 Page 1 of 1
Bidder's Registration Form	Attachment 2 Page 1 of 2
Potential Subcontractors Form	Attachment 3 Page 1 of 1
DBE Utilization Report	Attachment 4 Page 1 of 1
Letter of Intent	Attachment 5 Page 1 of 1
Summary of Good Faith Effort Documentation	Attachment 6 Page 1 of 1
Contact Report Form	Attachment 7 Page 1of 2
Monthly Summary of DBE Participation	Attachment 8 Page 1 of 2
49 CFR Part 23 and 26, Participation by DBE in DOT Programs ht	tps://www.ecfr.gov

CITY OF KENAI DISADVANTAGED BUSINESS ENTERPRISE (DBE) PROGRAM

Contract Specifications

DESCRIPTION

Policy

The City of Kenai has established a Disadvantaged Business Enterprise (DBE) program in accordance with regulations of the U.S. Department of Transportation (DOT), **49 CFR Part 26**. The City of Kenai is committed to increasing the opportunity for Disadvantaged Business Enterprises (DBE's) to participate in the performance of contracts where participation is a requirement of the state and federal funding sources.

CONTRACTOR'S OBLIGATION

The Contractor agrees to ensure that DBE's as defined in **49 CFR Part 26**, have the increased opportunity to participate in the performance of contracts and subcontracts financed in whole or in part with state or federal funds provided under this agreement. In this regard, all contractors shall take all necessary and reasonable steps in accordance with **49 CFR Part 26**, to ensure that DBE's have the increased opportunity to compete for and perform contracts.

Each contract the City of Kenai signs with a contractor (and each subcontract the prime contractor signs with a subcontractor) must include the following clauses:

Contract Assurance

The contractor, sub recipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of **49 CFR Part 26** in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate.

Prompt Payment

The prime contractor agrees to pay each subcontractor under this prime contract for satisfactory performance of its contract no later than eight (8) days from the receipt of each payment the prime contractor receives from the City of Kenai. The prime contractor agrees further to return retainage payments to each subcontractor within eight (8) 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 City of Kenai. This clause applies both to DBE and non-DBE subcontractors.

Compliance

All bidders who fail to meet the DBE goal and fail to demonstrate good faith efforts shall not be eligible to be awarded the contract. Contractors or subcontractors for this Federal Aviation Administration assisted contract are hereby notified that failure to carry out the DBE obligations shall constitute a breach of contract which may result in termination of the contract, or such other remedy found appropriate by the City.

The City of Kenai will bring to the attention of the Department of Transportation any false, fraudulent, or dishonest conduct in connection with the program, so that DOT can take the steps (e.g. referral to the Department of Justice for criminal prosecution, referral to the DOT Inspector General, action under suspension and debarment or Program Fraud and Civil Penalties rules) provided in 26.l09. The City will also consider similar action under our own legal authorities, including responsibility determinations in future contracts.

GENERAL

Use of Certified Firms

A DBE must be certified by the City of Kenai or the State Alaska Department of Transportation before credit may be allowed toward the DBE goal. Directories and updated information regarding certified firms may be obtained from the Airport Manager's Office, Kenai Municipal Airport, 305 N. Willow, Suite 200, Kenai, AK, 99611, (907-283-7951) or online through the State of Alaska at http://www.dot.state.ak.us.

A DBE must perform a commercially useful function, i.e., must be responsible for the execution of a distinct element of work and must carry out its responsibilities by actually performing, managing and supervising work.

A DBE joint venture partner must be responsible for a clearly defined portion of the work to be performed in addition to satisfying requirements for ownership and control. Credit is limited to the percent of the DBE's joint venture participation.

Good Faith Efforts

The requirements of 49 CFR Part 26, Regulations of the U.S. Department of Transportation, apply to this contract.

It is the policy of the City of Kenai to practice nondiscrimination based on race, color, sex, or national origin in the award or performance of this contract. All

firms qualifying under this solicitation are encouraged to submit bids/proposals. Award of this contract will be conditioned upon satisfying the requirements of this bid specification. These requirements apply to all bidders/offerors, including those who qualify as a DBE. A DBE contract goal has not been established for this contract. The bidder/offeror shall make good faith efforts, as defined in 49 CFR Part 26 (Attachment 9), to meet the contract goal for DBE participation in the performance of this contract.

The bidder/offeror shall be required to submit the following information **prior to a commitment by the City of Kenai to award the contract** to the apparent successful competitor, as a condition of responsibility.

- 1. The names and addresses of DBE firms that will participate in the contract.
- 2. A description of the work that each DBE will perform.
- 3. The dollar amount of the participation of each DBE firm participation
- The written and signed documentation (*DBE Utilization Report* Attachment 4) of commitment to use a DBE subcontractor whose participation it submits to meet a contract goal;
- 5. Written and signed confirmation (*Letter of Intent* **Attachment 5**) from the DBE that it is participating in the contract as provided in the prime contractor's commitment; and
- 6. If the contract goal is not met, evidence of good faith efforts (Summary of Good Faith Effort Documentation Attachment 6 and Contact Report Form Attachment 7).

DBE participation in this contract may be in the form of a prime contract, subcontract, joint venture, or another arrangement that qualifies under **49 CFR Sections 26.55 or 26.53 (g)** both of which are included in Attachment 9.

Demonstration of good faith efforts

The obligation of the bidder/offeror is to make good faith efforts. The bidder/offeror can demonstrate that it has done so by either meeting the contract goal or documenting good faith efforts. Examples of good faith efforts are found in **49 CFR Part 26**.

The Project Director will be responsible for determining whether a bidder/offeror who has not met the contract goal has documented sufficient good faith effort to be regarded as responsible.

The City will, as a minimum, use the following criteria to judge if the bidder who has not met the contract goals demonstrated sufficient good faith efforts:

- Soliciting through all reasonable and available means (e.g. attendance at a pre-bid meeting, if any, advertising and/or written notices) the interest of all certified DBEs who have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBEs to respond to the solicitation;
- 2. Providing interested DBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation;
- 3. Efforts made to select portions of the work proposed to be performed by DBEs in order to increase the likelihood of achieving the stated goal;
- 4. Efforts to negotiate with DBEs for specific sub bids including a minimum:
 - (a) The names, addresses, and telephone numbers of DBEs that were contacted
 - (b) A description of the information provided to DBEs regarding the plans and specifications for portions of the work to be performed; and
 - (c) A statement of why additional agreements with DBEs were not reached:
- 5. Concerning each DBE the bidder contacted but rejected as unqualified, the reasons for the bidder's conclusion.
- 6. Effort made to assist the DBEs contacted that needed assistance in obtaining bonding or insurance required by the bidder or the City of Kenai.

The **Summary of Good Faith Efforts** (Attachment 6) and the **Contact Report Form** (Attachment 7) may be used for documenting contacts and summarizing good faith efforts. We will ensure that all information is complete and accurate and adequately documents the bidder/offeror's good faith efforts before we commit to the performance of the contract by the bidder/offeror.

PARTICIPATION GOAL

A Disadvantaged Business Enterprise Goal has been established as follows:

No goal established for this project.

Measurement of attainment of these goals will be based on the actual amount of money received by the DBE for commercially useful work on this project.

DETERMINATION OF COMPLIANCE

Phase 1 – Bid and Award

All bidders/offerors shall submit the following completed forms with the bid:

- Disadvantaged Business Enterprise Utilization Declaration
 (Attachment 1). Bids submitted without this form attached will be considered non-responsive.
- 2. **Bidder's Registration Form** (Attachment 2). Required of all prime bidders with the bid.
- 3. *List of Potential Subcontractors* (Attachment 3). Required of all prime bidders with the bid.

In addition to bid submission requirements, the successful bidder must demonstrate DBE responsibility **prior to award** of this contract by:

- 1. Submitting a copy of the **DBE Utilization Report** (Attachment 4) listing the certified DBE's to be used to meet the goals.
- 2. Submitting a *Letter of Intent* (Attachment 5) from each **DBE** subcontractor.
- 3. Submitting a *Bidder's Registration Form* (Attachment 2) for each subcontractor (DBE and non-DBE) working on the project.
- 4. If the form contains less DBE participation than is required to meet the goal, documentation of good faith efforts in the form of the **Summary of Good Faith Effort Documentation** (Attachment 6) must be submitted. A **Contact Report Form** (Attachment 7) may be used for documenting contacts and summarizing good faith efforts.

If the contract goal is not met, failure to document sufficient good faith effort will result in bidder's disqualification for award.

Administrative reconsideration

Within 15 days of being informed by the City of Kenai, that it is not responsible because it has not documented sufficient good faith efforts, a bidder/offeror may request administrative reconsideration. Bidder/offerors should make this request

in writing to the following for the appointment or designation of a reconsideration official:

City Manager 210 Fidalgo Avenue Kenai, AK, 99611 Tel: 283-8222

The reconsideration official will not have played any role in the original determination that the bidder/offeror did not document sufficient good faith efforts.

As part of this reconsideration, the bidder/offeror will have the opportunity to provide written documentation or argument concerning the issue of whether it met the goal or made adequate good faith efforts to do so. The bidder/offeror will have the opportunity to meet in person with our reconsideration official to discuss the issue of whether it met the goal or made adequate good faith efforts to do. We will send the bidder/offeror a written decision on reconsideration, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so. The result of the reconsideration process is not administratively appealable to the Department of Transportation.

Good Faith Efforts when a DBE is replaced on a contract

We will require a contractor to make good faith efforts to replace a DBE that is terminated or has otherwise failed to complete its work on a contract with another certified DBE, to the extent needed to meet the contract goal. We will require the prime contractor to notify the DBE Liaison Officer immediately in writing of the DBE's inability or unwillingness to perform and provide reasonable documentation.

In this situation, we will require the prime contractor to obtain our prior approval of the substitute DBE and to provide copies of new or amended subcontracts, or documentation of good faith efforts.

The City of Kenai will require a prime contractor obtain prior written consent before terminating for convenience a DBE subcontractor and then performing the work of the terminated subcontractor with its own forces or through an affiliate.

If unable to replace with a DBE, the contractor will give full documentation to the City of Kenai (as required above and prior to completing the original DBE area of work) as to efforts made to obtain replacement of DBE participation. After review by the City of Kenai the award may be continued or terminated at the option of the City.

Phase II - Construction

Prior to construction, the contractor shall submit, in writing, the designation of a DBE officer.

The work items and creditable dollar amounts shown for a DBE firm on the **DBE Utilization Report** (Attachment 4) must be included in any subcontract with that firm, or prior written approval for replacement of the DBE participation must have been granted, before the City can approve substitution of the subcontract.

If the prime contract was awarded on the basis of sufficient "good faith effort," any subcontract containing items for which good faith effort documentation was not provided prior to award will be subject to the following requirement:

If the subcontract is with a non-DBE, the contractor must make at least one contact and submit documentation prior to subcontract approval.

Written proof of commitments (i.e, purchase orders or sales receipts) with DBE suppliers and manufacturers **must be submitted to the City of Kenai**.

INFORMATION COLLECTION AND REPORTING

Bidders List

The City of Kenai will create a bidders list, consisting of information about all DBE and non-DBE firms that bid or quote on FAA-assisted contracts. For every firm, the following information must be included:

- (1) Firm name;
- (2) Firm address;
- (3) Firm's status as a DBE or non-DBE:
- (4) The age of the firm; and
- (5) The annual gross receipts of the firm.

A **Bidder's Registration Form** (Attachment 2) will be included in each solicitation packet. All bidding **Prime Contractors**, **DBE and non-DBE**, must complete this form and **return it with the bid**. The successful **Prime Contractor** must submit **Bidder Registration Forms** for all subcontractors, DBE and non-DBE, who attempted to bid or quote on the contract **prior to bid award**.

Monitoring Payments to DBEs

We will require prime contractors to maintain records and documents of payments to DBEs for three years following the performance of the contract. The Prime Contractor will produce and make these records available for inspection if

asked by the City of Kenai or DOT. This reporting requirement also extends to any certified DBE subcontractor.

The prime contractor is required to submit a *Monthly Summary of DBE Participation* (Attachment 8) documenting the amount paid and total payment to date of actual payments to DBE firms for work committed to the prime contractor for the term of the contract. *This is required even if zero dollars (\$0) are paid that month.*

DBE participation will be counted towards the goal in accordance with 49 CFR Part 26, Section 26.55.

We may perform interim audits of contract payments to DBEs. The audit will review payments to DBE subcontractors to ensure that the actual amount paid to DBE subcontractors equals or exceeds the dollar amounts stated in the **DBE Utilization Report**.

City of Kenai DBE LIST OF SUBMITTALS

DBE Certification with City of Kenai or State of Alaska

Contact Airport Manager's Office. Certification may take up to 90 days.

Advertisement for Bid

Bid Opening

Bidder's Submittals

DBE Declaration, Bidder, Attachment 1

Bidder's Registration Form, Contractors & Subcontractors, Attachment 2

Potential Subcontractors Form, Attachment 3

Prior to Bid Award

DBE Utilization Report, Bidder, Attachment 4
Letter of Intent, Prime Contractor or Subcontractors, Attachment 5
Summary of Good Faith, Bidder, Attachment 6 (if needed)
Contact Report Form, Bidder, Attachment 7 (if needed)
Bidder's Registration Form, Subcontractors, Attachment 2

Bid Award

Council Resolution and Purchase Order Notice of Award

Contract

Contract Forms (Due within 10 calendar days of Notice of Award) Sign Contract

Notice to Proceed

Construction

Designation of a DBE Officer, Contractor submits in writing

Monthly DBE Reports

Monthly Summary of DBE Participation, Prime Contractor, Attachment 8

CITY OF KENAI DISADVANTAGED BUSINES ENTERPRISE (DBE) UTILIZATION DECLARATION

Project Name: _	
Project Number: _	
of his proposal, this of This declaration shall and submit this declar	rd of this contract, the bidder must execute and submit, as a part eclaration relating to Disadvantaged Business Enterprise (DBE). be deemed a part of the contract. Therefore, failure to complete ation or the inclusion of a false certification shall be considered as osal is non-responsive.
•	er/offeror has satisfied the requirements of the bid specification in please check the appropriate space):
The bidder/offer this contract.	or is committed to a minimum of percent DBE utilization on
to a minimum o	or (if unable to meet the DBE goal of percent) is committed f percent DBE utilization on this contract and submits lemonstrating good faith efforts.
Name of bidder/offero	's firm
	By:
	T:u

ATTACHMENT 2- PRIME CONTRACTORS MUST SUBMIT WITH THE BID; SUBCONTRACTORS MUST SUBMIT PRIOR TO BID AWARD.



DBE/SBE PROGRAM



210 Fidalgo Avenue, Suite 200 Kenai, AK 99611 305 N. Willow, Suite 200 Kenai, AK 99611

BIDDER'S REGISTRATION FORM

PROJECT NAME	NU	MBER
In accordance with Section 26.11 of 49 CFR on prime contracts and bidding or quoting s this form to be registered with the City of Ke 283-7951.	ubcontracts on D	OT-assisted contracts must complete
Name of Firm:		
Street Address:		
Mailing Address:		
City:	State:	_ Zip Code:
Telephone Number:	Fax N	umber:
E-mail Address:		
Date Firm was established:		
The firm listed above is a (check all that a	pply):	
Is this firm a prime contractor? Is this firm a subcontractor? Is this firm a service provider? Is this firm a material supplier? Is this firm a manufacturer? Is this firm a certified DBE*? Is this firm a SBE?	s	Identify Specialty
Firm's gross annual receipts: <\$500,000 \$500,000 - \$999,999 \$1,000,000 - \$4,999,999 \$5,000,000 - \$9,999,999 \$10,000,000 - \$16,999,999 \$17,000,000		

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ATTACHMENT 2 – PRIME CONTRACTORS MUST SUBMIT WITH THE BID; SUBCONTRACTORS MUST SUBMIT PRIOR TO BID AWARD.

ADDITIONAL INFORMATION REQUIRED FOR SELF-CERTIFIED SMALL BUSINESS ENTERPRISE PROGRAM (SBE)

Notice to Self-Certified SBE Firms: All businesses are required to submit a Bidder's Registration form before a contract can be awarded.

In order to verify your firm's compliance with business size standards under 13 CFR 121, at award you will be required to submit the following documents:

- SBE Affidavit of Certification Eligibility
- SBE Affidavit of Eligibility

At the time of bid send required documentation to: City of Kenai - Public Works.

Fostering Small Business Participation (SBE) (49 CFR 26.39):

To meet the requirements of 49 CFR 26.39, the City of Kenai will implement an element to structure contracting requirements in order to facilitate competition by small business concerns. The fostering small business participation component of the City of Kenai's DBE program is written to conform to the US DOT's requirements. This component is only applicable to federally funded projects and includes the following assurances:

- No geographic preferences will be implemented.
- There are no limits on the number of contracts awarded to firms participating in the program.
- Efforts will be made to avoid creating barriers to the use of new, emerging, and/or untried businesses.
- The SBE program is not prohibited by State law.

A. SBE Directory Information

1.	Can you verify at time of award that standards of \$15 million for the last regulations? () Yes	three yea	n does not exceed the business size ars of gross annual receipts per the SBE
	*If you marked "No" you do not quali	fy for the	SBE program.
2.	Contact Information		
	Name of Firm		Contact Name
	Telephone Number		Fax number
	Email address		Company website

8/24/20 Page 2 of 2

City of Kenai - DBE Program POTENTIAL SUBCONTRACTORS

PROJECT NAME			NUMBER		
Nan	ne of bidder/offeror'	s firm:			
Add	ress:				
City:	:	State:	Zip:	Telephone:	
bidd who	lers list containing inf	ormation about DBE y's federally-assisted	and non-DBE o	to create and maintain a ontractors and subcontractor e purpose of a bidders list is overall goals.	
subc succe prior	ontractors your firm r	nay use. This is not a Registration Forms w	a binding list. S vill be required	of probable or potential Should your firm be the I from each subcontractor	
1.	Name	Addres	S	Telephone	
2.	Name	Addres	s	Telephone	
3.	Name	Addres	S	Telephone	
4.	Name	Addres	s	 Telephone	
5.	Name	Addres	s	Telephone	
6.	Name	Addres	s	 Telephone	
7.	Name	Addres	s	Telephone	
8.	Name	Addres	s	Telephone	
9.	Name	Addres	s	 Telephone	

City of Kenai — DBE Program DBE UTILIZATION REPORT

PROJECT NAME			NOMBER _			
All bidders/offerors will be required to submit the following information to the City of Cenai, prior to the award of the contract.						
	bidder/offeror has manner (please circ		equirements of the b	id specification		
•	• •		e project. If it has not good faith efforts (is)	•		
2. Below	are the certified DB	E's to be used	in meeting the DBE go	oal:		
FIRM NAME	ADDRESS	*ROLE	DESCRIPTION OF WORK	\$\$ AMOUNT OF PARTICIPATION		
*Role = Prime Cont	ractor (P), Joint Venture	(JV), Subcontrac	ctor (Sub), Supplier (Spl)	or Manufacturer (M)		
		Total \$\$ Amoun	t of Participation	\$		
		Total Co	ontract Bid Amount	\$		
	!	DBE Participation	n as % of Total Contract	\$		
			DBE Project Goal	\$		
If accepted for " of DBE participat	~	this amount k	pecomes the required	l minimum level		
Company Name		Principal's Sig	gnature & Title	Date		
State Registratio	n No.					

MILIAADED

City of Kenai — DBE Program LETTER OF INTENT

PROJECT NAME			NUMBER
Name of bidder/offero	r's firm:		
Address:			
City:	State:	Zip:	Telephone:
Name of DBE firm:			
Address:			
City:	State:	Zip:	Telephone:
Description of work to	be performed by D	BE firm:	
			ed DBE firm for the work
Affirmation			
The above-named DBE estimated dollar value		ill perform the p	ortion of the contract for the
Ву			Date
Signature & Title (DB	E firm)		
If the bidder/offeror do representations in this			
(Each DBE subcontractor	must submit to the F	rime)	

City Of Kenai – DBE Program SUMMARY OF GOOD FAITH EFFORT DOCUMENTATION

NUMBER _____

PROJECT NAME _____

MATERIAL OR SPECIFIC ITEM OF WORK	ADS	DIRECT CONTRACT	MAIL CONTACT	REASON(S) WHY DBE NOT USED
Comments:				

- 1. Complete a DBE Contract Report for each item for which a direct contact was made.
- 2. Submit a copy of letters mailed. (If same letter sent to several firms, one copy and a list of addresses is acceptable).
- Submit proof of advertisement. (Advertisement is not acceptable as the only type of contact if firms can be identified through the City of Kenai directories or City of Kenai Staff.

City of Kenai -DBE Program CONTACT REPORT FORM

PF	ROJECT NAME NUMBER
Sp	ecific Work or Materials:
*	NSTRUCTIONS FOR SECTIONS A – D ON BACK
Α.	INITIAL CONTACT:
1.	Date: Method: Phone Mail Fax Other
2.	Name & Title of Person Contacted:
3.	DBE's Response:
	Date: Method: Phone Mail Fax Other
	Submitted an acceptable sub-bid. (If sub-bid accepted Skip to Section D)
	Not interested (indicate reason)
	Needs more information. Date Prime requested information:
	Will provide quote by:
	Sub-bid was unacceptable (complete Section C).
В.	FOLLOW-UP:
1.	Date: Method: Phone Mail Fax Other
2.	Name & Title of Person Contacted:
3.	DBE's Response:
	Date: Method: Phone Mail Fax Other
	Submitted an acceptable sub-bid. (If sub-bid accepted skip to Section D)
	Received unacceptable sub-bid. (Complete Section C).
	Other (explain):
C.	EXPLANATION OF FAILURE TO ACHIEVE AN ACCEPTABLE SUB-BID:
1.	Were the following required efforts made?
	Yes No Identified the specific work, products, materials in the quote(s)
	Yes No Offered assistance in acquiring necessary bonding and insurance

C. (Continued)	
Yes No Provided all necessary information for the work items or mo	aterials
2. Was the DBE's quote non-competitive (i.e. more than 10% higher than the accepte	d quote)?
☐ Yes ☐ No	
3. Was the DBE unable to perform in some capacity?	
D. CERTIFICATION:	
I certify that the information provided above is accurate and that efforts to sol made in good faith.	icit sub-bids were
Signature of Company Representative Title	Date
Name & Title of City Reviewer	 Date

*INSTRUCTIONS FOR SECTIONS A - D:

A. INTITIAL CONTACT (Must be made at least 10 days prior to bid opening)

- Date & method of initial contact: Indicate the method and date that actual contact was made or the date correspondence was postmarked. Leaving a message does not constitute a contact. Attach a copy of dated letter or fax.
- 2. Name & Title of Person Contacted: Name & title of company representative with whom you corresponded or discussed a sub-bid.
- DBE's Response: Indicate one or more of the responses listed. If a firm bid was received & accepted, skip to Section D.
- **B. FOLLOW UP CONTACT** If no response or an inconclusive response was received from the initial contact, a follow-up contact is required to determine for a certainty that the firm does not intend to submit a sub-bid or to conclude discussions with a sub-bid submittal.
 - Date & method of follow-up contact: Indicate the method and date that actual contact was made or the date correspondence was postmarked. Leaving a message does not constitute a contact. Attach a coy of dated letter or fax.
 - 2. Name & Title of Person Contacted: Name & title of company representative with whom you corresponded or discussed a sub-bid.
 - 3. **DBE's Response:** Indicate one or more of the responses listed. If a firm bid was received & accepted, skip to Section D.

C. EXPLANATION OF FAILURE TO ACHIEVE AN ACCEPTABLE SUB-BID

- 1. A **No** response to items la., b., or c. will result in rejection of this contact. Be specific on results of discussions
- 2. A YES answer to item 2. is grounds for rejecting a DBE sub-bid.
- 3. A YES answer to item 3. is grounds for rejecting a DBE sub-bid, only if the inability to perform is in an area of work specifically identified as a sub-item under the applicable bid item.

D. CERTIFICATION

This certification of accuracy and good faith by the Contractor will be verified by contact with the listed firm. Falsification of information on the DBE Contact Report is grounds for debarment action under AS 36.30.640(4).

City of Kenai - DBE Program MONTHLY SUMMARY OF DBE PARTICIPATION

(TO BE COMPLETED BY PRIME CONTRACTOR)

PROJECT NAME & NUMBER Prime Contractor		MO/YR	
		Yes No	
SUBCONT	TRACTORS		
WORK PERFORMED	AMOUNT PAID	TOTAL PAYMENT TO DATE	
SUBTOTAL	\$		
MANUFA	ACTURERS		
PRODUCT MANUFACTURED	AMOUNT PAID	TOTAL PAYMENT TO DATE	
SUBTOTAL	\$		
	SUBCONT WORK PERFORMED SUBTOTAL MANUFA PRODUCT MANUFACTURED	SUBCONTRACTORS WORK PERFORMED AMOUNT PAID SUBTOTAL \$ MANUFACTURERS PRODUCT AMOUNT PAID MANUFACTURED	

(Continued on back)

BROKERS

FIRM NAME	PRODUCT SERVICE BROKERED	AMOUNT PAID	TOTAL PAYMENT TO DATE
	SUBTOTAL	\$	

REGULAR DEALERS

FIRM NAME	MATERIALS SUPPLIED	AMOUNT PAID	TOTAL PAYMENT TO DATE
	SUBTOTAL	\$	
	60% of SUBTOTAL	\$	

DBE participation will be counted towards goals in accordance with Section 26.55 of 49 CFR Part 23 & 26.

I certify that all information in this Summary of DBE Participation is true and complete.

Signature & Title of Company Representative	Date	
The above information has been verified by:		
Signature & Employee Title	Date	

EXHIBIT D

CONSTRUCTION SAFETY AND PHASING PLAN NARRATIVE

Kenai Municipal Airport

2021 Improved Airfield Drainage

Construction Safety and Phasing Plan



Prepared On Behalf of the Sponsor:

Kenai Municipal Airport

Prepared by:

ENGINEERING
Consultants LLC

3335 Arctic Boulevard
Anchorage, Alaska 99503

April 6, 2021

INTRODUCTION

This Construction Safety and Phasing Plan (CSPP) is for use during the Kenai Municipal Airport 2021 Improved Airfield Drainage project in Kenai, Alaska. It has been prepared in conformance with the FAA Standard of Practice 1.00 (SOP 1.00), and Federal Aviation Administration (FAA) Advisory Circular (AC) 150/5370-2G *Operational Safety on Airports During Construction* (Safety AC). The Safety AC may be downloaded from:

http://www.faa.gov/airports/resources/advisory_circulars/

The purpose of this CSPP is to present information needed for construction in an effort to maintain airport safety, minimize disruption to the operations of air and ground traffic, and to allow the project to be completed quickly. The designated work area for this project is located immediately northwest of Runway 02L/20R inside the Runway Safety Area (RSA). The Contractor shall control his operations and the operations of his subcontractors and all suppliers to provide for the free and unobstructed movement of aircraft in areas that are not under construction.

This CSPP provides information on some of the coordination, limitations, and restrictions that will be required to accomplish this project. Some details have been left for the Contractor to provide, so that they may accomplish the work according to their own means and methods, as much as practical. The Contractor's plans to complete the work are subject to approval by the Engineer, and will require coordination and review by the Airport Manager, Federal Aviation Administration (FAA), and possibly other organizations or individuals. The Contractor is required to submit a Safety Plan Compliance Document (SPCD) to the Project Engineer (Engineer) describing how they will perform the work in compliance with this CSPP and the requirements set forth in FAA AC 150/5370-2G. The Contractor's work schedule (including a critical path method schedule) shall be included in Section 2 *Phasing* of the SPCD. See the Safety AC for more information. The SPCD must be submitted to the Engineer for approval prior to the commencement of any construction activities and prior to the preconstruction conference.

The Safety AC mandates the format and content of the CSPP and SPCD. All references to construction safety plans, security plans, and construction phasing or staging plans in the Project Manual refer to this CSPP and the Contractor's approved SPCD.

The FAA requires the CSPP and the SPCD to be "stand-alone" documents that can be circulated to the relevant sections of the FAA for review and approval. The CSPP and SPCD are both enforceable parts of the contract documents.

The Safety Plan sheets and Construction Phasing Plan sheets within the project plans are referred to in the CSPP and SPCD as the Construction Safety and Phasing Plan Drawings. The FAA requires that the CSPP include those plans as an appendix. The Contractor can find these sheets within the project plans.



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APPENDICES

Appendix A: Construction Phasing and Safety Plan Drawings as Shown in the Plan Set

LIST OF ACRONYMS

AC Advisory Circular
AGL Above Ground Level
AOA Airport Operating Area
ARC Airport Reference Code

ARFF Airport Rescue and Fire Fighting

ATCT Air Traffic Control Tower
ATO Air Traffic Organization

AWOS Automated Weather Observation Station

CSPP Construction Safety Phasing Plan
CTAF Common Traffic Advisory Frequencies

DOD Department of Defense ENA Kenai Municipal Airport

Engineer Project Engineer

FAA Federal Aviation Administration

FATO Final Approach and Takeoff Area (for heliports)

FCC Federal Communications Commission

FOD Foreign Object Debris
FSS Flight Service Station
GPS Global Positioning System

HAZMATHazardous Materials ManagementHDLHDL Engineering Consultants, LLCHMCPHazardous Materials Control Plan

ILS Instrument Landing System

MALSR Medium-intensity Approach Lighting System with Runway Alignment

Indicator Lights

MSDS Material Safety Data Sheets

NAVAID Navigational Aids
NOTAMs Notices to Airmen
OFZ Obstacle Free Zone

OSHA Occupational Safety and Health Administration

P&R Planning and Requirements
REIL Runway End Identifier Lights

RSA Runway Safety Area
ROFA Runway Object Free Area
SSC Systems Support Center

SPCD Safety Plan Compliance Document

SRM Safety Risk Management

SWPPP Storm Water Pollution Prevention Plan

TSA Taxiway Safety Area
TOFA Taxiway Object Free Area

VASI Visual Approach Slope Indicator

Section 1. Coordination

The Airport Manager holds the primary responsibility for virtually all aspects of the airport's operation, safety, and security. The Contractor's point of contact with the Airport Manager is through the Engineer. The Airport Manager (or designated representative) will provide the Contractor and subcontractors training for proper access, airport security, radio communication, vehicle operation, and any safety procedures or precautions. Prior to preparing the Safety Plan Compliance Document (SPCD) and the Construction Safety and Phasing Plan (CSPP), the Contractor shall coordinate with the Engineer to schedule the first meeting with the Airport Manager (or designated representative). The abovementioned training will usually occur after the preconstruction conference, but always before any work begins on airport property.

Coordination Through the Engineer: Whenever the project documents call for coordination, notification, contact, or other interaction with FAA; airport management; maintenance and operations; Airport Rescue and Fire Fighting (ARFF) personnel; airport tenants; airport users; any local, state, or federal agency, group, or association; or the general public, such activity shall be done through, in the presence of, or with the written approval of the Engineer. The Contractor shall allow sufficient time for coordination and approvals within proposed work schedules.

The Contractor shall plan work activities ahead of when they are needed to be performed. The Airport Manager (or designated representative) cannot accommodate last minute requests to allow access or close portions of the active Airport Operating Area (AOA) except in emergencies. The inability of the Airport Manager (or designated representative) or other entities, to meet these requests shall not constitute a delay to the Contractor's work effort or entitlement to further compensation.

The following are required lead times for coordination with certain groups:

Entity/Group/Agency/Organization	Lead Time For Coordination
FAA – if SPCD significantly changes this CSPP*	45 days
Airport Operations**	14 days
Airport Tenants/Users/Leaseholders***	
1 st Notice Describing Planned Construction Impacts	45 days
 2nd Notice Describing Planned Construction Impacts 	14 days
 3rd Notice Describing Planned Construction Impacts 	Same Day

^{*} Other Notifications to FAA requiring different lead times are shown in Section 9e below.

Predesign, Pre-Bid, and Pre-Construction conferences will be conducted by the Project Engineer in accordance with AC 150/5370-12.

^{**} Any issue involving airport safety or security, and all emergencies or accidents require immediate notification.

^{***} The 1st and 2nd notices shall be provided via mail, e-mail, and phone. The 3rd notice shall be via e-mail and phone. The 1st notice shall establish a point-of-contact for tenants to call with questions and scheduling concerns.

Throughout the design of the project, airport operational safety was considered. Airport operators and/or tenants impacted during construction have been, or will be, given the opportunity to provide comments and pose questions throughout the design process. Airport operational safety will also be addressed at the Pre-Bid and Pre-Construction conferences to introduce the issues specific to the construction of the Project.

A. Preconstruction Meeting

A pre-construction meeting will be held prior to issuance of the Notice to Proceed. Attendance will be required for the Engineer, a Kenai Municipal Airport representative, Kenai Air Traffic Control Tower representative, Kenai Flight Service Station (AFSS) representative, Kenai Flight Service Technical Operations (Tech Ops) representative construction observation staff, project Superintendent and Foreman of prime Contractor, and project Foreman for each subcontractor. The Contractor's SPCD and this CSPP will be reviewed during this meeting.

B. Contractor Progress Meetings

Contractor shall administer and hold weekly progress meetings with the Engineer at the time and place agreed to at the Pre-Construction conference. Ongoing coordination will be addressed at the weekly meetings, which will include the Project Engineer, the Contractor, and possibly representatives from the following groups/agencies/organizations:

- Kenai Municipal Airport (ENA)
- Kenai Air Traffic Control Tower representative
- AFSS
- FAA Tech Ops
- ENA Maintenance
- Airport Leaseholders

These meetings will include discussion of specific safety issues associated with work planned for the upcoming week and will address potential impacts to airport operations. Airport safety and security shall be a standing agenda item for the meetings. The Contractor shall: (1) keep all parties informed of status and changes of airport surfaces in relation to aircraft and ground traffic, (2) provide detailed drawings indicating routes for aircraft and ground traffic movement, areas closed for construction, and (3) provide updated drawings as required.

To ensure that proper airport operational safety guidelines are adhered to throughout construction activities, the Contractor, Engineer, and Airport Manager (or designated representative) will perform onsite inspections. Any deficiencies noted during these inspections, whether caused by negligence, oversight, or project scope change, shall be immediately remediated.

C. Scope or Schedule Changes

Changes in the scope and/or duration of the project may necessitate revisions to this CSPP. The FAA Airports Regional or District office shall be promptly notified of any proposed changes to this CSPP. The scope and schedule changes must be approved in writing by the Engineer. Changes to either scope or schedule may require additional coordination with ENA; airport stakeholders; other local, state, or federal agencies; or the public. Do not begin work that will result in a change in scope or schedule without coordinating with the Engineer, and obtaining written approval.

D. FAA Air Traffic Organization (ATO) Coordination

Before commencing construction, coordination with the appropriate FAA Air Traffic Organization (ATO), Kenai Municipal Airport Air Traffic Control Tower (ATCT), and AFSS is required to evaluate the effects of construction activity. The Contractor shall provide all required support, including meeting attendance, scheduling, and project documentation required to conduct this coordination.

All coordination with the FAA ATO and ATCT will be conducted through the Engineer. Coordination with FAA ATO will be required 45 days prior to the start of construction. The Contractor shall request notification to the FAA's ATO Planning and Requirements (P&R) Service Area office a minimum of 45 days prior to the "physical construction start date" for this project. The Contractor shall submit FAA Form entitled *Airport Sponsor Strategic Event Submission* to the Engineer including all date, time, and/or duration changes. The Engineer will submit the completed form to the FAA via email to <u>9-AJV-SEC-WSA@faa.gov</u>.

Contractor participation in a Safety Risk Management (SRM) meeting with ATCT should be anticipated. This is potentially a full day meeting where the possible safety risks and mitigation measures are discussed and evaluated with all parties. The meeting will be coordinated by the Engineer and the Contractor shall attend at no additional cost to the Owner.

Section 2. Phasing

A. Phasing Elements

This project consists of dewatering, excavation, removal of existing storm drain piping, installation of new storm drain piping in existing manholes, backfill, topsoil, and seeding. Refer to the Construction Phasing and Safety Plan drawings for graphical depictions of work area, Contractor's staging area, and access gates to be utilized for access to the project site.

B. Construction Phasing and Safety Plan Drawings

Construction Phasing and Safety Plan Drawings are included in the construction plans and are provided under Appendix A of this document. The drawings are available through the Engineer in Autodesk format (*.dwg) files, and as Adobe (*.pdf) format. If needed, the Contractor shall modify these drawings to fit the proposed means and methods to complete the project. The Contractor will submit the CSPP drawings

and any revisions, along with a work schedule and SPCD for approval prior to the Pre-Construction conference.

Requirements and details for the SPCD can be found in Advisory Circular (AC) 150/5370-2G *Operational Safety on Airports During Construction*. The latest edition of this AC and most others can be obtained free of charge from the FAA website at http://www.faa.gov/airports/resources/advisorv circulars/.

This CSPP is also available through the Engineer in either Microsoft Word (*.docx) or Adobe (*.pdf) formats.

Section 3. Areas and Operations Affected by the Construction Activity

A. Identification of Affected Areas

The Airport Reference Code (ARC) category will not change due to construction activities. Known affected areas are shown on the CSPP drawings in the construction plans. If other affected areas become known during the construction process, they must be added to the drawings and submitted to the Engineer for approval. Work in other affected areas is prohibited until the written approval of the revised SPCD and CSPP drawings is received from the Engineer.

1. Runway 02L/20R: Nightly Closures

The work area is adjacent to Runway 02L/20R, directly north of the blast pad on Runway 20R, as shown on the CSPP drawings. The runway will be closed nightly between the hours of 11:00 PM and 4:00 AM Sunday night through Friday morning and 11:00 PM and 6:00 AM Friday night through Sunday morning. The runway will be re-opened, full length and width, for use during the day. A NOTAM is required during hours or operations to notify users of unfinished work in the RSA northwest of Runway 20R threshold. Barricades and obstacles shall be removed from the project area and excavations shall be backfilled to create a smooth and level surface within the RSA at the end of each shift.

2. Taxiways B, C, and D: Nightly Closures

The nightly closures of Runway 02L/20R will be accompanied by nightly closures of the connecting Taxiways B, C, and D, as shown the CSPP drawings. The taxiways will be closed nightly between the hours of 11:00 PM and 4:00 AM Sunday night through Friday morning and 11:00 PM and 6:00 AM Friday night through Sunday morning. The taxiways will be re-opened for use during the day. Closed taxiways shall be marked with low profile barricades and signage as identified in the CSPP drawings and Section 15 of the CSPP.

3. Taxiways E, and F: Nightly Partial Closures

The nightly closures of Runway 02L/20R will be accompanied by partial nightly closures of Taxiways E and F as shown on the CSPP drawings. Access to the Runway 02L/20R from these taxiways will be closed nightly between the hours of 11:00 PM and 4:00 AM Sunday night through Friday morning and 11:00 PM and

6:00 AM Friday night through Sunday morning. The taxiways will be re-opened for use during the day. The closed taxiways from shall be marked with low profile barricades and signage as identified in the CSPP drawings and Section 15 of the CSPP.

4. Approach/Departure Surfaces Affected by Heights of Objects

The approach/departure surfaces for the active runways and heliport will not be affected while work is performed in the Work Area.

Runway 02L/20R will be closed while work is performed inside the work area. The Contractor shall submit FAA Form 7460-1, Notice of Proposed Construction or Alteration, to obtain airspace clearance for construction equipment used for completion of the work.

5. Staging Areas, and Haul Routes Near Airport Operation Areas (AOAs)

The Airport Operations Area is the area on the airport which is primarily used or intended to be used for landing, takeoff, or surface maneuvering of aircraft and related activities. This area consists of runways, taxiways, and aprons. There is one staging area identified on the CSPP Drawings on Kenai Municipal Airport that is outside the AOA and movement area. It is advised that the Contractor investigate the available staging area. If it proves unsatisfactory, the Contractor will need to secure an off property staging area for their operations. Hauling across active AOAs is prohibited unless otherwise noted. All staging areas and haul routes will be kept away from active AOAs.

<u>Aircraft have right of way</u>. All hauling operations and other ground vehicle traffic must yield to taxiing aircraft.

Other access may be authorized but limited by the operational needs of the airport, and as approved by the Engineer. See Section 7.B below for control of foreign object debris (FOD) during hauling operations.

6. Mitigation of Effects

Full closures of Runway 02L/20R and Taxiways B, C, and D and partial closures of Taxiways E and F are required as described above. Coordination with airport users through the Engineer must begin at least 45 days prior to the first nighttime closure. All construction related activities within, or adjacent to the AOAs will be coordinated with the airport users prior to beginning work.

The Contractor will appoint a Safety Officer who will be the primary point of contact for all safety issues including worker and airfield safety. The Safety Officer will have the authority to immediately direct Contractor and subcontractor personnel and equipment to evacuate an area or otherwise address a potentially unsafe situation. The Safety Officer will inspect the jobsite daily for compliance with safety requirements. All ENA, Contractor, and Subcontractor personnel must be instructed to remain alert for situations which could negatively impact the safety of air operations, the safety of personnel, or the safety of the public. When an unsafe situation or condition is identified, regardless of the source, immediate action must be taken to create a safe and healthy environment.

The Contractor will maintain a 24-hour point-of-contact for safety issues that arise, requiring immediate attention. This duty may be shared by more than one person as long as the personnel are identified to the Engineer in writing. These personnel must have the power to immediately take action involving Contractor personnel and equipment.

• Temporary changes to runway and/or taxiway operations

Temporary runway and taxiway closures will be required during construction. The temporary changes to the runway and taxiways will be mitigated by the use of runway closure markers, temporary taxiway closure signage, NOTAMs, and an airport flagger (if required).

Maintenance of essential utilities

Ensure that all lighting systems, telecommunications, and control cables remain in operation continuously throughout the construction period except as noted in the plans and specifications.

See the Construction Safety and Phasing Plan drawings for anticipated impacts to airport operations during the course of the project. Impacts will vary based on normal operations of an area, construction activities, and duration of work. The Contractor shall coordinate with the Engineer prior to impacting operations on the airport.

Section 4. Protection of NAVAIDs

During the nighttime closures associated with the construction of this project, the airport NAVAIDS associated with Runway 02L/20R (i.e. runway edge lights, Visual Approach Slope Indicator (VASI), Runway End Identifier Lights (REIL), Global Positioning System (GPS), Instrument Landing System (ILS), and Medium-intensity Approach Light System with Runway Alignment Indicator Lights (MALSR)) will not be operational. During hours of operation the airport NAVAIDS shall be operational and in use. See Section 1.D regarding ATO coordination for NAVAID procedures. See Section 11 regarding location and protection of utilities servicing NAVAIDs.

Section 5. Contractor Access

This CSPP details the areas to which the Contractor must have access, and how Contractor personnel will access those project work areas. These points of access, along with access routes, will be subject to change as construction of this project progresses. When required, the Engineer will communicate these changes at construction coordination meetings.

A. Location of Stockpiled Construction Materials

Stockpiles are limited to active work areas and the staging area shown in the CSPP drawings. Additional stockpile areas will not be provided outside of these areas. Stockpiles may not be placed within the AOA at any time. Additional stockpiles that cannot be contained at the available locations provided shall be

located at Contractor-supplied staging areas off airport property. Stockpiles shall not be placed within the Runway Object Free Area (ROFA) at any time.

See Section 15 regarding hazard marking for the staging area. See Section 7 regarding provisions preventing staged material from becoming Foreign Object Debris (FOD). See section 16 for TOFA and ROFA descriptions and dimensions.

B. Vehicle and Pedestrian Operations

Contractor vehicle and personnel access routes for construction must be controlled to prevent inadvertent or unauthorized entry of persons, vehicles, or animals onto the AOA. The Airport Manager (or designated representative) will coordinate requirements for vehicle operations with the Contractor.

<u>Aircraft have right of way.</u> All hauling operations, and other ground vehicle traffic must yield to taxiing aircraft.

All construction vehicles and personnel shall be restricted to the immediate work areas. These areas include the haul routes into the work area and the work area currently under construction.

Haul routes used by the Contractor must be clearly marked to prevent inadvertent entry to areas open to airport operations. Construction traffic must remain on the clearly designated routes and never stray from the approved paths. Maintenance and upkeep of the haul routes over the duration of the project is the responsibility of the Contractor. The Contractor shall provide a proposed haul route plan as part of the SPCD for approval by the Engineer. Upon completion of work, the Contractor shall return roads and haul route surfaces to their prior condition.

At all times aircraft shall have the right-of-way over construction equipment and vehicles.

All vehicles operating on airport property must be marked with flashing amber/yellow beacons at all times. Beacons must be maintained to standards and in good working condition at all times. Beacons must be located on the uppermost part of the vehicle structure, be visible from any direction, and flash 75 +/-15 flashes per minute. Alternately, orange and white flags may be used during daylight hours, when specifically approved by the Engineer. Flags shall be 3' x 3' with alternating 1' x 1' international orange and white squares. In the event that flags become faded, they shall be immediately replaced by the Contractor.

There are no waste or refuse disposal sites located on the airport. All material shall be removed by the Contractor and disposed of off airport property unless otherwise directed by the Project Engineer.

The Contractor must perform all service on construction vehicles and equipment offsite or within the limits of the staging area. Parked construction vehicles and equipment must be within the active work area, staging area, areas or off airport property. No equipment, vehicles, materials, or stockpiles shall be present in the work area outside of the allowable work hours when the Runway is open for operations.

C. Authorization to Operate Contractor Vehicles

Vehicles are not allowed to operate on active aircraft movement areas (aprons, taxiways, and runways) unless authorized by the Engineer. All vehicles operating on active aircraft movement surfaces shall be in good operating condition and free of fluid leaks. The Engineer may refuse to permit access or direct the removal of any vehicles not meeting these requirements.

Contractor shall monitor and perform two-way radio procedures with Kenai Municipal Airport Air Traffic Control Tower (ATCT), Kenai Flight Service Station (AFSS), and the Common Traffic Advisory Frequency (CTAF) in accordance with Paragraph G. Two-Way Radio Communications in this Section. If radio communication is disabled, the Contractor shall vacate the AOA and contact the Engineer immediately for further instructions.

The Safety Manager shall continuously monitor all construction activities and communicate with all project personnel using VHF frequency radios to assure the safety of project personnel. All project personnel, including surveyors, shall be equipped with an operational VHF radio on the same frequency as the Safety Manager. The Contractor shall provide one vehicle equipped with two operational radio systems. One radio system shall be an aviation radio capable of receiving and transmitting on all ATCT frequencies and a second VHF radio system shall be capable of positive and continuous communication with all Contractor and Subcontractor personnel present on the project site. The Contractor shall prepare and implement a plan that provides positive and continuous VHF radio communication between the Safety Manager and Contractor and Subcontractor personnel and equipment on the airport.

In accordance with the established Kenai Municipal Airport Ground Vehicle Operations Training Manual, a mandatory driver's safety training course shall be completed by all personnel working within the Air Operations Area. At a minimum, the mandatory driver's safety training course shall be completed by the Contractor's Site Superintendent, Safety Officer, and personnel placing and removing signs and barricades from the runways and taxiways. The objective is to enhance safety, raise security awareness of airport users, and familiarize them with practices and requirements during operations. The Kenai Municipal Airport will issue warnings and may demand removal of drivers and construction personnel that are in violation of their Ground Vehicle Operation procedures.

A copy of the Kenai Municipal Airport Ground Vehicle Operations Training Manual can be accessed through the Airport Manager (or designated representative). Contractor shall coordinate Ground Vehicle Operations Training with Airport Management. Training must be completed prior to accessing the Work Area.

The Contractor shall be responsible for maintaining completion certificates for the Contractor's Site Superintendent and Safety Officer who access the Air Operations Area throughout the duration of the project, and shall include copies of the completion certificates with the submittal of the Safety Plan Compliance Document. All Contractor vehicle operators must present a valid driver's license to the Airport Manager (or designated representative) to receive authorization to operate a vehicle on airport property.

Vehicle operators on airports face conditions that are not normally encountered during highway driving. Therefore, construction equipment shall remain within the designated work areas at all times. Persons who have vehicular access to the ramp or movement areas of the airport must have an appropriate level of knowledge of airport rules and regulations. Any person expected to operate on the movement area must demonstrate a functional knowledge of the English language.

D. Area of Authorization

Contractor personnel and vehicles are only authorized in the areas where contract work is being performed and on the designated access routes to and from that area.

E. Construction Employee Parking Areas

In addition to information included elsewhere in the CSPP, the following provisions apply:

- Coordinate vehicle-parking areas for Contractor employees with the Engineer and designate parking areas in advance to prevent damage to airport or private property and prevent unsafe conditions.
- Do not park or operate motorized vehicles on vegetated unimproved surfaces.
- Do not park vehicles within 15 feet of any roadway open to traffic.
- Do not park vehicles within 6 feet of any airport perimeter fencing.

F. Construction Vehicle and Equipment Parking

Contractor staging area for work on the project is shown on the plans, subject to the conditions cited in this Section. Before occupying a temporary use/staging area, mark the staging area limits with lath and flagging or other measures and arrange a joint inspection with the Engineer to record the area's original condition. Do not stage motorized equipment on dirt surfaces in the staging area without a drip pan. Equipment not actively employed in the work is to be removed from airport property, or parked within the approved staging area. When the area is no longer needed, arrange a joint inspection with the Engineer to ensure you have returned the area to an acceptable improved condition.

G. Two-Way Radio Communications

When the Contractor is working, the Contractor's Safety Manager, additional safety personnel, and Superintendent shall continuously monitor the CTAF on 121.3 MHz. This also pertains to anytime flaggers and/or manual gate operation personnel are onsite.

The Contractor shall follow the following procedures prior to accessing controlled areas:

- Prior to accessing controlled areas during hours that the ATCT is open, Contractor shall communicate with, and request approval from, ATCT on ground frequency 118.75 MHz.
- Prior to accessing the Work Area or the Runway Object Free Area (OFA) when the ATCT is open,
 Contractor shall communicate with, and request approval from, ATCT on CTAF 121.3 MHz.

• Prior to accessing any controlled area (including the Work Area and OFA) when the tower is closed, Contractor shall communicate with, and request approval from, AFSS on CTAF 121.3 MHz.

Communications shall be with an aviation frequency radio.

The ATCT normal hours of operation are as follows:

- May 01 September 30: ATCT open 6:00 AM to 10:00 PM
- October 01 April 30: ATCT open 7:00 AM to 9:00 PM

All persons and equipment working within the airport property shall remain in constant radio contact with the Contractor's Safety Manager using a radio frequency other than the aviation radio band approved for use by the Federal Communications Commission.

H. Airport Security

The Contractor shall maintain security at existing gates and access points as shown in the CSPP Drawings. Construction vehicles and personnel should be clearly identifiable to avoid any misconceptions about their reason for being on airport property.

Section 6. Wildlife Management

Contractor must control and continuously remove waste or loose materials that have the potential to attract wildlife. These items include, but are not limited to:

- Trash Food scraps from construction personnel must be collected and removed on a daily basis.
- Standing water Standing water in construction areas will not be allowed. Provide adequate
 drainage along with erosion and sediment control measures to prevent attracting birds and other
 wildlife.
- Tall grass and seeds Restoration of areas disturbed by the Contractor and areas shown in the Plans is required. Seeding and restoration shall be performed in accordance with the Plans and Specifications. Submit seed mix to the Engineer for approval. The seed mix must not act as a wildlife or bird attractant.
- Poorly maintained fencing and gates Fences or gates that are damaged by construction activities
 or by Contractor negligence must be repaired at no cost to the City of Kenai. All repairs are
 subject to the approval of the Engineer. Report gate and fence damage or deficiencies to the
 Engineer, whether caused by Contractor activities, or otherwise observed.
- Disruption of existing wildlife habitat Disturbance of ground or wildlife habitat beyond the project footprint is prohibited.

The Contractor shall immediately report any sighting of wildlife on airport property to the Engineer who will notify airport operations.

Section 7. Foreign Object Debris (FOD) Management

Special care and measures shall be taken to prevent FOD when working in an airport environment. The Contractor shall be held responsible for implementing an approved FOD Management Plan as a part of the SPCD. The FOD Management Plan will include procedures for prevention, regular cleanup, and containment of construction material and debris. The Contractor will ensure all vehicles related to the construction project in or near the AOA shall be free of any debris that could create a FOD hazard. The taxiways, aprons, and runways must remain clean. Waste containers with attached lids shall be required on construction sites. Special attention shall be given to securing lightweight construction material. Areas on runways and taxiways that the Contractor has accessed shall be swept clean of all FOD and approved by the Engineer prior to opening the surface to aircraft traffic. Contractor will provide their own equipment for vehicle and equipment washing and clean up.

A. Inspections

The Contractor will participate in daily safety and final inspections as required in Section 10 below. Take immediate action as required to clean up and prevent FOD on operational surfaces upon discovery or notification.

B. Hauling

Stay on approved and marked haul routes. Ensure all vehicles that must cross active areas for hauling, including those used to perform inspections, temporary marking maintenance, or other required activities, are swept clean and checked for loose materials, equipment, tools, or other objects that may become FOD.

The Engineer may suspend work at any time that operational surfaces cannot be adequately cleaned and maintained, including conditions of inclement weather, and improper, inadequate, or non-use of Contractor sweeping and cleaning equipment. No adjustment to contract time will be made, regardless of the cause of such work suspensions.

Section 8. Hazardous Materials (HAZMAT) Management

Contractors operating construction vehicles and equipment on the airport must be prepared to expeditiously contain and clean-up spills resulting from fuel, hydraulic fluid, or other chemical fluid leaks. Transport and handling of other hazardous materials on an airport also requires special procedures. To that end, the Contractor is required to develop and implement spill prevention and response procedures for vehicle operations.

The Contractor shall develop a Hazardous Materials Control Plan (HMCP) and a Spill Prevention, Control and Countermeasure (SPCC) plan. The Contractor shall designate a Spill Response Field Representative with 24-hour contact information. Designate a Subcontractor Spill Response Coordinator for each subcontractor. The Superintendent and Contractor's Spill Response Field Representative must have 24-

hour contact information for each Subcontractor Spill Response Coordinator and the Utility Spill Response Coordinator.

Contractor shall list and give the location and estimated quantities of HAZMAT (including materials or substances listed in 40 Code of Federal Regulations [CFR 117 and 302, and petroleum products]) to be used or stored on the project. HAZMAT must be stored in covered storage areas. Include secondary containment for all HAZMAT storage areas.

Identify the locations where fueling and maintenance activities will take place, describe the activities, and list controls to prevent the accidental spillage of petroleum products and other HAZMAT. Controls include placing absorbent pads or other suitable containment under fill ports while fueling, under equipment during maintenance or repairs, and under leaky equipment.

List the types and approximate quantities of response equipment and cleanup materials available on the project. Include a list and location map of cleanup materials at each different work site and readily available off-site (materials sources, material processing sites, disposal sites, staging areas, etc.). Spill response materials must be stored in sufficient quantity at each work location, appropriate to the hazards associated with that site.

Describe procedures for containment and cleanup of HAZMAT. Describe a plan for the prevention, containment, cleanup, and disposal of soil and water contaminated by spills. Describe a plan for dealing with contaminated soil and water encountered during construction. Clean up spills or contaminated surfaces immediately.

Describe methods of disposing of waste petroleum products and other HAZMAT generated by the Project, including routine maintenance. Identify haul methods and final disposal areas. Assure final disposal areas are permitted for HAZMAT disposal.

Describe methods of complying with the requirements of AS 46.04.010-900, Oil Hazardous Substances Pollution Control, and 18 AAC 75. Include contact information for reporting HAZMAT and petroleum product spills to the Engineer and for reporting to federal, state, and local agencies.

Prepare and implement a Spill Prevention, Control and Countermeasure (SPCC) Plan when required by 40 CFR 112; when both of the following conditions are present on the Project:

- Oil or petroleum products from a spill may reach navigable waters (as defined in 40 CFR 112); and
- Total above-ground storage capacity for oil and any petroleum product is greater than 1,320 gallons (not including onboard tanks for fuel or hydraulic fluid used primarily to power the movement of a motor vehicle or ancillary onboard oil-filled operational equipment, and not including containers with a storage capacity of less than 55 gallons).

Reference the SPCC Plan in the HMCP and SWPPP. The Contractor shall incorporate these procedures into the SPCD. This includes maintenance of appropriate MSDS data and appropriate prevention and response equipment on-site.

Section 9. Notification of Construction Activities

A. Responsible Representatives / Points of Contact

Contractor shall develop a list of contacts consisting of both Contractor personnel and project stakeholders. Although the primary contacts for all matters involving safety and security remain the Airport Manager (or designated representative), Engineer, and Contractor's Superintendent, certain issues may warrant the delegation of response to individuals capable of immediately taking action. These contacts may be required to be available 24 hours a day, as specified to address the following issues:

- For emergencies (dial 9-1-1)
- HAZMAT Spill Response
- Repair of erosion sediment control measures
- FOD cleanup
- Repair of damaged fence, gates, or locks
- Other points of contact, as specified, or as directed by the Engineer

The list shall also contain the contacts below:

Name	Title	Telephone Number
Kenai Fire Department		(907) 283-7666
Kenai Police Department		(907) 283-7879
Kenai Municipal Airport Air Traffic Control Tower		(907) 283-7245
Kenai Flight Service Station (AFSS)		(907) 283-7211
Kenai Flight Service Tech Ops		(907) 283-5270
National Poison Control Hotline		(800) 222-1222
Adam Bruscher	HDL Engineer	(907) 301-9899
Scott Curtin	Public Works Director	(907) 283-8420
Mary Bondurant	Airport Manager	(907) 283-7951
Jim Lackey	Operations Supervisor	(907) 398-9997

The Contractor shall designate a Superintendent or foreman of the company to act as Safety Manager for this project. The Safety Manager shall have full authority to direct the Contractor's activities including stopping work, to ensure a safe worksite. The Safety Manager shall be involved with all phases of construction including bidding, preconstruction conference, training of personnel, weekly meetings, daily construction status reports, and final inspections. The Safety Manager shall have an understanding of airport airspace, and the local traffic control procedures. The Safety Manager shall be available 24 hours a day during the construction phase to respond to all safety needs. The following information shall be provided:

Safety Manager's Name: _.	
Title:	
Residence Address:	

Day Telephone:	
Day Fax:	
Evening Telephone:	

The Contractor shall provide not less than two additional persons and phone numbers where they can be reached by the Engineer at any time, day or night. The listed persons shall have access to be capable of installing new batteries, flashers, cones, or other items required to keep the airport marking system operational.

B. Operational Safety Emergencies

In the event of an occurrence that might adversely affect the operational safety of the airport, the Contractor shall contact the Project Engineer, who will advise appropriate action and notify the Airport Manager (or designated representative) to issue a NOTAM.

<u>For all non-airport related emergencies Dial 9-1-1.</u> This includes required medical, fire, or police response on or off airport property. Under emergency conditions involving immediate loss of human life, or threat to wellbeing, Contractor personnel may allow access to airport property by uniformed emergency services. Maintain airfield security in all other respects. Notify the Engineer, and the Airport Manager immediately following any 9-1-1 emergency call.

C. Notices to Airmen (NOTAMs)

The Airport Manager (or designated representative) is the operating authority of the airport and has the sole authority to close a runway or the airport to aircraft operations until, in the opinion of the Airport Manager (or designated representative), the safety hazards no longer exist. The Airport Manager (or designated representative) has the sole authority to file NOTAMs with the FAA.

The Airport Manager (or designated representative) will issue any required NOTAMs for the airport. The Contractor shall coordinate the duration, requirements, and cancellations of NOTAMs with the Engineer.

D. Emergency Notification Procedures

In the event of an emergency, the Contractor shall notify the Airport Manager and Engineer. If necessary, the Contractor shall contact emergency services by calling 9-1-1.

In the event of an aircraft emergency, medevac, severe weather conditions, or any issue as determined by the Airport Manager (or designated representative) that may affect aircraft operations, the Contractor's personnel and/or equipment may be required to immediately vacate the area(s) affected and open the runways and taxiways, full length and width. Points of contact for the various parties involved with the project shall be identified and shared among the various parties at the pre-construction meeting. Specific emergency notification procedures shall be incorporated into the Contractor's SPCD.

E. Notification to the FAA

CFR 14 Part 77 requires that any person proposing construction or alteration on an airport must notify the FAA at least 45 days prior to initiating the construction or alteration. This includes construction equipment and proposed parking areas for this equipment (i.e. cranes, graders, other equipment) on airports. This notification can be made electronically at: https://oeaaa.faa.gov/oeaaa/external/portal.jsp, or by submitting an FAA Form 7460-1, Notice of Proposed Construction or Alteration to the Alaskan Region FAA, Airports Division, 222 West 7th Ave, #14, Anchorage, AK 99513-7587. Provide all notifications to the FAA, through the Engineer.

Section 10. Inspection Requirements

A. Daily (Or More Frequent) Inspections

Inspections shall be conducted daily, or more frequently, if necessary to ensure conformance with this document. The checklist provided in the Advisory Circular 150-5370-2G Appendix D, Construction Project Daily Safety Inspection Checklist, shall be used and completed by the Contractor's Safety Representative.

Conduct safety and security inspections at least daily during the project. These areas are detailed in Section 16 below. No work is allowed inside any active runway or taxiway movement areas.

Notify the Engineer and the Airport Manager (or designated representative) regarding any safety or security issues found during inspections, regardless of whether they are caused by negligence, oversight, or project scope change. Include at least the following items in the inspections; other items may be added at the direction of the Engineer, or as approved:

- Inspect each required crossing of any active surface for the presence of FOD.
- Inspect haul routes for proper markings and barricades. Ensure that vehicles are using only designated haul routes.
- Inspect fences and gates adjacent to, or used for access on haul routes. Ensure that vehicles are using only the designated access points. Ensure that each open gate is actively manned to protect airfield security.

B. Final Inspections

Prior to opening any portion of the airport to traffic, the Contractor and Engineer shall perform a safety inspection of the area to be opened to traffic to ensure conformance with the CSPP and FAA standards. Final inspections shall be conducted after construction is complete.

Remove any construction-related materials not allowed to remain on airport property. The final safety inspection may become part of the project completion final inspection at the discretion of the Engineer.

Section 11. Underground Utilities

Special attention shall be given to preventing unscheduled interruption of utility services and facilities. Where required due to construction purposes, the FAA shall locate all of their underground cables. The Contractor shall locate and/or arrange for the location of all other underground cables. The Contractor shall be responsible for the protection of all existing utilities, cables, wires, pipelines, and other underground facilities to remain throughout project construction. When an underground cable or utility is damaged due to the Contractor's negligence, the Contractor shall immediately notify the Engineer and repair the cable at his or her own expense. Full coordination between the ENA staff, the Engineer, and the Contractor will be performed prior to the commencement of construction activities to verify the location of known airport power and control cables in the work area.

Section 12. Penalties

The Contractor shall be responsible for payment of any fines assessed to ENA due to the Contractor's violation of FAA or Transportation Security Administration operation, safety, or security requirements.

Failure on the part of the Contractor to adhere to prescribed requirements may have consequences that jeopardize the health, safety, or lives of community members. ENA may issue warnings on the first offense based upon the circumstances of the incident. Individuals involved in non-compliance violations may be prohibited from working at the airport, pending an investigation of the matter.

All Contractor and subcontractor personnel must abide by the CSPP, and other contract requirements. Failure to comply with the safety rules of this CSPP, the SPCD, the General Contract Provisions, Occupational Safety and Health Administration (OSHA) regulations, or any other federal, state, or local laws may result in the suspension of construction activities or imposition of fines or other legal action. Suspension of work for failure to comply with these safety rules is not eligible for additional compensation for standby time. Penalties can include payment by the Contractor of any fines levied by any federal, state, or local agency having authority; suspension of the contract; and individual workers are subject to removal from the project.

The Contractor shall comply with any written order by the Engineer to remove workers, who, in the opinion of the Engineer, violate operational regulations, violate construction safety plan requirements, violate security plan requirements, perform the work in an unskilled manner, who are intemperate or disorderly, or who jeopardize the safety of the public, other workers or Engineer's personnel. The contractor shall allow removed workers to return to the project only with the Engineer's written permission. The Engineer may suspend the work if the contractor fails to furnish suitable and sufficient personnel necessary to perform the work, or fails to remove any worker at the Engineer's order.

Note: Project shutdown or misdemeanor citations may be issued on a first offense. When construction operations are suspended, activity shall not resume until all deficiencies are rectified.

Section 13. Special Conditions

In the event of an emergency, Contractor personnel and/or equipment may be required to immediately vacate the work area and open the runways and taxiways, full length and width. The Contractor will receive notification from the Engineer and Airport Manager (or designated representative) when a special condition requires vacation of the work area, as applicable. In any event, construction personnel must be aware at all times and give right of way as required to any emergency vehicles moving toward work areas with emergency lights displayed during construction as this generally will indicate an emergency situation is imminent.

A. Health, Safety, and Accident Prevention

Contractor shall comply with this document and all applicable federal, state, and local safety regulations to ensure the safety of airport users, the public and construction staff.

B. Special Equipment

Use of tall equipment, such as cranes or drilling rigs, must be submitted on Form 7460-1 and approved by the FAA. See coordination with, and notification of FAA above.

C. Water for Dust Control

Contractor shall provide water for dust control as required, and as directed. Water is available from the City of Kenai through coordination with Public Works Department. Dust, smoke, steam, or other airborne particulates caused by Contractor activities may be considered a safety violation as determined by the Engineer.

D. NOTAMs

Coordinate with the Engineer and Airport Manager (or designated representative) at least three days in advance to provide information required to issue NOTAMs.

Section 14. Runway and Taxiway Visual Aids

A. General

All temporary markers, lighting, and signs must be clearly visibly and secured in place to prevent movement and constructed of materials that would minimize damage to an aircraft in the event of inadvertent contact. Items used to secure markings must be of a color similar to the marking.

B. Markings

Temporary markings (markers) must comply with FAA AC 150/5340-1M, Standards for Airport Marking. They must be properly configured and secured.

- Temporary Runway Closures: Place illuminated temporary runway closure markers (lighted X's) at each runway end.
- Temporary Taxiway Closures: Install low profile barricades as shown on the CSPP drawings.

The Owner has lighted temporary runway closure markers (lighted X's) available for use. Contractor shall coordinate availability of temporary runway closure markers prior to start of construction.

C. Lighting and Visual aids, and NAVAIDs

During nighttime closures of Runway 02L/20R, the associated runway edge lights, VASI, REILs, GPS, ILS, and MALSR shall be disabled. Prior to start each night shift, the Contractor shall request that the Engineer, or the Airport's other designated representative, contact Kenai Flight Service Station and Kenai Flight Service Tech Ops to disable the lights and NAVAIDs. Upon completion of temporary closures, Contractor shall also request that the lights and NAVAIDs be reactivated and ensure that airfield lighting and NAVAIDs are fully operational.

Section 15. Hazard Marking and Lighting

Hazard marker barriers shall be used to delineate limits of active construction as shown on the CSPP drawings. Other methods of delineation that are deemed necessary during the course of construction by the Airport Manager (or designated representative) shall be implemented and maintained by the Contractor at no additional cost. Lighted runway closure marker shall be placed vertically facing the approach at both ends of the closed runway prior to beginning any work.

Contractor shall provide hazard markings which clearly delineate to both airborne and taxiing aircraft which portions of the facility are open and which are closed, as set forth in the Safety Plan drawing, Contractor's approved Traffic Control Plan, and as described herein. Standard height highway barriers are not acceptable on this project because they do not provide the necessary clearance between low wing aircraft and the barriers. At a minimum, the following will be provided:

- 1. Low profile barricades, spacing not to exceed 8-feet.
- 2. Flashing red markers located at grade level at off-limit work areas.
- 3. Other traffic control devices in accordance with the Contractor's approved Traffic Control Plan.

The Contractor must have designated person on call 24 hours a day for emergency maintenance of airport markings, hazard lighting, and barricades. The Contractor must file the designated person's contact information with the Airport Manager (or designated representative) and Engineer. Lighting should be checked at least once a day, preferably at dusk.

The safety Manager shall inspect the usable surface at the completion of the construction operations to ensure that the surface is usable before re-opening closed areas. The Airport, or his designated representative, will conduct other inspections as deemed necessary.

Section 16. Protection of Runway and Taxiway Safety Areas

A. Runway Safety Area (RSA)

The RSA dimensions for Runway 02L/20R is shown in Table 1 below. Work will only occur inside the RSA when the runway has been closed by issuance of a NOTAM and marked in accordance with Section 15 above. The RSA is centered on the centerline of the active runway. No equipment, vehicles, or personnel will be allowed within the RSA of the active runway. No material stockpiles will be allowed in the RSA at any time. Exceptions to these construction limitations may occur only with the permission of the Engineer and after the proper NOTAMs have been issued. See Section 5 of this CSPP for details regarding vehicle and personnel movement within safety areas and material stockpiling restrictions.

See Section 15 of this CSPP for details regarding the hazard marking and lighting devices used to identify the active work area, active open excavation, or areas disturbed by construction. Construction activities within the existing RSA are subject to the following conditions:

- Open trenches or excavations are not permitted within the RSA while the runway is open. Backfill trenches and grade the area match preexisting condition before the runway is opened.
- The RSA shall be graded smooth with no ruts, humps, depressions, or other surface variations.

To install or remove, temporary runway closure markers, only access RSA areas after Runway 02L/20R is closed with prior approval and authorization from the Air Traffic Control Tower (if the tower is open) and AFSS (if the tower is closed). Ensure proper NOTAMs are in place prior to accessing RSA for Runway closure.

B. Runway Object Free Area (ROFA)

The ROFA dimensions for the Runway 02L/20R is shown in Table 1 below. The ROFA is centered on the active runway centerline. Work will be conducted inside the ROFA for this project while the runway is closed. Materials and equipment shall not be within the ROFA unless they are actively being used for construction. Remove equipment, stockpiles, and material from the ROFA prior to opening runway for operation. No equipment or vehicles are to be parked, or left unattended, in the ROFA at any time.

C. Taxiway Safety Area (TSA)

The TSA's will not be impacted or changed during construction. No work will occur inside of the TSA except as required to install barricades and taxiway closure signage. Only access TSA areas after Runway 02L/20R is closed with prior approval and authorization from the Air Traffic Control Tower (if the tower is open) and AFSS (if the tower is closed). Ensure proper NOTAMs are in place prior to accessing TSA's for taxiway closures. TSA dimensions for taxiways affected by the closure of Runway 02L/20R are shown in Table 1 below.

D. Taxiway Object Free Area (TOFA)

The TOFA's will not be impacted or changed during construction. No work will occur inside of the TOFA except as required to install barricades and taxiway closure signage. Only access TOFA areas after Runway 02L/20R is closed with prior approval and authorization from the Air Traffic Control Tower (if the tower is open) and AFSS (if the tower is closed). Ensure proper NOTAMs are in place prior to accessing TOFA's for taxiway closures. TOFA dimensions for taxiways affected by the closure of Runway 02L/20R are shown in Table 1 below.

E. Obstacle Free Zone (OFZ)

The OFZ dimensions for the Runway 02L/20R is shown in Table 1 below. Personnel, material, and/or equipment may not penetrate the OFZ while the runway is open for aircraft operations. No work will occur inside of the OFZ, except when the runway has been closed by issuance of a NOTAM and marked in accordance with Sections 14 and 15 above.

F. Runway Approach/Departure Surfaces

The Runway approach and departure surfaces will not be impacted during construction. No work will occur inside of the Runway approach and departure surfaces except when the runway has been closed by issuance of a NOTAM and marked in accordance with Sections 14 and 15 above.

Area	Design Element	Width (Feet)	Length Beyond Runway End (Feet)
	RSA	500	1000
RW 02L/20R	ROFA	800	1000
	ROFZ	400	200
Taxiways	TSA	171	N/A
	TOFA	259	N/A

Table 1: Runway and Taxiway Protection Areas

G. Heliport Approach/Departure Surfaces

The Heliport Approach/Departure Surfaces will not be impacted by this project.

H. Heliport Transitional Surfaces

Heliport transitional surfaces will not be impacted by this project.

Section 17. Other Limitations on Construction

Use of tall equipment (e.g., cranes) will require a 7460-1 determination letter issued for such equipment. The Contractor shall coordinate Kenai Municipal Airport airspace clearance permits with the Engineer for work that penetrates the air space. The Contractor shall be required to submit the clearance permit to the FAA within 45 days prior to beginning construction activities.

No use of open flame welding torches unless fire safety precautions are provided and the Engineer has approved their use.

No use of electrical blasting caps or explosives of any kind on or within 1,000 ft. of the airport property.

No use of flare pots on airport property.

PERFORMANCE BOND

NOW ALL MEN BY THESE PRESENTS: that
(Name of Contractor)
(Address of Contractor)
, hereinafter called Principal, and (Corporation, Partnership, or Individual)
(Name of Surety)
(Address of Surety) ereinafter called Surety, are held and firmly bound unto
(Name of Owner)
(Address of Owner)
ereinafter called Owner, in the penal sum of Dollars,
HE CONDITIONS OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with the Owner, dated the day of, 202_, a copy of which is hereto attached and made a art hereof for the construction of:
Cenai Municipal Airport (KMA) 2021 Improved Airfield Drainage

NOW, THEREFORE, if the Principal shall well, truly and faithfully perform its duties, all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term thereof, and any extensions thereof which may be granted by the Owner, with or without notice to the Surety, and if he shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless the Owner from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay owner all outlay and expense which the owner may incur in making good any default, then this obligation shall be void; otherwise to remain in full force and effect .

PROVIDED, FURTHER, that the said Surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the work to be performed thereunder or the specifications accompanying the same shall in any ways affects its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the work or to the specifications.

PROVIDED, FURTHER, that no final settlement between the Owner and the Contractor shall abridge the right of any beneficiary hereunder, who claims may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executeemed an original, this the day of	ited in three (3) counterparts,	each one of which shall be	
decined an original, this the day or	, 202		
	(Discipal)	(0541)	
	(Principal)	(SEAL)	
	(Principal Secretary)	· · · · · · · · · · · · · · · · · · ·	
ATTEST:			
	BY		
(Witness as to Principal)	(Address)		
(Address)			
	(Surety)	(SEAL)	
ATTEST:	BY(Attorney-in-Fact)		
(Witness as to Surety)	(Address)	· · · · · · · · · · · · · · · · · · ·	
(Address)			
NOTE: If Contractor is Partnership, all partners show	uld execute bond.		
IMPORTANT: Surety companies executing bonds must a			

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS: that
(Name of Contractor)
(Address of Contractor)
a, hereinafter called Principal, and (Corporation, Partnership, or Individual)
(Name of Surety)
(Address of Surety)
hereinafter called Surety, are held and firmly bound unto
(Name of Owner)
(Address of Owner)
hereinafter called Owner, in the penal sum of Dollars (\$) in lawful money of the United States, for the payment of which sum well and trul to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.
THE CONDITIONS OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with the Owner, dated the day of, 202_, a copy of which is hereto attached and made a partnereof for the construction of:
Kenai Municipal Airport (KMA) 2021 Improved Airfield Drainage

NOW, THEREFORE, if the Principal shall promptly make payment to all persons, firms, subcontractors, and corporations furnishing materials for or performing labor in the prosecution of the work provided for in such contract, and any authorized extension or modification thereof, including all amounts due for materials lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or used in connection with the construction of said work, and all insurance premiums on said work, and for all labor, performed in such work whether by subcontractor or other-wise, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said Surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the work to be performed thereunder or the specifications accompanying the same shall in any ways affects its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the work or to the specifications.

PROVIDED, FURTHER, that no final settlement between the Owner and the Contractor shall abridge the right of any beneficiary hereunder, who claims may be unsatisfied.

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(Address)			
NOTE: If Contractor is Partn	ership, all partners	should execute bond.	
IMPORTANT: Surety compan	nies evecuting hands =	nust annear on the Traceury Departs	ment's most current list (Circular 570 co
		t business in the State where the proje	ment's most current list (Circular 570 as

CONTRACTOR'S RELEASE AND AFFIDAVIT OF PAYMENTS OF DEBTS AND CLAIMS ("Release")

PROJECT NAME: Kenai Municipal Airport (KMA) 2021 Improved Airfield Drainage

The undersigned, being first duly sworn, deposes and says:
1. That pursuant to this contract for project between the undersigned and the City of Kenai dated the undersigned hereby certifies that, except as listed below, he has paid in full or has otherwise satisfied all obligations for materials and equipment furnished for all work, labor, and services performed and for all known indebtedness and claims for which the Contractor or the City of Kenai is or may become liable in connection with performance under this contract. The Contractor warrants that he has made diligent search and inquiry to determine the existence of any such claim, debt, or liability and that all such obligations, whether liquidated, unliquidated, or disputed, have been satisfied.
2. The Contractor further certifies he did not extend any loan, gratuity, or gift of money of any form whatsoever to any employee or agent of the City, that he did not rent or purchase any equipment or materials from any employee of the City, nor to the best of his knowledge, from any agent of any employee of the City, and that he has not made any promise to an employee or agent of the City to do or undertake any such action after completion of the subject contract.
3. Pursuant to the above-described contract and in consideration of the final payment in the amount of \$, the undersigned Contractor hereby releases and discharges the City of Kenai, its officers, agents and employees of and from any and all further claim, debt, charge, demand, liability, or other obligation whatsoever under or arising from said contract, whether known or unknown and whether or not ascertainable at the time of the execution of this instrument. This release is complete, final, binding and irrevocable.
4. The Contractor shall indemnify, defend, save and hold the City, its elected and appointed officers, agents and employees, harmless from any and all claims, demands, suits, or liability of any nature, kind or character including costs, expenses, and attorneys fees resulting from Contractor or Contractor's officers, agents, employees, partners, attorneys, suppliers, and subcontractors' performance or failure to perform this Agreement in any way whatsoever. This defense and indemnification responsibility includes claims alleging acts or omissions by the City or its agents which are said to have contributed to the losses, failure, violations, or damage. However, Contractor shall not be responsible for any damages or claim arising from the sole negligence or willful misconduct of the City, its agents, or employees. Contractor and subcontractors shall also not be required to defend or indemnify the City for damage or loss that has been found to be attributed to an independent contractor directly responsible to the City under separate written contract.

CONTRACTOR'S RELEASE AND AFFIDAVIT OF PAYMENTS OF DEBTS AND CLAIMS ("Release")

If any portion of this Release is voided by law or court of competent jurisdiction, the remainder of this Release shall remain in full force and effect. IN WITNESS WHEREOF, this Release has been executed this __day of ______, 202_. (Contractor's signature) Title_____ **ACKNOWLEDGMENT** STATE OF ALASKA SS THIRD JUDICIAL DISTRICT THIS IS TO CERTIFY that on this _____ day of ____ , 202 , before the undersigned, a Notary Public in and for the State of Alaska, duly commissioned and sworn, personally appeared having produced satisfactory evidence of identification, and having acknowledged the voluntary and authorized execution of the foregoing instrument for the purposes therein mentioned, executed the above and foregoing instrument. Notary Public for Alaska My Commission Expires: (NOTE: In case of a corporation, the attached Certificate of Authority must be completed by a

corporate officer other than the one who signs above.)



CONSENT OF SURETY COMPANY TO FINAL PAYMENT

PROJECT: Kenai Municipal Airport (KMA) 2021 Improved Airfield Drainage
CONTRACT DATE:
CONTRACTOR:
TO: CITY OF KENAI, OWNER 210 Fidalgo Avenue Kenai, AK 99611 Attn: Public Works Department
In accordance with the provisions of the above-referenced Contract between Owner, City of Kenai, and Contractor, Surety (insert name and address of Surety),
does hereby consent to and approve of the final payment to Contractor in the amount of \$, and in the case of Surety, it is further agrees as follows:
1. In giving this Consent, Surety has made its own investigation to determine whether said payment should be made to Contractor and Surety has not relied on any representation by the City of Kenai or its employees or agents which has induced it to consent to such payment.
2. Surety agrees that this payment shall not relieve Surety of any of its obligations to the City of Kenai as set forth in its Labor and Material Payment and Performance Bonds

and Surety waives any and all claims against C to Contractor.	ity of Kenai for wrongful release of funds
IN WITNESS WHEREOF, said Surety Compa, 202	ny has set its hand this day of
	(Surety)
	(Signature of authorized representative)
	(Printed name and title)
ACKNOWI	LEDGMENT
STATE OF	
THIS IS TO CERTIFY that on the	day of, 202,
(Surety), being personally known to me or identification, appeared before me and acknowle of the foregoing instrument.	having produced satisfactory evidence of dged the voluntary and authorized execution
	Notary Public for
	Notary Public for My Commission Expires:

NOTE TO SURETY: ATTACH PROOF OF POWER OF ATTORNEY OR OTHER DOCUMENTATION DEMOSTRATING SIGNATORY MAY BIND SURETY

BUSINESS / CONTRACTOR'S LICENSE

(To be submitted)

SAMPLE

Alaska Department of Commerce, Community, and Economic Development P.O. Box 110806, Juneau, Alaska 99811-0806

ALASKA BUSINESS LICENSE

The licenses named heley helds Aleeks Pusiness License Number	
The licensee named below holds Alaska Business License Number Covering the period of: through	
Line of Business:	
COMPANY NAME	
COMPANY NAME ADDRESS	
O wner: NAME OF OWNER	
This license shall not be taken as permission to do business in the state without having complied with The other requirements of the laws of the State of Alaska or of the United States.	
Alaska Department of Commerce, Community, and Economic Developn	nent
Commissioner:	
This license must be posted in a conspicuous place at the business location. It is not transferable or assignable.	
SAMP	
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No STATE OF ALASKA	LL
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Expires: DEPARTMENT OF COMMERCE, COMMUNITY & ECONOMIC DEVELOPMENT	LE
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Insurance Certificate

(Submit original)



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(les) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy certain policies may require an endorsement. A statement on this certificate does not confer rights to the

PRODUCER		CONTACT NAME:				
		PHONE (A/C, No. Ext):	FAX (A/C, No):	(C) (B		
		E-MAIL ADDRESS:				
		INSURER(S) AI	NAIC #			
		INSURER A		:		
INSURED		INSURER B:				
		INSURER C:				
		INSURER D:				
		INSURER E :				
		INSURER F:				
COVERAGES	CERTIFICATE NUMBER:		REVISION NUMBER:			
INDICATED. NOTWITH	HAT THE POLICIES OF INSURANCE LISTED BELOW STANDING ANY REQUIREMENT, TERM OR CONDITI ISSUED OR MAY PERTAIN, THE INSURANCE AFFO	ON OF ANY CONTRACT OR OTHE	ER DOCUMENT WITH RESPECT TO	WHICH THIS		

EXCLUSIONS AND CONDITIONS OF SUCH POLICIES, LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSF	TYPE OF INSURANCE	ADD	SUBR		POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMIT	s	
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			+-					PERSONAL & ADV INJURY	\$	1,000,000
								GENERAL AGGREGATE	\$	2,000,000
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	HIRED AUTOS NON-OWNED AUTOS	-	-					PROPERTY DAMAGE (Per accident)	\$	
								Underinsured motorist	\$	1,000,000
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A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY							X WC STATU- OTH-		
	ANY PROPRIETOR PARTNER/EXECUTIVE	N/A						E.L. EACH ACCIDENT	\$	1,000,000
	OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	7 7 7	^_	_		pa a		E.L. DISEASE - EA EMPLOYEE	\$	1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below		X					E.L. DISEASE - POLICY LIMIT	\$	1,000,000

DESCRIPTION OF OPERATIONS (LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

Re: PROJECT NAME

Certificate Holder is an Additional Insured on General Liability & Automobile policies, but only with respect to work done by or on behalf or the named insured for the project referenced. The Certificate Holder is granted Waiver of Subrogation on the General Liability, Automobile and Workers' Compensation policies as respects the referenced project

CERTIFICATE HOLDER	CANCELLATION
City of Kenai	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
210 Fidalgo Ave Kenai, AK 99611	AUTHORIZED REPRESENTATIVE

ACORD 25 (2010/05)

REQUIRED WAGE RATES

Laborers' & Mechanics' Minimum Rates of Pay

State of Alaska Title 36 Wage Rates

State wage rates can be obtained at:

http://www.labor.state.ak.us/lss/pamp600.htm

Use the State wage rates that are in effect 10 days before Bid Opening. A paper copy of the state wage rates will be included in the executed Contract.

Federal Davis-Bacon Wage Rates

Federal wage rates for the State of Alaska can be obtained at:

http://www.wdol.gov/dba.aspx

Use the federal wage rates that are in effect 10 days before Bid Opening. A paper copy of the federal wage rates will be included in the executed Contract.

APPENDIX A

CONSTRUCTION SPECIFICATIONS

SPECIFICATION INDEX

SECTION	SECTION TITLE
Division 01	General Requirements
Section 01 10 00	Summary
Section 01 25 00	Substitution Procedures
Section 01 26 00	Contract Modification Procedure
Section 01 29 00	Payment Procedure
Section 01 31 00	Project Management and Coordination
Section 01 32 00	Construction Progress Documentation
Section 01 33 00	Submittal Procedure
Section 01 42 00	References
Section 01 60 00	Product Requirements
Section 01 73 00	Execution
Section 01 77 00	Closeout Procedures
Section 01 78 39	Project Record Documents

Technical Specifications

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A-110	Airport Safety Requirements
A-120	Permits and Environmental Limitations
D-701	Pipe for Storm Drains and Culverts
G-100	Mobilization and Demobilization
G-115	Worker Meals and Lodging, or Per Diem
G-135	Construction Surveying and Monuments
G-200	Contractor Quality Control Program
G-300	Critical Path Method Scheduling
P-152	Excavation, Subgrade, and Embankment
P-641	Erosion, Sediment, and Pollution Control
P-660	Retroreflective Markers and Cones
P-670	Hazardous Area Barriers
P-671	Runway and Taxiway Closure Markers
T-901	Seeding
T-905	Topsoil
T-908	Mulching

Appendices

Appendices

Appendix A – Environmental Permits

Appendix B – Construction Survey Requirements

Appendix C – Materials Sampling and Testing Frequency

Appendix D – Construction Project Daily Safety Inspection Checklist

SECTION 01 10 00 - SUMMARY

PART 1 GENERAL

1.1 SUMMARY

- A. The intent of the Contract is to provide for the construction and completion of every detail of the described work. The Contractor shall furnish all labor, material, supervision, equipment, tools, additional permits, transportation, supplies, and other resources required to complete the work in the time specified and according to the Contract. The Contractor is responsible for the means, methods, techniques, sequence or procedures of construction, safety, additional permitting, quality control, and to perform or furnish the work in accordance with the Plans and this Project Manual.
- B. The Contractor shall develop a COVID-19 Management Plan meeting the requirements of federal, state, local, and City of Kenai regulations for this project. Contractors who fail to do so may have work on their projects suspended until such time as they demonstrate compliance.
- C. Section Includes:
 - 1. Project information.
 - 2. Work covered by Contract Documents.
 - 3. Work Incidental to the Contract.
 - 4. Contractor's use of site and premises.
 - 5. Utilities.
 - 6. Coordination.
 - 7. Work restrictions.
 - 8. Environmental Permits and Limitations.
 - 9. Access for Testing and Inspection.
 - 10. Specification and Drawing conventions.

1.2 PROJECT INFORMATION

- A. Project Identification: Kenai Municipal Airport 2021 Improved Airfield Drainage
 - 1. Project Location: Kenai Municipal Airport
- B. Owner: City of Kenai 210 Fidalgo Ave. Kenai, AK 99611
 - 1. Owner's Representative: Scott Curtin, Public Works Director, (907) 283-8240

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2. Project Representative: HDL Engineering Consultants, LLC

3335 Arctic Boulevard Anchorage, AK 99503

C. Engineer: HDL Engineering Consultants, LLC

3335 Arctic Boulevard Anchorage, AK 99503

D. Engineer's Consultants: None.

1.3 WORK COVERED BY CONTRACT DOCUMENTS

- A. The Work of Project is defined by the Contract Documents and generally consists of the following:
 - 1. Reconstructing approximately 493 linear feet of storm drain piping on the northwest end of Runway 02L/20R within the Kenai Municipal Airport and related work. Work under this contract generally includes, but is not limited to:
 - a. Removal and disposal of existing storm drain piping.
 - b. Furnishing and installation of storm drain pipe in existing manholes.
 - c. Protecting construction materials from damage or theft until installed.
 - d. Managing runway closures and airport safety during construction.
 - e. Surveying.
 - f. Contractor Quality Control.
 - g. Other related work as specified in the Contract Documents.
 - 2. All other work indicated on the Drawings and in these Specifications.
- B. Type of Contract:
 - 1. Project will be constructed under a single prime contract.
- C. Work will be completed in one schedule/phase, as shown on the Bid Schedule and the Drawings.

1.4 WORK INCIDENTAL TO THE CONTRACT

- A. The intent of the Contract documents is for the contractor to execute and complete all work necessary to complete the project in its entirety. Items of work shown in the Contract documents, but not specifically addressed in the Bid Schedule, will be considered incidental to the cost of the Contract and will not be measured or paid for separately. Work incidental to the contract generally includes, but is not limited to, the following:
 - 1. Job site safety;

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- 2. Utility location and verification;
- 3. Protecting underground utilities;
- 4. Providing safe hauling routes for transporting stockpile materials, other construction materials, and site access;
- 5. Dewatering;
- 6. Resetting disturbed property corners or monuments;
- 7. Providing any permits not provided by the City of Kenai;
- 8. Hauling and material transport;
- 9. Fuel storage and dispensing, and related environmental protections;
- 10. Clean-up;
- 11. Maintenance of drainage;
- 12. Dust Control;
- 13. Emissions control;
- 14. Protection of existing ground;
- 15. Maintaining haul routes and repairing damage to haul routes to their original condition;
- 16. Restoration of damage caused by construction activities;
- 17. Coordination with FAA, landowners, stakeholders, agencies, and utility companies;
- 18. Coordinating with the public, and other contractors and accommodating unfettered use of haul routes and stockpile area by others;
- 19. Scarifying, grading, and compacting existing materials at bottom of excavation prior to placing fill and backfill;
- 20. Final grading and compacting of disturbed areas to smooth contours;
- 21. Trench excavation, backfill, and compaction for storm drain installation;
- 22. Compaction of placed material;
- 23. Water for moisture control;
- 24. Revegetating disturbed areas with topsoil, seeding, mulching, and soil stabilization techniques;
- Compliance with permits and requirements per Item A-120, any ground restoration or revegetation work necessary, and payment of any penalties levied by agencies or landowners from the Contractor's operations;
- 26. Compliance with contract DBE requirements per Item G-120.

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1.5 CONTRACTOR'S USE OF SITE AND PREMISES

- A. Limited use of Construction Site within active Airfield Operations Area (AOA): Contractor shall have limited access to the project site for construction operations during the construction period. Contractor's use of Project site is limited to night shift work only as allowed in the Construction Safety and Phasing Plan (CSPP) and must be in compliance with the CSPP at all times. The Owner reserves the right to perform work or to retain other contractors on portions of Project.
- B. Coordinate with Kenai Municipal Airport/City of Kenai prior to placing equipment, supplies, or material in the stockpile and staging areas identified on the Contract Drawings. Contractor may provide additional areas for staging, as needed, and at no additional expense to the Owner. Do not disturb areas outside of project boundaries or approved contractor provided staging areas.
- C. Do not disrupt access to adjacent areas unaffected by the Work. Keep roadways and entrances serving premises clear and available for use at all times. Cooperate with Kenai Municipal Airport/City of Kenai during construction operations to minimize conflicts and facilitate Kenai Municipal Airport operations.

D. Contractor shall:

- Assume full responsibility for protection and safekeeping of products under this Contract.
- 2. Assume full responsibility for the protection of existing facilities and contents, from damage due to construction operations.
- 3. Assume full responsibility for the protection of existing ground.
- E. Staging Area: City of Kenai has provided a staging area available for storage of equipment and materials, as shown on the Plans. The Contractor shall confine its equipment, storage of materials, and construction operations to such limits as shown on the Plans, and shall not unreasonably encumber the premises with its materials.
- F. Condition of Existing Grounds: Maintain portions of existing grounds, landscaping, and hardscaping affected by construction operations throughout construction period. Repair damage caused by construction operations.

1.6 UTILITIES

- A. Bid Considerations. Bidders shall include in their bid the cost of:
 - 1. Working around or through all permanent utilities shown on the Plans.

The approximate location of utilities known to be within the work areas are shown on the Plans. The location of some City and FAA power cables, control cables, and underground utilities are not known. Bidders shall expect that the location, elevation, and nature of utilities may vary from what is shown on the Plans and shall factor those contingencies into the bid price. Additional utilities may exist that are not shown on the Plans. Contractor shall contact the City of Kenai and FAA for locates and field verify location of all utilities prior to commencing work.

B. Cooperation with Utility Owners. The Contractor assumes the obligation of coordinating their activities with utility owners, and shall cooperate with utility owners to facilitate removal, adjustment, or relocation operations, avoid duplication of work, and prevent unnecessary interruption

SUMMARY 01 10 00 - 4 of 6

of services. When a utility owner is identified in the Contract as being responsible for removing, adjusting, or relocating a utility, the Contractor shall give the utility owner 30 days advance written notice regarding the dates when the utility owner is required to begin and end operations.

C. Shutoffs / Disruptions To Service. Schedule outages for times which minimize impact on facility operations. Provide not less than 7-days notice to the Engineer prior to disrupting the system and notify Engineer immediately when the system is back in operation. All outages, shutoffs, and disruptions to services shall be performed in accordance with the approved Contractor Safety and Phasing Plan.

1.7 COORDINATION

- Coordinate Work to assure efficient and orderly sequence of installation of construction elements.
 - 1. Sequence Work to maximize worker efficiency and minimize construction time.
 - 2. Prior to material procurement, verify that characteristics of interrelated components are compatible.
- B. Coordination with the Public and Other Contractors. Contractor shall coordinate his work harmoniously with the public and other contractor's working in the area as described in the Supplemental General Conditions.
- C. Coordination with Landowners. The City of Kenai has provided an area for stockpiles and a permitted haul route for transporting equipment and materials onto the Airfield Operations Area. Contractor shall coordinate specifics of their proposed hauling operations Kenai Municipal Airport Maintenance and Operations as described in the Supplemental General Conditions.
- D. Contractor shall plan, coordinate, and perform operations to minimize impacts to the operations of others and maintain unrestricted access to other stockpiles, haul routes, and work areas.

1.8 WORK RESTRICTIONS

- A. Comply with restrictions on construction operations.
 - 1. Comply with limitations on use of haul routes within the active AOA, public streets, rights of way, and other requirements of authorities having jurisdiction.
 - 2. Comply with Construction Safety and Phasing Plan.
- B. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others unless as follows:
 - 1. Interruption of Runway 02L/20R lighting and visual NAVAIDS shall conform to allowances per the CSPP.
 - 2. Obtain Project Representative's written permission before proceeding with utility interruptions.
 - 3. Maintain uninterrupted utilities to remainder of the Airport at all times.

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1.9 ENVIRONMENTAL PERMITS AND LIMITATIONS

A. The Contractor shall comply with Section A-120 Permits and Environmental Limitations. Contractor shall provide any additional permits or modifications to existing permits required to complete the work according to their designated means and methods that are not specifically provided by the City of Kenai.

1.10 ACCESS FOR TESTING AND INSPECTION

A. Provide access for the Kenai Municipal Airport/City of Kenai and Engineer to the site. Provide on-site transportation, eye and ear protection, hard hats, appropriate and clean respiratory protection, etc., for inspections and testing of the work.

1.11 SPECIFICATION AND DRAWING CONVENTIONS

- A. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
 - 1. Imperative mood and streamlined language are generally used in the Specifications. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.
 - 2. Text Color: Text used in the Specifications, including units of measure, manufacturer and product names, and other text may appear in multiple colors or underlined as part of a hyperlink; no emphasis is implied by text with these characteristics.
 - 3. Hypertext: Text used in the Specifications may contain hyperlinks. Hyperlinks may allow for access to linked information that is not residing in the Specifications. Unless otherwise indicated, linked information is not part of the Contract Documents.
 - 4. Specification requirements are to be performed by Contractor unless specifically stated otherwise.
- B. Division 00 Contracting Requirements: General provisions of the Contract, including General and Supplementary Conditions, apply to all Sections of the Specifications and Appendices.
- C. Division 01 General Requirements: Requirements of Sections in Division 01 apply to the Work of all Sections in the Specifications and Appendices.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION 01 10 00

SUMMARY 01 10 00 - 6 of 6

SECTION 01 25 00 - SUBSTITUTION PROCEDURES

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for substitutions.
- B. Related Requirements:
 - 1. Section 01 60 00 Product Requirements

1.2 DEFINITIONS

- A. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.
- B. Substitutions for Cause: Changes proposed by Contractor that are required due to changed Project conditions, such as unavailability of product, regulatory changes, or unavailability of required warranty terms.
- C. Substitutions for Convenience: Changes proposed by Contractor or Owner that are not required in order to meet other Project requirements but may offer advantage to Contractor or Owner.

1.3 ACTION SUBMITTALS

- A. Substitution Requests: Submit three copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
 - 1. Substitution Request Form: Use form acceptable to Project Representative.
 - 2. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
 - a. Statement indicating why specified product or fabrication or installation method cannot be provided, if applicable.
 - Coordination of information, including a list of changes or revisions needed to other parts of the Work and to construction performed by Owner and separate contractors that will be necessary to accommodate proposed substitution.
 - c. Detailed comparison of significant qualities of proposed substitutions with those of the Work specified. Include annotated copy of applicable Specification Section. Significant qualities may include attributes, such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.

- d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
- e. Samples, where applicable or requested.
- f. Certificates and qualification data, where applicable or requested.
- g. List of similar installations for completed projects, with project names and addresses as well as names and addresses of architects/engineers and owners.
- h. Material test reports from a qualified testing agency, indicating and interpreting test results for compliance with requirements indicated.
- i. Detailed comparison of Contractor's construction schedule using proposed substitutions with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating date of receipt of purchase order, lack of availability, or delays in delivery.
- j. Cost information, including a proposal of change, if any, in the Contract Sum.
- k. Contractor's certification that proposed substitution complies with requirements in the Contract Documents, except as indicated in substitution request, is compatible with related materials and is appropriate for applications indicated.
- Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.
- 3. Project Representative's Action: If necessary, Project Representative will request additional information or documentation for evaluation within seven days of receipt of a request for substitution. Project Representative will notify Contractor of acceptance or rejection of proposed substitution within fifteen days of receipt of request, or seven days of receipt of additional information or documentation, whichever is later.
 - a. Forms of Acceptance: Change Order, Construction Change Directive, or Engineer's Supplemental Instructions for minor changes in the Work.
 - b. Use product specified if Project Representative does not issue a decision on use of a proposed substitution within time allocated.

1.4 QUALITY ASSURANCE

A. Compatibility of Substitutions: Investigate and document compatibility of proposed substitution with related products and materials. Engage a qualified testing agency to perform compatibility tests recommended by manufacturers.

1.5 PROCEDURES

Coordination: Revise or adjust affected work as necessary to integrate work of the approved substitutions.

1.6 SUBSTITUTIONS

- A. Substitutions for Cause: Submit requests for substitution immediately on discovery of need for change, but not later than fifteen days prior to time required for preparation and review of related submittals.
 - Conditions: Project Representative will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Project Representative will return requests without action, except to record noncompliance with these requirements:
 - a. Requested substitution is consistent with the Contract Documents and will produce indicated results.
 - b. Substitution request is fully documented and properly submitted.
 - c. Requested substitution will not adversely affect Contractor's construction schedule.
 - d. Requested substitution has received necessary approvals of authorities having jurisdiction.
 - e. Requested substitution is compatible with other portions of the Work.
 - f. Requested substitution has been coordinated with other portions of the Work.
 - g. Requested substitution provides specified warranty.
 - h. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.
- B. Substitutions for Convenience: Project Representative will consider requests for substitution if received within sixty days after the Notice of Award. Requests received after that time may be considered or rejected at discretion of Project Representative.
 - Conditions: Project Representative will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Project Representative will return requests without action, except to record noncompliance with these requirements:
 - a. Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Owner must assume. Owner's additional responsibilities may include compensation to Project Representative for redesign and evaluation services, increased cost of other construction by Owner, and similar considerations.

- b. Requested substitution does not require extensive revisions to the Contract Documents.
- c. Requested substitution is consistent with the Contract Documents and will produce indicated results.
- d. Substitution request is fully documented and properly submitted.
- e. Requested substitution will not adversely affect Contractor's construction schedule.
- f. Requested substitution has received necessary approvals of authorities having jurisdiction.
- g. Requested substitution is compatible with other portions of the Work.
- h. Requested substitution has been coordinated with other portions of the Work.
- i. Requested substitution provides specified warranty.
- j. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION 01 25 00

SECTION 01 26 00 - CONTRACT MODIFICATION PROCEDURES

PART 1 GENERAL

1.1 SUMMARY

A. Section includes administrative and procedural requirements for handling and processing Contract modifications.

1.2 MINOR CHANGES IN THE WORK

- A. Project Representative will issue a Field Order authorizing minor changes in the Work, not involving adjustment to the Contract Sum or the Contract Time.
 - 1. Work Change Proposal Requests issued by the Project Representative are not instructions either to stop work in progress or to execute the proposed change.

1.3 PROPOSAL REQUESTS

- A. Owner-Initiated Proposal Requests: Project Representative will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
 - 1. Work Change Proposal Requests issued by Project Representative are not instructions either to stop work in progress or to execute the proposed change.
 - 2. Within 7 days, unless otherwise stated, after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
 - a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - c. Include costs of labor and supervision directly attributable to the change.
 - d. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
- B. Contractor-Initiated Proposals: If latent or changed conditions require modifications to the Contract, Contractor may initiate a claim by submitting a request for a change to Project Representative.

- 1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.
- 2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
- 3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
- 4. Include costs of labor and supervision directly attributable to the change.
- 5. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
- 6. Comply with requirements in Section 01 25 00 "Substitution Procedures" if the proposed change requires substitution of one product or system for product or system specified.
- C. Proposal Request Form: Use AIA Document G709 or similar form, approved by Owner and Project Representative, for Proposal Requests.

1.4 CHANGE ORDER PROCEDURES

A. Change Orders shall be prepared, negotiated, and processed in accordance with Article 9 of the General Conditions. On Owner's approval of a Work Change Proposal Request, Project Representative will issue a Change Order for signatures of Owner and Contractor.

1.5 WORK CHANGE DIRECTIVE

- A. Work Change Directive: Project Representative may issue a Work Change Directive which instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
 - Work Change Directive contains a complete description of change in the Work. It also designates method to be followed to determine change in the Contract Sum or the Contract Time.
- B. Documentation: For time and material basis work, maintain detailed records on a time and material basis of work required by the Work Change Directive. Daily time records are to be submitted to the Project Representative by 9:00 am on the following workday.
 - 1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

1.6 FIELD DIRECTIVE

A. A Field Directive, also meaning Field Order, may be issued by the Project Representative/Engineer to authorize minor variations to the Contract Documents not involving a change in Contract Price or Times and which are compatible with the design concept of the completed project. The Field Directive is binding upon the Owner and also on the Contractor who will perform the

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work promptly. If the Owner or Contractor believes an adjustment to the Contract Price or Time is necessary, the party may make a claim in accordance with the General Conditions.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION 01 26 00

SECTION 01 29 00 - PAYMENT PROCEDURES

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements necessary to prepare and process Applications for Payment.
- B. Payment procedures shall be in accordance with Article 8 of the General Conditions.

1.2 SCHEDULE OF VALUES

- A. Coordination: Coordinate preparation of the schedule of values for lump sum bid items with preparation of Contractor's construction schedule.
 - Correlate line items in the Schedule of Values with other required administrative forms and schedules, including Application for Payment forms, Submittals Schedule, and Contractor's Construction Schedule.
 - 2. Submit the Schedule of Values for lump sum bid items to Project Representative at earliest possible date but no later than 10 days after effective date of notice to proceed and prior to commencement of work.
- B. Format and Content: Use the Specification Index as a guide to establish line items for the Schedule of Values. Provide at least one line item for each applicable technical Specification Section.
 - 1. Identification: Include the following Project identification on the Schedule of Values:
 - a. Project name and location.
 - b. Name of Engineer.
 - c. Engineer's project number.
 - d. Contractor's name and address.
 - e. Date of submittal.
 - 2. Submit draft Schedule of Values for lump sum bid items for approval.
 - Provide a breakdown of the contract lump sum bid items in enough detail to facilitate
 continued evaluation of Applications for Payment and progress reports. Provide several line items for principal subcontract amounts in excess of five percent of the Contract Sum.
 - Round amounts to nearest whole dollar; total shall equal the bid item lump sum amount.

- 5. Provide a separate line item in the Schedule of Values for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not yet installed.
- 6. Provide separate line items in the Schedule of Values for initial cost of materials, for each subsequent stage of completion, and for total installed value of that part of the Work.
- 7. Each item in the Schedule of Values and Applications for Payment shall be complete. Include total cost and proportionate share of general overhead and profit for each item.
 - a. Temporary facilities and other major cost items that are not direct cost of actual work-in-place may be shown either as separate line items in the Schedule of Values or distributed as general overhead expense, at Contractor's option.
- 8. Schedule Updating: Update and resubmit the Schedule of Values before the next Applications for Payment when Change Orders or Construction Change Directives result in a change in the Contract Sum.

1.3 APPLICATIONS FOR PAYMENT

- A. Each Application for Payment following the initial Application for Payment shall be consistent with previous applications and payments as certified by Project Representative and paid for by Owner.
- B. Payment Application Times: The date for each progress payment is indicated in the General Conditions. The period of construction work covered by each Application for Payment is the period indicated in the General Conditions.
- C. Payment Application Forms: Use form EJCDC No. C-620 and additional supporting forms as provided by Owner or other mutually agreeable form.
- D. Application Preparation: Complete every entry on form. Execute by a person authorized to sign legal documents on behalf of Contractor. Project Representative will return incomplete applications without action.
 - 1. Entries shall match data on the schedule of values and Contractor's construction schedule. Use updated schedules if revisions were made.
 - 2. Include amounts for work completed following previous Application for Payment, whether or not payment has been received. Include only amounts for work completed at time of Application for Payment.
 - 3. Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application.
- E. Transmittal: Submit one (1) signed copy of each Application for Payment to Project Representative. Include waivers of lien and similar attachments as required.
 - 1. Transmit each copy with a transmittal form listing attachments and recording appropriate information about application.

- 2. Attach copies of Certified Payroll Reports submitted to the Alaska DOL during the period covered by the Application.
- 3. Attach monthly DBE Utilization Report.
- 4. Updated CPM Construction Schedule.
- F. Waivers of Mechanic's Lien: With each Application for Payment, submit waivers of mechanic's lien from every entity who is lawfully entitled to file a mechanic's lien arising out of the Contract and related to the Work covered by the payment.
 - 1. Submit partial waivers on each item for amount requested in previous application, after deduction for retainage, on each item.
 - 2. When an application shows completion of an item, submit final or full waivers.
 - 3. Owner reserves the right to designate which entities involved in the Work must submit waivers.
 - 4. Waiver Forms: Submit executed waivers of lien on forms acceptable to Owner.
- G. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
 - List of subcontractors.
 - 2. Schedule of values for lump sum items.
 - 3. Contractor's construction schedule (preliminary if not final).
 - 4. Submittal schedule (preliminary if not final).
 - 5. List of Contractor's staff assignments.
 - 6. Copies of building permits.
 - 7. Initial progress report.
 - 8. Report of preconstruction conference.
 - 9. Certificates of insurance and insurance policies.
 - 10. Notice of Work submitted to Alaska DOL.
 - 11. Fully executed copies of all Subcontracts.
- H. Final Payment Application: After completing Project closeout requirements, submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:
 - 1. Evidence of completion of Project closeout requirements.
 - 2. Contract Completion and Acceptance Certificate.

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- 3. Contractor's Statement Concerning Claims.
- 4. AIA Document G707, "Consent of Surety to Final Payment."
- 5. Evidence that claims have been settled.
- 6. Final, liquidated damages settlement statement.
- 7. Notice of Completion of Public Works submitted to Alaska DOL.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION 01 29 00

SECTION 01 31 00 - PROJECT MANAGEMENT AND COORDINATION

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
 - 1. General coordination procedures
 - 2. Request for Information (RFI)
 - 3. Project meetings.
- B. Related Requirements:
 - 1. Section 01 73 00 Execution

1.2 DEFINITIONS

A. RFI: Request from Contractor seeking interpretation or clarification of the Contract Documents.

1.3 INFORMATIONAL SUBMITTALS

- A. Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design. Include the following information in tabular form:
 - 1. Name, address, telephone number, and email address of entity performing subcontract or supplying products.
 - 2. Number and title of related Specification Section(s) covered by subcontract.
 - 3. Drawing number and detail references, as appropriate, covered by subcontract.

1.4 GENERAL COORDINATION PROCEDURES

- A. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations included in different Sections that depend on each other for proper installation, connection, and operation.
 - 1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
 - 2. Coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair.
 - 3. Make adequate provisions to accommodate items scheduled for later installation.

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- B. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
 - 1. Preparation of Contractor's construction schedule.
 - 2. Preparation of the schedule of values.
 - 3. Delivery and processing of submittals.
 - 4. Progress meetings.
 - 5. Project closeout activities.

1.5 REQUEST FOR INFORMATION (RFI)

- A. General: Immediately on discovery of the need for additional information, clarification, or interpretation of the Contract Documents, Contractor shall prepare and submit an RFI in the form specified.
 - 1. Project Representative will return without response those RFIs submitted to Project Representative or Engineer by other entities controlled by Contractor.
 - 2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.
- B. Content of the RFI: Include a detailed, legible description of item needing information or interpretation and the following:
 - 1. Project name.
 - 2. Date.
 - 3. Name of Contractor.
 - 4. Name of Engineer
 - 5. RFI number, numbered sequentially.
 - 6. RFI subject
 - 7. Specification Section number and title and related paragraphs, as appropriate.
 - 8. Drawing number and detail references, as appropriate.
 - 9. Field dimensions and conditions, as appropriate.
 - 10. Contractor's suggested solution(s). If Contractor's solution(s) impact the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
 - 11. Contractor's signature.

- 12. Attachments: Include drawings, descriptions, measurements, photos, Product Data, Shop Drawings, and other information necessary to fully describe items needing interpretation. Each page of attachments shall be identified with the RFI number and sequential page number.
- C. RFI Forms: Mutually acceptable form with the same content as indicated above, acceptable to Project Representative and Engineer.
- D. Project Representative's Action: Project Representative will review each RFI, determine action required, and respond. Allow seven days for Project Representative's response for each RFI. RFIs received by Project Representative after 1:00 p.m. will be considered as received the following working day.
 - 1. The following Contractor-generated RFIs will be returned without action:
 - a. Requests for approval of submittals.
 - b. Requests for approval of substitutions.
 - c. Requests for approval of Contractor's means and methods.
 - d. Requests for coordination information already indicated in the Contract Documents.
 - e. Requests for adjustments in the Contract Time or the Contract Sum.
 - f. Requests for interpretation of Project Representative's actions on submittals.
 - g. Incomplete RFIs or inaccurately prepared RFIs.
 - 2. Project Representative's action may include a request for additional information, in which case Project Representative's time for response will date from time of receipt by Project Representative of additional information.
 - 3. Project Representative's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Section 01 26 00 "Contract Modification Procedures."
 - a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Project Representative in writing within seven days of receipt of the RFI response.
- E. RFI Log: Prepare, maintain, and submit a tabular log of RFIs organized by the RFI number. Submit log weekly. Use mutually acceptable form, including the following:
 - 1. Project name.
 - 2. Name and address of Contractor.
 - 3. Name and address of Engineer.
 - 4. RFI number including RFIs that were returned without action or withdrawn.

- 5. RFI subject.
- 6. Date the RFI was submitted.
- 7. Date Project Representative's response was received.
- 8. Identification of related Field Order, Work Change Directive, and Proposal Request, as appropriate.
- F. On receipt of Project Representative's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Project Representative within seven days if Contractor disagrees with response.

1.6 PROJECT MEETINGS

- A. General: Schedule and conduct meetings and conferences at Project site or via a virtual platform to comply with COVID-19 precautions, unless otherwise indicated.
- B. Preconstruction Conference: Project Representative will schedule a preconstruction conference before Contractor starts construction, at a time convenient to Owner, Project Representative, Engineer, and Contractor. The Project Representative will conduct the meeting to review responsibilities and personnel assignments.
 - 1. Attendees: Authorized representatives of Owner, Engineer, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the conference. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
 - 2. Agenda: Discuss items of significance that could affect progress, including the following:
 - a. Responsibilities and personnel assignments.
 - b. Tentative construction schedule.
 - c. Phasing.
 - d. Critical work sequencing and long-lead items.
 - e. Designation of key personnel and their duties.
 - f. Lines of communication.
 - g. Procedures for processing field decisions and Change Orders.
 - h. Procedures for RFIs.
 - i. Procedures for testing and inspecting.
 - j. Procedures for processing Applications for Payment.
 - k. Distribution of the Contract Documents.

- I. Submittal procedures.
- m. Preparation of Record Documents.
- n. Use of the premises.
- o. Work restrictions.
- p. Responsibility for temporary facilities and controls.
- q. Procedures for disruptions and shutdowns.
- r. Construction waste management and recycling.
- s. Office, work, and storage areas.
- t. Equipment deliveries and priorities.
- u. First aid.
- v. Security.
- w. Progress cleaning.
- x. Working hours.
- 3. Minutes: Project Representative will record and distribute meeting minutes.
- 4. The Contractor shall submit the following documents to the Project Representative at least five working days before the preconstruction conference:
 - a. Critical Path Method (CPM) Progress Schedule, as required in G-300.
 - b. List of Subcontractors and a complete copy of all executed subcontracts.
 - c. Storm Water Pollution Prevention Plan (SWPPP), including the Hazardous Materials Control Plan (HMCP).
 - d. Resume of the Contractor's Project Construction Manager.
 - e. Quality Control Plan, as required in G-200.
 - f. Construction Phasing Safety Plan Compliance Document (SPCD), as required in A-110.
- C. Progress Meetings: Project Representative will conduct progress meetings weekly, or at other intervals approved by the Owner.
 - Attendees: In addition to representatives of Owner and Engineer, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at

these meetings. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.

- 2. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
 - a. Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's Construction Schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
 - 1) Review schedule for next period.
 - b. Review present and future needs of each entity present, including the following:
 - 1) Interface requirements.
 - 2) Sequence of operations.
 - 3) Status of submittals.
 - 4) Deliveries.
 - 5) Off-site fabrication.
 - 6) Access.
 - 7) Site utilization.
 - 8) Temporary facilities and controls.
 - 9) Work hours.
 - 10) Hazards and risks.
 - 11) Quality and work standards.
 - 12) Status of correction of deficient items.
 - 13) Field observations.
 - 14) RFIs.
 - 15) Status of proposal requests.
 - 16) Pending changes.

- 17) Status of Change Orders.
- 18) Pending claims and disputes.
- 19) Documentation of information for payment requests.
- c. Other topics listed and included in the Construction Safety and Phasing Plan (CSPP).
- 3. Minutes: Project Representative will record the meeting minutes.
- 4. Reporting: Project Representative will distribute minutes of the meeting to each party present and to parties who should have been present.
 - a. Schedule Updating: Revise Contractor's Construction Schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule within three working days of each meeting.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION 01 31 00

SECTION 01 32 00 - CONSTRUCTION PROGRESS DOCUMENTATION

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:
 - 1. Contractor's Construction Schedule.
 - 2. Construction schedule updating reports.
 - 3. Daily construction reports.
 - 4. Site condition reports.

1.2 DEFINITIONS

- A. Activity: A discrete part of a project that can be identified for planning, scheduling, monitoring, and controlling the construction Project. Activities included in a construction schedule consume time and resources.
 - 1. Critical Activity: An activity on the critical path that must start and finish on the planned early start and finish times.
 - 2. Predecessor Activity: An activity that precedes another activity in the network.
 - 3. Successor Activity: An activity that follows another activity in the network.
- B. CPM: Critical path method, which is a method of planning and scheduling a construction project where activities are arranged based on activity relationships. Network calculations determine when activities can be performed and the critical path of Project.
- C. Critical Path: The longest connected chain of interdependent activities through the network schedule that establishes the minimum overall Project duration and contains no float.
- D. Event: The starting or ending point of an activity.
- E. Float: The measure of leeway in starting and completing an activity.
 - 1. Float time is not for the exclusive use or benefit of either Owner or Contractor, but is a jointly owned, expiring Project resource available to both parties as needed to meet schedule milestones and Contract completion date.

1.3 SUBMITTALS

- A. Format for Submittals: Submit required submittals in the following format:
 - 1. Working electronic copy of schedule file.
 - 2. PDF file.

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- B. CPM Schedule: See G-300 Critical Path Method Scheduling.
- C. Daily Construction Reports: Submit daily.
- D. Daily Quality Control Technician Inspection Reports: See G-200 Contractor Quality Control Program.
- E. Site Condition Reports: Submit at time of discovery of differing conditions.

1.4 CPM SCHEDULE REQUIREMENTS

A. Shall conform to the requirements of G-300 Critical Path Method Scheduling.

1.5 REPORTS

- A. Daily Construction Reports: Prepare a daily construction report recording the following information concerning events at Project site:
 - 1. List of subcontractors at Project site.
 - 2. List of separate contractors at Project site.
 - 3. Approximate count of personnel at Project site.
 - 4. Equipment at Project site.
 - 5. Material deliveries.
 - 6. High and low temperatures and general weather conditions, including presence of rain or snow.
 - 7. Testing and inspection in accordance with Section C-200 Contractor Quality Control Program.
 - 8. Accidents.
 - 9. Meetings and significant decisions.
 - 10. Stoppages, delays, shortages, and losses.
 - 11. Emergency procedures.
 - 12. Orders and requests of authorities having jurisdiction.
 - 13. Change Orders received and implemented.
 - 14. Work Change Directives received and implemented.
 - 15. Services connected and disconnected.
 - 16. Substantial Completions authorized.

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B. Site Condition Reports: Immediately on discovery of a difference between site conditions and the Contract Documents, prepare and submit a detailed report. Submit with a Request for Information. Include a detailed description of the differing conditions, together with recommendations for changing the Contract Documents.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION 01 32 00

SECTION 01 33 00 - SUBMITTAL PROCEDURES

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Submittal schedule requirements.
 - 2. Administrative and procedural requirements for submittals.

1.2 DEFINITIONS

- A. Action Submittals: Written and graphic information and physical samples that require Project Representative's responsive action. Action submittals are those submittals indicated in individual Specification Sections as "action submittals."
- B. Informational Submittals: Written and graphic information and physical samples that do not require Project Representative's responsive action. Submittals may be rejected for not complying with requirements. Informational submittals are those submittals indicated in individual Specification Sections as "informational submittals."

1.3 SUBMITTAL SCHEDULE

A. Submittal Schedule: Submit, as an action submittal, a list of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, ordering, manufacturing, fabrication, and delivery when establishing dates. Include additional time required for making corrections or revisions to submittals noted by Project Representative and additional time for handling and reviewing submittals required by those corrections.

1.4 SUBMITTAL FORMATS

- A. Submittal Information: Include the following information in each submittal:
 - 1. Project name.
 - 2. Date.
 - 3. Name of Engineer.
 - 4. Name of Contractor.
 - 5. Name of firm or entity that prepared submittal.
 - 6. Names of subcontractor, manufacturer, and supplier.
 - 7. Unique submittal number, including revision identifier. Include Specification Section number with sequential alphanumeric identifier; and alphanumeric suffix for resubmittals.
 - 8. Category and type of submittal.
 - 9. Submittal purpose and description.

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- Number and title of Specification Section, with paragraph number and generic name for each of multiple items.
- 11. Drawing number and detail references, as appropriate.
- 12. Indication of full or partial submittal.
- 13. Location(s) where product is to be installed, as appropriate.
- 14. Other necessary identification.
- 15. Remarks.
- 16. Signature of transmitter.
- B. Options: Identify options requiring selection by Project Representative.
- C. Deviations and Additional Information: On each submittal, clearly indicate deviations from requirements in the Contract Documents, including minor variations and limitations; include relevant additional information and revisions, other than those requested by Project Representative on previous submittals. Indicate by highlighting on each submittal or noting on attached separate sheet.
 - 1. Transmittal for Submittals: Assemble each submittal individually and appropriately for transmittal and handling.
- D. Electronic Submittals: Prepare submittals as PDF package, incorporating complete information into each PDF file. Name PDF file with submittal number.

1.5 SUBMITTAL PROCEDURES

- A. Prepare and submit submittals required by individual Specification Sections. Types of submittals are indicated in individual Specification Sections.
 - 1. Email: Prepare submittals as PDF package, and transmit to Project Representative by sending via email. Include PDF transmittal form. Include information in email subject line as requested by Project Representative.
- B. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
 - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 - Submit all submittal items required for each Specification Section concurrently unless partial submittals for portions of the Work are indicated on approved submittal schedule.
 - 3. Submit action submittals and informational submittals required by the same Specification Section as separate packages under separate transmittals.
- C. Processing Time: Allow time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Project Representative's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.

- 1. Initial Review: Allow 15 days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Project Representative will advise Contractor when a submittal being processed must be delayed for coordination.
- 2. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
- 3. Resubmittal Review: Allow 15 days for review of each resubmittal.
- D. Resubmittals: Make resubmittals in same form and number of copies as initial submittal. Contractor shall pay all review costs associated with more than two reviews, unless a resubmittal is required due to the new comments addressing previously submitted information.
- E. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
- F. Use for Construction: Retain complete copies of submittals on Project site. Use only final action submittals that are marked with approval notation from Project Representative's action stamp.

1.6 SUBMITTAL REQUIREMENTS

- A. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
 - 1. If information must be specially prepared for submittal because standard published data are unsuitable for use, submit as Shop Drawings, not as Product Data.
 - 2. Mark each copy of each submittal to show which products and options are applicable.
 - 3. Include the following information, as applicable:
 - a. Manufacturer's catalog cuts.
 - b. Manufacturer's product specifications.
 - c. Standard color charts.
 - d. Statement of compliance with specified referenced standards.
 - e. Testing by recognized testing agency.
 - f. Application of testing agency labels and seals.
 - g. Notation of coordination requirements.
 - h. Availability and delivery time information.
 - 4. For equipment, include the following in addition to the above, as applicable:
 - a. Wiring diagrams that show factory-installed wiring.
 - b. Printed performance curves.

- c. Operational range diagrams.
- d. Clearances required to other construction, if not indicated on accompanying Shop Drawings.
- 5. Submit Product Data before Shop Drawings, and before or concurrent with Samples.
- B. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.
 - 1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
 - 2. Identification of products.
 - 3. Schedules.
 - 4. Compliance with specified standards.
 - 5. Notation of coordination requirements.
 - 6. Notation of dimensions established by field measurement.
 - 7. Relationship and attachment to adjoining construction clearly indicated.
 - 8. Seal and signature of professional engineer if specified.
- C. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other materials.
 - Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
 - 2. Identification: Permanently attach label on unexposed side of Samples that includes the following:
 - a. Project name and submittal number.
 - b. Generic description of Sample.
 - c. Product name and name of manufacturer.
 - d. Sample source.
 - e. Number and title of applicable Specification Section.
 - f. Specification paragraph number and generic name of each item.
 - 3. Email Transmittal: Provide PDF transmittal. Include digital image file illustrating Sample characteristics, and identification information for record.

- 4. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
 - a. Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Contractor.
- 5. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.
 - a. Number of Samples: Submit one full set of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Engineer, through Project Representative, will return submittal with options selected.
- 6. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.
 - a. Number of Samples: Submit three sets of Samples. Project Representative will retain two Sample sets; remainder will be returned.
 - Submit a single Sample where assembly details, workmanship, fabrication techniques, connections, operation, and other similar characteristics are to be demonstrated.
 - 2) If variation in color, pattern, texture, or other characteristic is inherent in material or product represented by a Sample, submit at least three sets of paired units that show approximate limits of variations.
- D. Product Schedule: As required in individual Specification Sections, prepare a written summary indicating types of products required for the Work and their intended location. Include the following information in tabular form:
- E. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, contact information of architects and owners, and other information specified.
- F. Design Data: Prepare and submit written and graphic information indicating compliance with indicated performance and design criteria in individual Specification Sections. Include list of assumptions and summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Number each page of submittal.
- G. Certificates:
 - 1. Certificates and Certifications Submittals: Submit a statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be

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- signed by an officer or other individual authorized to sign documents on behalf of that entity. Provide a notarized signature where indicated.
- 2. Installer Certificates: Submit written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.
- Manufacturer Certificates: Submit written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.
- 4. Material Certificates: Submit written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.
- 5. Product Certificates: Submit written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.
- Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of Welding Procedure Specification and Procedure Qualification Record on AWS forms. Include names of firms and personnel certified.

H. Test and Research Reports:

- Compatibility Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for substrate preparation and primers required.
- 2. Field Test Reports: Submit written reports indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.
- 3. Material Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.
- 4. Preconstruction Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements in the Contract Documents.
- 5. Product Test Reports: Submit written reports indicating that current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.
- 6. Research Reports: Submit written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project. Include the following information:
 - a. Name of evaluation organization.
 - b. Date of evaluation.

- c. Time period when report is in effect.
- d. Product and manufacturers' names.
- e. Description of product.
- f. Test procedures and results.
- g. Limitations of use.

1.7 DELEGATED-DESIGN SERVICES

- A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.
 - 1. If criteria indicated are insufficient to perform services or certification required, submit a written request for additional information to Engineer.
- B. Delegated-Design Services Certification: In addition to Shop Drawings, Product Data, and other required submittals, submit digitally signed PDF file, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional.
 - 1. Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.

1.8 CONTRACTOR'S REVIEW

- A. Action Submittals and Informational Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Project Representative.
- B. Contractor's Approval: Indicate Contractor's approval for each submittal with a uniform approval stamp. Include name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.
 - 1. Engineer will not review submittals received from Contractor that do not have Contractor's review and approval.

1.9 ENGINEER'S REVIEW

- A. Action Submittals: Engineer will review each submittal, indicate corrections or revisions required and return it through the Project Representative.
 - 1. PDF Submittals: Engineer will indicate, via markup on each submittal, the appropriate action.
 - 2. Informational Submittals: Project Representative and Engineer will review each submittal and will not return it, or will return it if it does not comply with requirements. Project Representative will forward each submittal to appropriate party.

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- 3. Partial submittals prepared for a portion of the Work will be reviewed when use of partial submittals has received prior approval from Engineer.
- 4. Incomplete submittals are unacceptable, will be considered nonresponsive, and will be returned for resubmittal without review.
- 5. Project Representative will return without review submittals received from sources other than Contractor.
- 6. Submittals not required by the Contract Documents will be returned by Project Representative without action.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION 01 33 00

SECTION 01 42 00 - REFERENCES

PART 1 GENERAL

1.1 DEFINITIONS

- A. General: Basic Contract definitions are included in the General Conditions of the Contract and the Agreement between Owner and Contractor.
- B. "Approved": When used to convey Engineer's action on Contractor's submittals, applications, and requests, "approved" is limited to Engineer's duties and responsibilities as stated in the Conditions of the Contract.
- C. "Directed": A command or instruction by Project Representative. Other terms including "requested," "authorized," "selected," "required," and "permitted" have the same meaning as "directed."
- D. "Indicated": Requirements expressed by graphic representations or in written form on Drawings, in Specifications, and in other Contract Documents. Other terms including "shown," "noted," "scheduled," and "specified" have the same meaning as "indicated."
- E. "Regulations": Laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, and rules, conventions, and agreements within the construction industry that control performance of the Work.
- F. "Furnish": Supply and deliver to Project site, ready for unloading, unpacking, assembly, installation, and similar operations.
- G. "Install": Unload, temporarily store, unpack, assemble, erect, place, anchor, apply, work to dimension, finish, cure, protect, clean, and similar operations at Project site.
- H. "Provide": Furnish and install, complete and ready for the intended use.
- "Project Site": Space available for performing construction activities. The extent of Project site
 is shown on Drawings and may or may not be identical with the description of the land on which
 Project is to be built.

1.2 INDUSTRY STANDARDS

- A. Applicability of Standards: Unless the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.
- Publication Dates: Comply with standards in effect as of date of the Contract Documents unless otherwise indicated.
- C. Copies of Standards: Each entity engaged in construction on Project should be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Contract Documents.
 - 1. Where copies of standards are needed to perform a required construction activity, obtain copies directly from publication source.

REFERENCES 01 42 00 - 1 of 3

1.3 ABBREVIATIONS AND ACRONYMS

- A. Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities indicated in Gale's "Encyclopedia of Associations: National Organizations of the U.S." or in Columbia Books' "National Trade & Professional Associations of the United States."
- B. Code Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. This information is believed to be accurate as of the date of the Contract Documents.
 - 1. DIN Deutsches Institut fur Normung e.V.; www.din.de.
 - 2. IAPMO International Association of Plumbing and Mechanical Officials; www.iapmo.org.
 - 3. ICC International Code Council; www.iccsafe.org.
 - 4. ICC-ES ICC Evaluation Service, LLC; www.icc-es.org.
- C. Federal Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. Information is subject to change and is up to date as of the date of the Contract Documents.
 - 1. COE Army Corps of Engineers; www.usace.army.mil.
 - 2. CPSC Consumer Product Safety Commission; www.cpsc.gov.
 - DOC Department of Commerce; National Institute of Standards and Technology; www.nist.gov.
 - 4. DOD Department of Defense; www.quicksearch.dla.mil.
 - 5. DOE Department of Energy; www.energy.gov.
 - 6. EPA Environmental Protection Agency; www.epa.gov.
 - 7. FAA Federal Aviation Administration; www.faa.gov.
 - 8. FG Federal Government Publications; www.gpo.gov/fdsys.
 - 9. GSA General Services Administration; www.gsa.gov.
 - 10. HUD Department of Housing and Urban Development; www.hud.gov.
 - 11. LBL Lawrence Berkeley National Laboratory; Environmental Energy Technologies Division; www.eetd.lbl.gov.
 - 12. OSHA Occupational Safety & Health Administration: www.osha.gov.
 - 13. SD Department of State; www.state.gov.
 - 14. TRB Transportation Research Board, National Cooperative Highway Research Program; The National Academies; www.trb.org.
 - 15. USDA Department of Agriculture; Agriculture Research Service; U.S. Salinity Laboratory; www.ars.usda.gov.
 - 16. USDA Department of Agriculture; Rural Utilities Service; www.usda.gov.
 - 17. USDOJ Department of Justice; Office of Justice Programs; National Institute of Justice; www.ojp.usdoj.gov.
 - 18. USP U.S. Pharmacopeial Convention; www.usp.org.
 - 19. USPS United States Postal Service; www.usps.com.
- D. Standards and Regulations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the standards and regulations in the following list. This information is subject to change and is believed to be accurate as of the date of the Contract Documents.

REFERENCES 01 42 00 - 2 of 3

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- 1. CFR Code of Federal Regulations; Available from Government Printing Office; www.gpo.gov/fdsys.
- 2. DOD Department of Defense; Military Specifications and Standards; Available from DLA Document Services; www.quicksearch.dla.mil.
- 3. DSCC Defense Supply Center Columbus; (See FS).
- 4. FED-STD Federal Standard; (See FS).
- 5. FS Federal Specification; Available from DLA Document Services; www.quicksearch.dla.mil.
- 6. Available from Defense Standardization Program; www.dsp.dla.mil.
- 7. Available from General Services Administration; www.gsa.gov.
- 8. Available from National Institute of Building Sciences/Whole Building Design Guide; www.wbdg.org.
- 9. MILSPEC Military Specification and Standards; (See DOD).
- 10. USAB United States Access Board; www.access-board.gov.
- 11. USATBCB U.S. Architectural & Transportation Barriers Compliance Board; (See USAB).

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION 01 42 00

REFERENCES 01 42 00 - 3 of 3

SECTION 01 60 00 - PRODUCT REQUIREMENTS

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; and comparable products.
- B. Related Requirements:
 - 1. Section 01 25 00 Substitution Procedures
 - 2. Section 01 33 00 Submittal Procedures

1.2 DEFINITIONS

- A. Products: Items obtained for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
 - Named Products: Items identified by manufacturer's product name, including make or model number or other designation shown or listed in manufacturer's published product literature that is current as of date of the Contract Documents.
 - 2. New Products: Items that have not previously been incorporated into another project or facility. Salvaged items or items reused from other projects are not considered new products. Items that are manufactured or fabricated to include recycled content materials are considered new products, unless indicated otherwise.
 - 3. Comparable Product: Product by named manufacturer that is demonstrated and approved through the comparable product submittal process described in Part 2 "Comparable Products" Article, to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of specified product.
- B. Basis-of-Design Product Specification: A specification in which a single manufacturer's product is named including make or model number or other designation. Published attributes and characteristics of basis-of-design product establish salient characteristics of products.
 - 1. Evaluation of Comparable Products: In addition to the basis-of-design product description, product attributes and characteristics may be listed to establish the significant qualities related to type, function, in-service performance and physical properties, weight, dimension, durability, visual characteristics, and other special features and requirements for purposes of evaluating comparable products of additional manufacturers named in the specification. Manufacturer's published attributes and characteristics of basis-of-design product also establish salient characteristics of products for purposes of evaluating comparable products.
- C. Subject to Compliance with Requirements: Where the phrase "Subject to compliance with requirements" introduces a product selection procedure in an individual Specification Section, provide products qualified under the specified product procedure. In the event that a named

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product or product by a named manufacturer does not meet the other requirements of the specifications, select another named product or product from another named manufacturer that does meet the requirements of the specifications; submit a comparable product request or substitution request, if applicable.

- D. Comparable Product Request Submittal: An action submittal requesting consideration of a comparable product, including the following information:
 - 1. Identification of basis-of-design product or fabrication or installation method to be replaced, including Specification Section number and title and Drawing numbers and titles.
 - 2. Data indicating compliance with the requirements specified in Part 2 "Comparable Products" Article.
- E. Basis-of-Design Product Specification Submittal: An action submittal complying with requirements in Section 01 33 00 "Submittal Procedures."
- F. Substitution: Refer to Section 01 25 00 "Substitution Procedures" for definition and limitations on substitutions.

1.3 QUALITY ASSURANCE

A. Compatibility of Options: If Contractor is given option of selecting between two or more products for use on Project, select product compatible with products previously selected, even if previously selected products were also options.

1.4 PRODUCT DELIVERY, STORAGE, AND HANDLING

A. Deliver, store, and handle products, using means and methods that will prevent damage, deterioration, and loss, including theft and vandalism. Comply with manufacturer's written instructions.

1.5 PRODUCT WARRANTIES

- A. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.
 - 1. Manufacturer's Warranty: Written standard warranty form furnished by individual manufacturer for a particular product and issued in the name of the Owner or endorsed by manufacturer to Owner.
 - 2. Special Warranty: Written warranty required by the Contract Documents to provide specific rights for Owner and issued in the name of the Owner or endorsed by manufacturer to Owner.
- B. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution.
 - 1. Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.

- 2. Specified Form: When specified forms are included in the Project Manual, prepare a written document, using indicated form properly executed.
- 3. See other Sections for specific content requirements and particular requirements for submitting special warranties.

PART 2 PRODUCTS

2.1 PRODUCT SELECTION PROCEDURES

- A. General Product Requirements: Provide products that comply with the Contract Documents, are undamaged and, unless otherwise indicated, are new at time of installation.
 - 1. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
 - 2. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
 - 3. Owner reserves the right to limit selection to products with warranties meeting requirements of the Contract Documents.
 - Where products are accompanied by the term "as selected," Architect / Engineer will make selection.
 - 5. Descriptive, performance, and reference standard requirements in the Specifications establish salient characteristics of products.

B. Product Selection Procedures:

- 1. Sole Product: Where Specifications name a single manufacturer and product, provide the named product that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.
 - a. Sole product may be indicated by the phrase "Subject to compliance with requirements, provide the following."
- Sole Manufacturer/Source: Where Specifications name a single manufacturer or source, provide a product by the named manufacturer or source that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.
 - a. Sole manufacturer/source may be indicated by the phrase "Subject to compliance with requirements, provide products by the following."
- Limited List of Products: Where Specifications include a list of names of both manufacturers and products, provide one of the products listed that complies with requirements. Comparable products or substitutions for Contractor's convenience will be considered unless otherwise indicated.
 - a. Limited list of products may be indicated by the phrase "Subject to compliance with requirements, provide one of the following."

- 4. Non-Limited List of Products: Where Specifications include a list of names of both available manufacturers and products, provide one of the products listed or an unnamed product that complies with requirements.
 - a. Non-limited list of products is indicated by the phrase "Subject to compliance with requirements, available products that may be incorporated in the Work include, but are not limited to, the following."
 - b. Provision of an unnamed product is not considered a substitution, if the product complies with requirements.
- 5. Limited List of Manufacturers: Where Specifications include a list of manufacturers' names, provide a product by one of the manufacturers listed that complies with requirements. Comparable products or substitutions for Contractor's convenience will be considered unless otherwise indicated.
 - a. Limited list of manufacturers is indicated by the phrase "Subject to compliance with requirements, provide products by one of the following."
- 6. Non-Limited List of Manufacturers: Where Specifications include a list of available manufacturers, provide a product by one of the manufacturers listed or a product by an unnamed manufacturer that complies with requirements.
 - a. Non-limited list of manufacturers is indicated by the phrase "Subject to compliance with requirements, available manufacturers whose products may be incorporated in the Work include, but are not limited to, the following."
 - b. Provision of products of an unnamed manufacturer is not considered a substitution, if the product complies with requirements.
- 7. Basis-of-Design Product: Where Specifications name a product, or refer to a product indicated on Drawings, and include a list of manufacturers, provide the specified or indicated product or a comparable product by one of the other named manufacturers. Drawings and Specifications may additionally indicate sizes, profiles, dimensions, and other characteristics that are based on the product named. Comply with requirements in "Comparable Products" Article for consideration of an unnamed product by one of the other named manufacturers.
 - a. For approval of products by unnamed manufacturers, comply with requirements in Section 01 25 00 "Substitution Procedures" for substitutions for convenience.

C. Buy American:

1. Comply with Buy American requirements of the Contract.

2.2 COMPARABLE PRODUCTS

A. Conditions for Consideration of Comparable Products: Project Representative will consider Contractor's request for comparable product when the following conditions are satisfied. If the following conditions are not satisfied, Project Representative may return requests without action, except to record noncompliance with the following requirements:

- 1. Evidence that proposed product does not require revisions to the Contract Documents, is consistent with the Contract Documents, will produce the indicated results, and is compatible with other portions of the Work.
- 2. Detailed comparison of significant qualities of proposed product with those of the named basis-of-design product. Significant product qualities include attributes, such as type, function, in-service performance and physical properties, weight, dimension, durability, visual characteristics, and other specific features and requirements.
- 3. Evidence that proposed product provides specified warranty.
- 4. List of similar installations for completed projects, with project names and addresses and names and addresses of architects and owners, if requested.
- 5. Samples, if requested.
- B. Project Representative's Action on Comparable Products Submittal: If necessary, Project Representative will request additional information or documentation for evaluation, as specified in Section 01 33 00 "Submittal Procedures."
 - 1. Form of Approval of Submittal: As specified in Section 01 33 00 "Submittal Procedures."
 - 2. Use product specified if Project Representative does not issue a decision on use of a comparable product request within time allocated.
- C. Submittal Requirements, Single-Step Process: When acceptable to Project Representative, incorporate specified submittal requirements of individual Specification Section in combined submittal for comparable products. Approval by the Project Representative of Contractor's request for use of comparable product and of individual submittal requirements will also satisfy other submittal requirements.

PART 3 EXECUTION (NOT USED)

END OF SECTION 01 60 00

SECTION 01 73 00 - EXECUTION

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes general administrative and procedural requirements governing execution of the Work, including, but not limited to, the following:
 - 1. Construction layout.
 - 2. Field engineering and surveying.
 - 3. Installation of the Work.
 - 4. Progress cleaning.
 - 5. Starting and adjusting.
 - 6. Protection of installed construction.
- B. Related Requirements:
 - 1. Section 01 10 00 Summary
 - 2. Section 01 77 00 Closeout Procedures

1.2 QUALITY ASSURANCE

A. Manufacturer's Installation Instructions: Obtain and maintain on-site manufacturer's written recommendations and instructions for installation of specified products and equipment.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Comply with requirements specified in other Sections.
- B. In-Place Materials: Use materials for patching identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.
 - If identical materials are unavailable or cannot be used, use materials that, when installed, will provide a match acceptable to the Engineer for the visual and functional performance of in-place materials. Use materials that are not considered hazardous.
- C. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

PART 3 EXECUTION

3.1 EXAMINATION

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- A. Existing Conditions: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning site work, investigate and verify the existence and location of underground utilities and other construction affecting the Work
 - 1. Before construction, verify the location and invert elevation at existing manholes and location of other utilities.
 - 2. Furnish location data for work related to Project that must be performed by public utilities serving Project site.
- B. Examination and Acceptance of Conditions: Before proceeding with each component of the Work, examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.
 - 1. Examine the existing manhole catch basins and inverts and assess their condition. Verify actual locations of connections before commencing work.
- C. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

3.2 PREPARATION

- A. Existing Utility Information: Furnish information to local utility that is necessary to adjust, move, or relocate existing utility structures, utility poles, lines, services, or other utility appurtenances located in or affected by construction. Coordinate with authorities having jurisdiction.
- B. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
- C. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.
- D. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents, submit a request for information to Project Representative in accordance with requirements in Section 01 31 00 "Project Management and Coordination."

3.3 CONSTRUCTION LAYOUT

- A. Verification: Before proceeding to lay out the Work, verify layout information shown on Drawings, in relation to the property survey and existing benchmarks and existing conditions. If discrepancies are discovered, notify Project Representative promptly.
- B. Construction Surveying shall be conducted in accordance with Section G-135 Construction Surveying and Monuments.

3.4 INSTALLATION

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- A. Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.
 - 1. Install storm drain pipe to the elevations as shown on the Plans.
- B. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.
- C. Install products at the time and under conditions that will ensure satisfactory results as judged by Engineer. Maintain conditions required for product performance until Substantial Completion.
- D. Conduct construction operations, so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy of type expected for Project.
- E. Sequence the Work and allow adequate clearances to accommodate movement of construction items on-site and placement in permanent locations.
- F. Tools and Equipment: Select tools or equipment that minimize production of excessive noise levels.
- G. Repair or remove and replace damaged, defective, or nonconforming Work.
 - 1. Comply with Section 01 77 00 "Closeout Procedures" for repairing or removing and replacing defective Work.

3.5 PROGRESS CLEANING

- A. Clean Project site and work areas daily, including common areas. Enforce requirements strictly. Dispose of materials lawfully.
 - Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
 - 2. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
 - a. Use containers intended for holding waste materials of type to be stored.
- B. Site: Maintain Project site free of waste materials and debris.
- C. Work Areas: Clean areas where Work is in progress to the level of cleanliness necessary for proper execution of the Work.
 - 1. Remove liquid spills promptly.
- D. Waste Disposal: Do not bury or burn waste materials on-site. Do not wash waste materials down sewers or into waterways.
- E. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.

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- F. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period.
- G. Limiting Exposures: Supervise construction operations to ensure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

3.6 PROTECTION AND REPAIR OF INSTALLED CONSTRUCTION

- A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.
- B. Repair Work previously completed and subsequently damaged during construction period. Repair to like-new condition.
- C. Protection of Existing Items: Provide protection and ensure that existing items to remain undisturbed by construction are maintained in condition that existed at commencement of the Work.

END OF SECTION 01 73 00

EXECUTION 01 73 00 - 4 of 4

SECTION 01 77 00 - CLOSEOUT PROCEDURES

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for Contract closeout, including, but not limited to, the following:
 - 1. Substantial Completion procedures.
 - 2. Final completion procedures.
 - 3. Warranties.
 - 4. Final cleaning.
- B. Related Requirements:
 - 1. Section 01 78 39 Project Record Documents

1.2 SUBSTANTIAL COMPLETION PROCEDURES

- A. Contractor's List of Incomplete Items: Prepare and submit a list of items to be completed and corrected (Contractor's "punch list"), indicating the value of each item on the list and reasons why the Work is incomplete.
- B. Submittals Prior to Substantial Completion: Complete the following a minimum of 10 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
 - Certificates of Release: Obtain and submit releases from authorities having jurisdiction, permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
 - 2. Submit closeout submittals specified in other Division 01 Sections, including Project Record Documents, operation and maintenance manuals, damage or settlement surveys, property surveys, and similar final record information.
 - 3. Submit closeout submittals specified in individual Sections, including specific warranties, workmanship bonds, final certifications, and similar documents.
 - 4. Submit maintenance material submittals specified in individual Sections, including tools, spare parts, extra materials, and similar items, and deliver to location designated by Project Representative. Label with manufacturer's name and model number.
 - 5. Submit testing records.
- C. Procedures Prior to Substantial Completion: Complete the following a minimum of 10 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
 - 1. Advise Owner of pending insurance changeover requirements.

- 2. Complete startup and testing of systems and equipment.
- 3. Participate with Owner in conducting inspection and walkthrough.
- 4. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
- 5. Complete final cleaning requirements.
- D. Inspection: Submit a written request for inspection for Substantial Completion at least 10 days prior to date the Work will be completed and ready for inspection. On receipt of request, Project Representative will either proceed with inspection or notify Contractor of unfulfilled requirements. Project Representative will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Engineer, that must be completed or corrected before certificate will be issued.
 - 1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.
 - 2. Results of completed inspection will form the basis of requirements for Final Completion.

1.3 FINAL COMPLETION PROCEDURES

- A. Submittals Prior to Final Completion: Before requesting final inspection for determining Final Completion, complete the following:
 - 1. Submit a final Application for Payment in accordance with Section 01 29 00 "Payment Procedures."
 - Submit certified copy of Engineer's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Engineer. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
 - 3. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
 - 4. Submit final Certified Payroll Reports.
 - 5. Submit final DBE Utilization.
- B. Inspection: Submit a written request for final inspection to determine acceptance a minimum of 10 days prior to date the Work will be completed and ready for final inspection and tests. On receipt of request, Engineer will either proceed with inspection or notify Contractor of unfulfilled requirements. Engineer will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.
 - 1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.

1.4 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

A. Preparation: Submit three copies of list. Include name and identification of each area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.

1.5 SUBMITTAL OF PROJECT WARRANTIES

- A. Time of Submittal: Submit written warranties on request of Project Representative for designated portions of the Work where warranties are indicated to commence on dates other than date of Substantial Completion, or when delay in submittal of warranties might limit Owner's rights under warranty.
- B. Organize warranty documents into an orderly sequence based on the table of contents of Project Manual.
- C. Warranty Electronic File: Provide warranties and bonds in PDF format. Assemble complete warranty and bond submittal package into a single electronic PDF file with bookmarks enabling navigation to each item. Provide bookmarked table of contents at beginning of document.
 - 1. Submit by email to Project Representative.
- D. Provide additional copies of each warranty to include in operation and maintenance manuals.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.1 FINAL CLEANING

- A. Perform final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
 - 1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a designated portion of Project:
 - 2. Clean Project site of rubbish, waste material, litter, and other foreign substances.
 - 3. Remove debris and surface dust from limited-access spaces, trenches, manholes, and similar spaces.
 - 4. Remove FOD from project area and airport surfaces.
 - 5. Remove mortar droppings, and other foreign substances.

3.2 REPAIR OF THE WORK

A. Complete repair and restoration operations required by Section 01 73 00 "Execution" before requesting inspection for determination of Substantial Completion.

END OF SECTION 01 77 00

SECTION 01 78 39 - PROJECT RECORD DOCUMENTS

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for Project Record Documents, including the following:
 - 1. Record Drawings.
 - 2. Record specifications.
 - 3. Record Product Data.

1.2 CLOSEOUT SUBMITTALS

- A. Record Drawings: Comply with the following:
 - 1. Number of Copies: Submit one set of full-size marked-up record prints.
- B. Miscellaneous Record Submittals: Submit one electronic copy in PDF format.

1.3 RECORD DRAWINGS

- A. Record Prints: Maintain one set of marked-up paper copies of the Contract Drawings and Shop Drawings, incorporating new and revised drawings as modifications are issued.
 - Preparation: Mark record prints to show the actual installation, where installation varies
 from that shown originally. Require individual or entity who obtained record data,
 whether individual or entity is Installer, subcontractor, or similar entity, to provide information for preparation of corresponding marked-up record prints.
 - a. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later.
 - b. Accurately record information in an acceptable drawing technique.
 - c. Record data as soon as possible after obtaining it.
 - d. Record and check the markup before enclosing concealed installations.
 - e. Cross-reference record prints to corresponding photographic documentation.
 - 2. Content: Types of items requiring marking include, but are not limited to, the following:
 - a. Dimensional changes to Drawings.
 - b. Revisions to details shown on Drawings.
 - c. Depths of manholes.

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- d. Locations and depths of underground utilities.
- e. Revisions to routing of piping and conduits.
- f. Revisions to electrical circuitry.
- g. Actual equipment locations.
- h. Conduit size and routing.
- i. Changes made by Change Order or Work Change Directive.
- j. Changes made following Project Representative's written orders.
- k. Details not on the original Contract Drawings.
- I. Field records for variable and concealed conditions.
- m. Record information on the Work that is shown only schematically.
- 3. Mark the Contract Drawings and Shop Drawings completely and accurately. Use personnel proficient at recording graphic information in production of marked-up record prints.
- 4. Mark record prints with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at same location.
- 5. Mark important additional information that was either shown schematically or omitted from original Drawings.
- 6. Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.

1.4 MISCELLANEOUS RECORD SUBMITTALS

- A. Assemble miscellaneous records required by other Specification Sections for miscellaneous record keeping and submittal in connection with actual performance of the Work. Bind or file miscellaneous records and identify each, ready for continued use and reference. Examples of miscellaneous records include:
 - 1. Test reports
 - 2. Inspections by authorities having jurisdiction.

1.5 MAINTENANCE OF RECORD DOCUMENTS

A. Maintenance of Record Documents: Store Record Documents in the field office apart from the Contract Documents used for construction. Do not use Project Record Documents for construction purposes. Maintain Record Documents in good order and in a clean, dry, legible condition, protected from deterioration and loss. Provide access to Project Record Documents for Engineer's reference during normal working hours.

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PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION 01 78 39

ITEM A-110 AIRPORT SAFETY REQUIREMENTS

DESCRIPTION

110-1.1 GENERAL. This item references the Construction Safety and Phasing Plan (CSPP) as included in Exhibit D for use during the Kenai Municipal Airport – 2021 Improved Airfield Drainage project in Kenai, Alaska. The CSPP was prepared in conformance with the Federal Aviation Administration (FAA) Standard of Practice 2.0 (SOP 2.0), and FAA Advisory Circular (AC) 150/5370-2G Operational Safety on Airports During Construction (Safety AC). The Safety AC may be downloaded from:

http://www.faa.gov/airports/resources/advisory_circulars/

The purpose of the CSPP is to present information needed for construction in an effort to maintain airport safety, minimize disruption to the operations of air and ground traffic, and to allow the project to be completed quickly. The designated work area for this project includes Runway 02L/20R and interlink taxiways as shown on the drawings. The Contractor shall control his operations and the operations of his subcontractors and all suppliers to provide for the free and unobstructed movement of aircraft in areas that are not under construction.

The CSPP provides information on some of the coordination, limitations, and restrictions that will be required to accomplish this project. Some details have been left for the Contractor to provide, so that they may accomplish the work according to their own means and methods, as much as practical. The Contractor's plans to complete the work are subject to approval by the Engineer, and will require coordination and review by the Airport Manager, FAA, and possibly other organizations or individuals. The Contractor is required to submit a Safety Plan Compliance Document (SPCD) to the Project Engineer (Engineer) describing how they will perform the work in compliance with the CSPP and the requirements set forth in FAA AC 150/5370-2G. The Contractor's work schedule (including a critical path method schedule) shall be included in Section 2 Phasing of the SPCD. See the Safety AC for more information. The SPCD must be submitted to the Engineer for approval prior to the commencement of any construction activities and prior to the preconstruction conference.

The Safety AC mandates the format and content of the CSPP and SPCD. All references to construction safety plans, security plans, and construction phasing or staging plans in the Project Manual refer to the CSPP and the Contractor's approved SPCD.

The FAA requires the CSPP and the SPCD to be "stand-alone" documents that can be circulated to the relevant sections of the FAA for review and approval. The CSPP and SPCD are both enforceable parts of the contract documents.

The Safety Plan sheets and Construction Phasing Plan sheets within the project plans are referred to in the CSPP and SPCD as the Construction Safety and Phasing Plan Drawings. The Contractor can find these sheets within the Plans. See Sheets G2.00 through G2.02.

All Work associated with this Project shall be conducted in a safe and workman-like manner so as not to endanger personnel on the site or the public. It shall be the Contractor's responsibility to comply with any and all Federal or State safety requirements. Failure by the Contractor to comply with safety laws or operate in a safe manner, as determined by the Owner or other regulatory authorities, will be cause for a "Stop Work Order", after which Work on the Project will not proceed until the unsafe practices or conditions are corrected.

The Contractor is solely responsible for all safety related to his operations on this Project. The Contractor shall continuously monitor and be responsible for his activities to assure the safety of all workers, aircraft, and flying public using the airport. Contractor shall be responsible for and shall provide all safety training, procedures, coordination, notifications to the Airport Manager or designee, equipment, barricades, markings, signs, and manpower to comply with these safety requirements.

The Contractor shall control his operations and the operations of his Subcontractors and all suppliers so as to provide for the free and unobstructed movement of aircraft in the area that is not under construction.

110-1.2 SPCD. The Contractor shall submit a SPCD to the Engineer describing how the Contractor shall comply with the requirements set forth in the CSPP and the requirements set forth in FAA AC 150/5370-2G. The SPCD shall be submitted to the Engineer prior to the commencement of any construction activities. Appendix D of FAA AC 150/5370-2G "Construction Project Daily Safety Inspection Checklist" is included in Appendix D for reference.

METHOD OF MEASUREMENT

110-3.1 This item will not be measured for payment.

BASIS OF PAYMENT

110-4.1 Payment will be made at the contract lump sum price for complying with the airport safety requirements described in this specification and the Construction Safety and Phasing Plan included in Exhibit D and the Construction Safety and Phasing Plan drawings. All work, materials, equipment, and flagging required to complete the work is incidental to this item.

Item A110.000.0000 Airport Safety Requirements - per Lump Sum

ITEM A-120 PERMITS AND ENVIRONMENTAL LIMITATIONS

DESCRIPTION

120-1.1 Provide all permits not provided by the City of Kenai and comply with all permit and environmental conditions, limitations, and mitigations required by local, state, and federal agencies for this project.

GENERAL

- **120-2.1 GENERAL.** Abide by all permit stipulations included in permit approval letters and authorizations included in the appendices of the Categorical Exclusion (CATEX) document included in Appendix A.
- **120-2.2 PERMITS RECEIVED.** The following permits/consultations have been obtained and approvals are included in Appendix A:
 - 1. U.S. Army Corps of Engineers Nationwide Permit 58 Utility Line Activities for Water and Other Substances (Preconstruction Notification not required)
 - 2. Alaska Department of Natural Resources (ADNR) Office of History and Archaeology State Historic Preservation Office Section 106 Consultation (Concurrence received April 13, 2021)
- 120-2.3 PERMITS APPLIED FOR. The Owner has not applied for any additional permits.
- **120-2.4 PERMITS TO BE OBTAINED.** The following permits/consultations need to be obtained by the contractor prior to construction:
 - 1. Alaska Pollutant Discharge Elimination System General Permit for Excavation Dewatering (Permit Number: AKG002000)
 - (a) A Notice of Intent (NOI) and a Certified BMP Plan must be submitted a minimum of 30 days prior to anticipated discharge.
 - 2. ADNR Temporary Water Use Permit may need to be obtained if a significant amount of water is used. A significant amount of water is defined as:
 - (a) the consumptive use of more than 5,000 gallons of water from a single source in a single day; or
 - (b) the regular daily or recurring consumptive use of more than 500 gallons per day (gpd) from a single source for more than 10 days per calendar year; or
 - (c) the non-consumptive use of more than 30,000 gpd (0.05 cubic feet per second) from a single source; or
 - (d) any water use that may adversely affect the water rights of other appropriators or the public interest.
- **120-2.4 OTHER PERMIT-RELATED REQUIREMENTS.** The permits listed in this section may not be all inclusive. Contractor shall carefully read the contract documents, permits provided, and anticipated environmental commitments included in Appendix A. Contractor shall comply with requirements for other permits or environmental limitations required for constructing this project, including but not limited to the Anticipated Environmental Commitments and Mitigation measures included in Appendix A.

METHOD OF MEASUREMENT

120-3.1 There is no measurement for this item.

BASIS OF PAYMENT

120-4.1 Work associated with this section is subsidiary to other contract work and no further additional payment will be made.

ITEM D-701 PIPE FOR STORM DRAINS AND CULVERTS

DESCRIPTION

701-1.1 This item shall consist of the construction of pipe culverts and storm drains according to these Specifications and in reasonably close conformity with the lines and grades shown on the Plans.

MATERIALS

701-2.1 Materials shall meet the requirements shown on the Plans and specified below.

701-2.2 PIPE. The pipe shall be of the type called for on the PlansCorrugated Polyethylene Pipe (CPEP) Type S and shall be according to the following appropriate requirements.

Metallic Coated Corrugated Steel Pipe (Type I, IR or II) Corrugated Steel Pipe, Metallic-Coated for Sewers and Drains Galvanized Steel Corrugated Structural Plates and Fasteners for Pipe, Pipe-Arches, and Arches	AASHTO M 36 ASTM A760 ASTM A761
Polymer Precoated Corrugated Steel Pipe for Sewers and Drains Post-Coated and Lined (Bituminous or Concrete)	ASTM A762
Corrugated Steel Sewer and Drainage Pipe	ASTM A849
Corrugated Aluminum Alloy Culvert Pipe	ASTM B745
Non-Reinforced Concrete Pipe	ASTM C14
Reinforced Concrete Pipe	ASTM C76
Reinforced Concrete D-Load Pipe	ASTM C655
Reinforced Concrete Arch Pipe	ASTM C506
Reinforced Concrete Elliptical Pipe	ASTM C507
Precast Reinforced Concrete Monolithic Box Sections for Culverts,	
Storm Drains, and Sewers	ASTM C1433
Corrugated Polyethylene (PE) Pipe and Fittings	ASTM F667
Polyethylene (PE) Plastic Pipe (DR-PR) Based on Outside Diameter	ASTM F714
Poly (Vinyl Chloride) Ribbed Drain Pipe & Fittings Based	7.61
on Controlled Inside Diameter	ASTM F794
Polyethylene (PE) Large Diameter profile Wall Sewer and Drain Pipe	ASTM F894
Poly (Vinyl Chloride) (PVC) Corrugated Sewer Pipe	
With a Smooth Interior and Fittings	ASTM F949
Steel Reinforced Polyethylene (PE) Corrugated Pipe	ASTM F2435
Steel Reinforced Thermoplastic Ribbed Pipe and Fittings for Non-	
Pressure Drainage and Sewerage	ASTM F2562
Polypropylene (PP) Corrugated Single Wall Pipe and Double Wall Pipe Polypropylene (PP) Triple Wall Pipe and Fittings for Non-Pressure	ASTM F2736
Sanitary Sewer Applications	ASTM F2764
Polypropylene (PP) Dual Wall Pipe and Fittings for Non-Pressure Storm	
Sewer Applications.	ASTM F2881
Bituminous-Coated Corrugated Metal Pipe and Pipe Arches	AASHTO M 190
Bituminous-Coated Corrugated Aluminum Alloy Culvert Pipe	AASHTO M 190 and M
	196
Bituminous-Coated Structural Plate Pipe, Pipe Arch, and Arches	AASHTO M 167 and M 243
Aluminum Alloy Structural Plate for Pipe, Pipe Arch, and Arches	AASHTO M 219
Polyvinyl Chloride (PVC) Pipe	ASTM D3034
Corrugated Polyethylene Drainage Tubing	AASHTO M 252

Corrugated Polyethylene Pipe, 300 mm to 1500 mm (12- to 60-in) Diameter

AASHTO M 294

Poly (Vinyl Chloride) (PVC) Profile Wall Drain Pipe and Fittings Based on Controlled Inside Diameter

AASHTO M 304

701-2.3 CONCRETE. Plain and reinforced concrete used in structures, connections of pipes with structures, and the support of structures or frames shall conform to the requirements of Item P-610.

701-2.4 RUBBER GASKETS. Rubber gaskets for rigid pipe shall conform to the requirements of ASTM C443. Rubber gaskets for PVC pipe and polyethylene pipe shall conform to the requirements of ASTM F477. Rubber gaskets for zinc-coated steel pipe and precoated galvanized pipe shall conform to the requirements of ASTM D1056, for the "RE" closed cell grades. Rubber gaskets for steel reinforced thermoplastic ribbed pipe shall conform to the requirements of ASTM F477.

701-2.5 JOINT MORTAR. Pipe joint mortar shall consist of one part by volume of Portland cement and two parts sand. The Portland cement shall conform to the requirements of AASHTO M 85, Type ICement for mortar shall conform with the requirements of ASTM C-150, Type II. The sand shall conform to the requirements of AASHTO M 45. The mortar shall be composed of one (1) part cement and three (3) parts sand. The addition of lime is not permitted.

701-2.6 JOINT FILLERS. Poured filler for joints shall conform to the requirements of AASHTO M 324.

701-2.7 PLASTIC GASKETS. Plastic gaskets shall conform to the requirements of AASHTO M 198 (Type B).

701-2.8. CONTROLLED LOW-STRENGTH MATERIAL (CLSM). Controlled low-strength material shall conform to the requirements of Item P-153. When CLSM is used all joints shall have gaskets.

701-2.9 CULVERT MARKER POSTS. Provide posts made of durable glass fiber and resin reinforced material flexible to -40°F, resistant to impact and ultraviolet light. "T" in cross section, 3.75-inch wide by 72 inches long, and color blue. Provide Carsonite CUM-375 utility marker or approved equal.

701-2.10 CLASS B BEDDING. Use one of the following materials:

- **a.** Suitable material as defined in specification subsection P-152-2.3, except that 100% of the material will pass a 1-inch sieve.
- **b.** P-299 Aggregate Surface Course (when included in this contract).
- **c.** P-209 Crushed Aggregate Base Course (when included in this contract).

701-2.11 END SECTIONS. End sections for metal pipe must be of the same material as the pipe.

CONSTRUCTION METHODS

701-3.1 EXCAVATION. The width of the pipe trench shall be sufficient to permit satisfactory jointing of the pipe and thorough tamping of the bedding material under and around the pipe, but it shall not be less than the external diameter of the pipe plus 18 inches on each side. The trench walls shall be approximately vertical.

Where rock, hardpan, or other unyielding material is encountered, the Contractor shall remove it from below the foundation grade for a depth of at least 8 inches or 1/2-inch for each foot of fill over the top of the pipe (whichever is greater) but for no more than 75% of the nominal diameter of the pipe. The width of the excavation shall be at least 1 foot greater than the horizontal outside diameter of the pipe. The excavation

below grade shall be backfilled with selected fine compressible material, such as silty clay or loam, and lightly compacted in layers not over 6 inches in uncompacted depth to form a uniform but yielding foundation.

Where a firm foundation is not encountered at the grade established, due to soft, spongy, or other unstable soil, the unstable soil shall be removed and replaced with approved Class B bedding material for the full trench width. The Engineer shall determine the depth of removal necessary. The Class B bedding material shall be compacted to provide adequate support for the pipe.

The excavation for pipes that are placed in embankment fill shall not be made until the embankment has been completed to a height above the top of the pipe as shown on the Plans.

701-3.2 BEDDING. The pipe bedding shall conform <u>Class B bedding to the class specified on the Plans.</u> When no bedding class is specified or detailed on the Plans, the requirements for Class B bedding shall apply. Compact all bedding to 95% of the maximum density determined by ATM 207 or ATM 212.

 Rigid Pipe. Class A bedding shall consist of a continuous concrete cradle conforming to the plan details.

Class B bedding shall consist of a bed of granular material having a thickness of at least 6 inches below the bottom of the pipe and extending up around the pipe for a depth of not less than 30% of the pipe's vertical outside diameter. The layer of bedding material shall be shaped to fit the pipe for at least 10% of the pipe's vertical diameter and shall have recesses shaped to receive the bell of bell and spigot pipe.

Class C bedding shall consist of bedding the pipe in its natural foundation material to a depth of not less than 10% of the pipe's vertical diameter. The bed shall be shaped to fit the pipe and shall have recesses shaped to receive the bell of bell and spigot pipe.

b. Flexible Pipe. For flexible pipe, the bed shall be roughly shaped to fit the pipe, and a bedding blanket of sand or fine granular material shall be provided as follows in Table 701-1. Minimum Bedding Depth per Pipe Corrugation Depth.

TABLE 701-1. MINIMUM BEDDING DEPTH PER PIPE CORRUGATION DEPTH

Pipe Corrugation Depth, in.	Minimum Bedding Depth, in.
1/2	1
1	2
2	3
2-1/2	3-1/2

c. PVC and Polyethylene Pipe. For PVC and polyethylene pipe, the bedding material shall consist of Class B bedding. The bedding shall have a thickness of at least 6 inches below the bottom of the pipe and extend up around the pipe for a depth of not less than 50% of the pipe's vertical outside diameter.

701-3.3 LAYING PIPE. The pipe laying shall begin at the <u>lowest point of the trenchdownstream manhole</u> and proceed <u>upgradeupstream</u>. The lower segment of the pipe shall be in contact with the bedding throughout its full length. Bell or groove ends of rigid pipes and outside circumferential laps of flexible pipes shall be placed facing upgrade.

Paved or partially lined pipe shall be placed so that the longitudinal center line of the paved segment coincides with the flow line.

Elliptical and elliptically reinforced concrete pipes shall be placed with the manufacturer's reference lines designating the top of pipe within five degrees of a vertical plane through the longitudinal axis of the pipe.

701-3.4 JOINING PIPE. Joints shall be made with (1) Portland cement mortar, (2) Portland cement grout, (3) bell and spigot rubber gaskets, (4) plastic gaskets, or (5) coupling bands.

Mortar joints shall be made with an excess of mortar to form a continuous bead around the outside of the pipe and shall be finished smooth on the inside. Molds or runners shall be used for grouted joints in order to retain the poured grout. Rubber ring gaskets shall be installed to form a flexible watertight seal.

- **a.** Concrete Pipe. Concrete pipe may be either bell and spigot or tongue and groove. The method of joining pipe sections shall be such that the ends are fully entered and the inner surfaces are reasonably flush and even. Joints shall be thoroughly wetted before mortar or grout is applied.
- **b. Metal Pipe.** Metal pipe shall be firmly joined by form fitting bands conforming to the requirements of ASTM A760 for steel pipe and AASHTO M 36 for aluminum pipe.
- c. PVC, Polypropylene, and Polyethylene Pipe. Joints for PVC, polypropylene, and polyethylene pipe shall conform to the requirements of ASTM D3212-when water tight joints are required. Joints for PVC and polyethylene pipe shall conform to the requirements of AASHTO M 304 when soil tight joints are required. Fittings for polyethylene pipe shall conform to the requirements of AASHTO M 252 or M 294. Fittings for polypropylene pipe shall conform to the requirements of ASTM F2881, ASTM F2736, or ASTM F2764.

701-3.5 CONNECTIONS TO EXISTING MANHOLES. Connections to existing manholes shall be made in a workmanlike manner. Contractor shall not insert any portion of the bell of CPEP pipe into any manhole unless that portion will be completely removed when the pipe is trimmed to two inches (2") inside the manhole. The invert shall be brought into the existing manhole at the elevation shown on the Plans. The downstream pipe in manholes shall be screened to prevent entry of mortar or other debris from entering the system.

After connection is made to a storm drain manhole and the mortar holding the pipe in place has set, cut the pipe off evenly so that no more than two inches (2") of pipe protrudes into the manhole and remove any screening.

701-3.56 BACKFILLING. Pipes shall be inspected before any backfill is placed; any pipes found to be out of alignment, unduly settled, or damaged shall be removed and relaid or replaced at the Contractor's expense.

Use backfill that is suitable material as defined in subsection P-152-2.3 except that:

- a. 100% of the material placed within 1 foot of the pipe will pass a 3-inch sieve.
- **b.** If the pipe is placed in or under the structural section, construct the backfill according to the material and construction requirements of the specifications for the applicable lift of material (P-154, P-299, P-209).

When the top of the pipe is even with or below the top of the trench, the backfill shall be compacted in layers not exceeding 6 inches on both sides of the pipe and shall be brought up 1 foot above the top of the pipe or to natural ground level, whichever is greater. Care shall be exercised to thoroughly compact the backfill material under the haunches of the pipe without displacing the pipe. Material shall be brought up evenly on both sides of the pipe for the full length of the pipe.

When the top of the pipe is above the top of the trench, the backfill shall be compacted in layers not exceeding 6 inches and shall be brought up evenly on both sides of the pipe to 1 foot above the top of the pipe. The width of backfill on each side of the pipe for the portion above the top of the trench shall be equal to twice the pipe's diameter or 12 feet, whichever is less.

For PVC, polypropylene, and polyethylene pipe, the backfill shall be placed in two stages; first to the top of the pipe and then at least 12 inches over the top of the pipe. The backfill material shall meet the requirements of subsection 701-3.2c.

All backfill shall be compacted to the density required under Item P-152.

It shall be the Contractor's responsibility to protect installed pipes and culverts from damage due to construction equipment operations. The Contractor shall be responsible for installation of any extra strutting or backfill required to protect pipes from the construction equipment.

701-3.67 CULVERT MARKER POSTS. Install culvert marker posts at each culvert inlet and outlet. Drive posts to 18 inches minimum embedment.

METHOD OF MEASUREMENT

701-4.1 PIPE. The length of pipe will be measured by the linear feet of pipe in place, completed, and approved. It will be measured horizontally along the centerline of the pipe from center of manhole to center of manhole. The different sizes will be measured separately. All fittings will be included in the length of the pipe being measured. All trench excavation and backfill, topsoil, seeding, and mulching associated with pipe installation is subsidiary to D-701 items used for the work.

BASIS OF PAYMENT

701-5.1 Payment will be made at the contract unit price per linear foot for each kind of pipe of the type and size designated.

Payment will be made under:

Item D701.010.0018	CPEP Pipe, 18-inch – per linear foot
Item D701.010.0020	CPEP Pipe, 20-inch – per linear foot

MATERIAL REQUIREMENTS

AASHTO M 36	Corrugated Steel Pipe, Metallic-Coated, for Sewers and Drains
AASHTO M 45	Aggregate for Masonry Mortar
AASHTO M 85	Portland Cement
AASHTO M 157	Ready-Mixed Concrete
AASHTO M 190	Bituminous-Coated Corrugated Metal Culvert Pipe and Pipe Arches
AASHTO M 196	Corrugated Aluminum Alloy Culverts and Underdrains
AASHTO M 198	Joints for Circular Concrete Sewer and Culvert Pipe Using Flexible Watertight Gaskets
AASHTO M 219	Aluminum Alloy Structural Plate for Pipe, Pipe-Arches, and Arches
AASHTO M 243	Field Applied Coating of Corrugated Metal Structural Plate for Pipe, Pipe-Arches, and Arches
AASHTO M 252	Corrugated Polyethylene Drainage Tubing
AASHTO M 294	Corrugated Polyethylene Pipe, 300 to 1500 mm Diameter
AASHTO M 304	Poly (Vinyl Chloride) (PVC) Profile Wall Drain Pipe and Fittings Based on Controlled Inside Diameter
AASHTO M 324	Joint and Crack Sealants, Hot Applied, for Concrete and Asphalt Pavements
ASTM A760	Corrugated Steel Pipe, Metallic-Coated for Sewers and Drains

ASTM A761	Steel Galvanized, Corrugated Structural Plates and Fasteners for Pipe, Pipe-Arches, and Arches
ASTM A762	Precoated (Polymeric) Galvanized Steel Sewer and Drainage Pipe
ASTM A849	Post-Coated and Lined (Bituminous or Concrete) Corrugated Steel Sewer and Drainage Pipe
ASTM B745	Corrugated Aluminum Alloy Culvert Pipe
ASTM C14	Concrete Sewer, Storm Drain, and Culvert Pipe
ASTM C1433	Precast Reinforced Concrete Monolithic Box Sections for Culverts, Storm Drains, and Sewers, $3-24\ \text{in}$
ASTM C150	Standard Specification for Portland Cement
ASTM C76	Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
ASTM C443	Joints for Circular Concrete Sewer and Culvert Pipe, Using Rubber Gaskets
ASTM C506	Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe
ASTM C507	Reinforced Concrete Elliptical Culvert, Storm Drain and Sewer Pipe
ASTM C655	Reinforced Concrete D-Load Culvert, Storm Drain and Sewer Pipe
ASTM C700	Vitrified Clay Pipe, Extra Strength, Standard Strength, and Perforated
ASTM D1056	Flexible Cellular MaterialsSponge or Expanded Rubber
ASTM D3034	Type PSM Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings
ASTM D3212	Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals
ASTM F477	Elastomeric Seals (Gaskets) for Joining Plastic Pipe
ASTM F667	Corrugated Polyethylene Pipe and Fittings
ASTM F714	Polyethylene (PE) Plastic Pipe (DR PR) Based on Outside Diameter
ASTM F794	Poly (Vinyl Chloride) Ribbed Drain Pipe & Fittings Based on Controlled Inside Diameter
ASTM F894	Polyethylene (PE) Large Diameter profile Wall Sewer and Drain Pipe
ASTM F949	Poly (Vinyl Chloride) (PVC) Corrugated Sewer Pipe With a Smooth Interior and Fittings
ASTM F2435	Steel Reinforced Polyethylene (PE) Corrugated Pipe
ASTM F2562	Steel Reinforced Thermoplastic Ribbed Pipe and Fittings for Non-Pressure Drainage and Sewerage
ASTM F2736	Polypropylene (PP) Corrugated Singe Wall Pipe and Double Wall Pipe
ASTM F2764	Polypropylene (PP) Triple Wall Pipe and Fittings for Non-Pressure Sanitary Sewer Applications
ASTM F2881	Polypropylene (PP) Dual Wall Pipe and Fittings for Non-Pressure Storm Sewer Applications

ITEM G-100 MOBILIZATION AND DEMOBILIZATION

DESCRIPTION

100-1.1 This item consists of preparatory work and operations, including but not limited to operations necessary to move personnel, equipment, and supplies to the project site; to establish offices, buildings and other facilities, except as provided under Item G-130; to perform all other work and operations, including costs incurred, before beginning work on the project; and to complete similar demobilization activities, including submittals such as as-builts, certificates, payrolls, civil rights reports, equipment warranties, etc.

100-2.1 POSTED NOTICES. Prior to commencement of construction activities, the Contractor must display posters as provided under Section GCP 70in accordance with state and federal provisions. These notices must remain posted until final acceptance of the work by the DepartmentCity of Kenai.

METHOD OF MEASUREMENT

100-3.1 Payment for mobilization and demobilization will be made in partial payments as follows:

- **a.** When equipment and supplies are landed in serviceable condition at the project site and other necessary preparation have been completed so that work can commence on other pay items, 60% of the pay item.
- **b.** When 25% or more of the original contract is earned, an additional 20%.
- c. With Final Payment, the remaining 20%.

The City of Kenai reserves the right to require submittal of invoices, receipted bills, payrolls, and other appropriate documents to justify any or all payments under this item.

BASIS OF PAYMENT

100-4.1 Payment will be made at the contract lump sum price for mobilization and demobilization. This price and payment shall be full compensation for all costs associated with this item.

Payment will be made under:

Item G100.010.0000 Mobilization and Demobilization – per lump sum

ITEM G-115 WORKER MEALS AND LODGING, OR PER DIEM

DESCRIPTION

115-1.1 This item consists of complying with the Alaska Department of Labor and Workforce Development (DOLWD) requirements for Worker Meals and Lodging, or Per Diem; as described in the Laborers' and Mechanics' Minimum Rates of Pay (Pamphlet 600), current issue.

Ensure subcontractors comply with the DOLWD requirements. The Pamphlet 600 is available on the DOLWD Division of Labor Standards and Safety internet page: https://labor.alaska.gov/lss/pamp600.htm.

Ensure facilities meet the Alaska Administrative Code 8 AAC 61.1010 and 8 AAC 61.1040 Occupational Safety and Health Standards, 18 AAC 31 Alaska Food Code, and U. S. Code of Federal Regulations 29 CFR Section 1910.142 Temporary Labor Camps.

Do not consider the cost of Meals and Lodging or Per Diem in setting wages for the worker or in meeting wage requirements under AS 23.10.065 or AS 36.05.

METHOD OF MEASUREMENT

115-2.1 There is no measurement for this item.

BASIS OF PAYMENT

115-3.1 Work associated with this section is subsidiary to other contract work and no further additional payment will be made.

ITEM G-135 CONSTRUCTION SURVEYING AND MONUMENTS

DESCRIPTION

135-1.1 GENERAL. Perform surveying and staking essential for the completion of the project and perform the necessary calculations required to accomplish the work in conformance with the Plans and specifications and standard survey and engineering practices.

The Contractor shall provide all survey work including, but not limited to: project layout, cross sections, slope stakes, grade stakes, as-built measurements, and-quantity measurements, and all other surveying as required and necessary to satisfactorily complete the project. Immediately upon completion of initial cross sections, the Contractor shall furnish reduced and checked survey notes to the Engineer. From time to time throughout the work, as requested by the Engineer, the Contractor shall take appropriate sections and shall provide the Engineer with reduced and checked notes from which quantity calculations for progress payment purposes can be accomplished. Notes shall be kept in a neat, orderly, and legible form according to professional surveying practices.

Upon completion of each phase of the work, the Contractor shall furnish the Engineer with all necessary measurements for completion of the as-built drawings. The Contractor shall include identification and location of project features where actual locations differ from locations shown on the Plans. All original survey notes and field books shall become the property of the City of Kenai Department and shall be delivered to the Engineer as a condition to final payment on this contract.

Furnish and install survey monuments and monument cases in conformance with the Plans or as directed.

135-1.2 DEFINITIONS.

- a. **Monument:** A fixed physical object marking a point on the surface of the earth; For the purposes of this definition, a monument is a permanent marker intended to last through the construction of the project, if not definitely. Monuments are used to commence or control a survey; mark the boundaries of a parcel of land; or the centerline of a right-of-way corridor. Monuments will be Primary or Secondary, as shown on the Plans.
- **b. Point:** An identified spot located on the surface of the earth. For purposes of this definition, a point can be a PK nail, wooden hub, rebar, large nail or other structure capable of being utilized as a marker marked by a primary or secondary monument, or marked by a temporary marker such as a PK nail, wooden hub, rebar, large nail, or other structure capable of being utilized as a marker.
- **c. Witness Corner:** A material mark or point usually placed on a property or survey line, at a known distance from a property corner or other survey point. A witness corner is <u>marked on the ground by a monument, and is employed</u> to witness the location of a corner/point that cannot be monumented at its true location.
- **d.** Reference Monument: A material mark or point_monument placed at a known distance and direction from a property corner or other survey point, usually not on a property or survey line. A reference monument is employed to perpetuate a corner/point that cannot be monumented at its true location or where the corner monument is subject to destruction.
- e. Surveyor: The Contractor's Professional Land Surveyor, currently registered in the State of Alaska.

MATERIALS

135-2.1 MONUMENT CASES. Castings shall conform to AASHTO M 105, Class 30A. Castings shall be coated with a bituminous damp-proof coating. Bolting tops shall be used.

135-2.2 PRIMARY MONUMENT. A minimum 2-inch diameter nonferrous pipe at least 30 inches long, with a minimum 4-inch flange at the bottom and having magnets attached at the top and bottom. A minimum 2-1/4-inch diameter nonferrous metal cap must be permanently attached to the top. Mark the cap around the outside edge with the words "STATE OF ALASKA DOT&PF". Permanently stamp every monument with the Surveyor's registration number, the year set, and the point/corner identification. Orient cap so that the data may be read facing up-station when placed on an alignment with stationing. Orient all other caps so that the data may be read facing north.

135-2.3 SECONDARY MONUMENT. A minimum 5/8-inch by 30-inch rebar with a 2-inch aluminum cap attached to the top. Permanently stamp every secondary monument with the Surveyor's registration number and the year set.

CONSTRUCTION REQUIREMENTS

135-3.1 GENERAL. Use competent, qualified personnel and suitable equipment for the layout work required and furnish traffic control, stakes, templates, straight-edges and other devices necessary for establishing, checking and maintaining the required points, lines, and grades.

Furnish computer services to accomplish the work. Check data received from the computer for completeness and accuracy. As soon as practical after completion of the work, and in no case later than acceptance of the project, deliver field books, computer forms and computer output data to the Engineer. This data becomes the property of the Department City of Kenai.

Supervise construction surveying personnel. Correct errors resulting from the operations of said personnel at Contractor expense. The Contractor is responsible for the accuracy of the work.

Work classified as Land Surveying under AS 08.48, and work involving the location, control, and monumentation of construction centerline and right-of-way, shall be performed by or under the responsible charge of a Professional Land Surveyor.

Follow the Department's Alaska Department of Transportation and Public Facilities (ADOT&PF) Construction Surveying Requirements <u>provided in Appendix B.</u>

Ensure that the contract surveyor contacts the Engineer prior to performing survey work under this item.

The DepartmentCity of Kenai will provide sufficient centerline or reference thereto, and at least one benchmark to enable the establishment of planned elevations and centerline. Airport control monuments currently existing at the airport will provide the basis for horizontal and vertical control.

Keep field notes in standard hardbound notebooks survey field books in a clear, orderly, and neat manner consistent with Departmental accepted procedures, including titles, numbering, and indexing. Make field books available for inspection by the Engineer's project personnel at any time. Legible copies of the reduced field notes shall be made daily. Store the field books in the Engineer's Project Office during periods of non-use. Copies of the field books shall be kept in a separate secure location.

Perform the following:

- a. Staking necessary to delineate clearing and/or grubbing limits.
- **b.** (Not Required).
- c. (Not Required).
- d. (Not Required).
- **e.** Bridge staking. Staging Areas: At the beginning of construction, Contractor shall survey top of pad in staging area prior to staging equipment and stockpiling materials.

- f. Setting finishing stakes.
- g. Measurement of pay quantities that require measurement.
- h. (Not Required).
- **i.** Staking, referencing and other actions required to preserve or restore land monuments and property corners. Follow all requirements of A.S. 19.10.260 and A.S. 34.65.040.
- **j.** As-built surveying as required <u>by the General Conditionsunder Section 50-08 Survey Control</u>. Tie as-built measurements and locations to project horizontal and vertical survey control.
- k. (Not Required).
- Provide interim calculations for measured items to the Engineer prior to progress payments for each specific item. Ensure that the calculations are completed, checked, and signed by the person in responsible charge of the work.
- m. Other surveying and staking necessary to complete the project.

Notify the Engineer immediately if a <u>City of Kenai</u> Department-established reference point is discovered to be in error or a reset point is not in relationship to the adjacent centerline points.

Furnish a notekeeper to record field survey notes, including documentation for quantity computations for payment. Ensure that the notekeeper is thoroughly familiar with generally accepted standards of good survey notekeeping practice and the Department's Construction Surveying requirements identified in Appendix B.

The Engineer may randomly spot check the Contractor's surveys, staking, and computations. After the survey or staking has been completed, provide the Engineer with a minimum of 72 hours notice before performing work, and furnish the appropriate data, to allow for random spot checking. The Department-City of Kenai assumes no responsibility for the accuracy of the work.

Measure, compute, and plot all field-measured pay item quantities., including but not limited to excavation and disposal of asphalt cement concrete (AC), Portland cement concrete (PCC) pavement, and classified/unclassified excavation volumes. Stake for measurement and calculation of excavation quantities after AC and PCC pavement removal. Submit a proposed method of measuring and computing volumes to the Engineer in writing for approval before performing any field work under this item.

Provide item quantities, including computations and plots to the Engineer prior to payment for each specific item. The Department City of Kenai will review and accept or modify the quantities provided.

Digital terrain modeling (DTM) may be used in determining earthwork quantities as an alternative to before and after cross sections by average end area if the Engineer has agreed in writing to the DTM method prior to commencement of any field work. If DTM is approved and used, provide plotted cross-sections on 50-foot stations with elevations, offsets and computed end areas in square feet for each section, volumes for the section and cumulative volumes for the alignment, prior to earthwork payments for each item. Provide these cross-sections and associated data for the entire area of earthwork computations along with the terrain model in AutoCAD Civil 3D file format.

Accomplish staking in accordance with the following:

- a. Perform the topographic survey by grid or cross section method of surveying 25 feet beyond <u>limits</u> of construction the project match lines. Take elevation shots at 25-foot intervals, at all terrain breaks, and at topographic features.
- **b.** Record and locate all baselines and connect them to the project's centerline, both horizontally and vertically.

- **c.** Upon completion of the before and after survey, provide the Engineer a grid layout sheet showing the baseline, stations and all spot elevations.
- d. Provide the Engineer a contour map of the original ground and an identical size map showing the final elevations with 0.5 foot contour intervals. Provide the Engineer with plotted cross-sections for each station grid with elevations and offsets shown. Provide electronic files of the AutoCAD Civil 3D surfaces used to substantiate the quantities determined by the survey. The final as-built construction survey shall be signed and sealed by the Surveyor.

At the end of each day's work, hand deliver a copy of the downloaded raw data from the data collector, in hard copy form, to the Engineer. This hard copy shall be signed by the Contractor or Surveyor. If editing is deemed necessary, show all changes in an amended hard copy, the surveyor shall email a copy of the downloaded raw data from the data collector, in its original format, to the Engineer. If editing is deemed necessary, send a separate email with the amended electronic data and a change log annotating the changes.

Provide in the above products to the Engineer before payment will be made for that work. Provide as-builts and electronic data to the Engineer prior to final inspection.

135-3.2 CROSS-SECTION SURVEYS. When required, obtain right-angle cross sections to the construction centerline at the interval detailed in the Department's Construction Surveying Requirements Appendix B.

The following will be supplied by the Department City of Kenai:

- a. Construction Plans and specifications.
- **b.** Design Cross Sections, if any.
- c. State of Alaska Land Survey Monument Record forms.
- d. Department's ADOT&PF Construction Surveying Requirements, Appendix B. One copy.
- e. Design centerline grades.

The following shall be required of the Contractor:

- **a.** Field Books (Level, Cross-Section, Slope Stake, etc.). Use "Rite-in-the-Rain" or similar weather resistant hardbound field survey books. Field books become the property of the City of Kenai Department-upon completion of the work.
- **b.** Label the books and number the pages. Make a heading in the appropriate book (date, weather, names and duties of crew members) at the beginning of each day's work.
- **c.** Update the index of the appropriate book at the end of each day's work.
- **d.** Reduce, check, and adjust level notes.
- **e.** The notekeeper shall compute the cross-section level notes and slope stake catches and a different crew member shall check the computation on a continual basis in the field.
- **f.** Enter the grade data, shoulder width and/or ditch distance, stationing, slope, etc., in the slope stake books.
- **g.** Maintain the position and identifying marks of slope stakes and reference points until used for their intended purpose.
- **h.** Correct errors by drawing a line through them and writing the correct entry directly above. Erasures will not be allowed.

- i. Return field books and copies of the field books to the Project office at the end of each work day or as directed.
- **j.** Provide copies of grade sheets and temporary bench mark elevations to the Engineer 48 hours before beginning work on unclassified excavation or embankment.
- **k.** The Contractor's survey crews shall comply with approved traffic control plans. Coordinate crew activities with the Worksite Traffic Supervisor.
- Keep a survey Party Chief diary, and give a copy of the diary to the Engineer each day. The diary shall contain the following information:
 - (1) Date.
 - (2) Weather.
 - (3) Crew members' names and duties.
 - (4) Type and location of work performed.
 - (5) Hours worked.
 - **(6)** Type of equipment used (brand) and date equipment was double centered or "peg" test was performed.
 - (7) Signature of person in responsible charge.
- **m.** Submit the survey field notes, for the specific area, relating to monument referencing, before beginning clearing, grubbing, or excavation.
- n. Draw cross-sections and complete quantity calculations for all earthwork quantities.

135-3.3 MONUMENTS. Install primary and secondary monuments, as called for in the Plans, at the positions established by the Department. Prior to the start of construction, reference monuments, to include property markers/corners and accessories, that may be disturbed or buried during construction. In addition, reference monuments designated for referencing on the Plans. Prepare and record Monument Record Forms in the appropriate Recorder's Office before disturbing monuments. Monument Record Forms may be obtained from the Engineer. Re-establish monuments in their original position before completion of the project. Prepare and file a Monument Record Form for each reestablished monument. Follow all requirements of A.S. 19.10.260 and A.S. 34.65.040.

Keep records and report to the Engineer evidence that a monument has been disturbed and is no longer reliable or cannot be located and is presumed to be missing. Establish a minimum of two in-line reference points, or three swing-tie reference points in situations where in-line referencing is not desirable. Set reference points outside of the construction limits. Measure distances from the monument to the nearest 0.01 foot. Record referencing of monuments in a separate field book stamped and signed by the Surveyor.

Replace existing monuments disturbed by construction with Primary or Secondary Monuments meeting the requirements of subsections 135-2.1 through 3. When it is impractical to establish a monument in its original position, install a witness corner (WC). Place the WC to a property corner on the property line when the other property corner that defines said line is existing or there has been sufficient retracement to define said line. In other cases, place a reference monument (RM) perpendicular to the centerline at the station of the original position and at a distance from the original position measured in whole feet.

Those monuments found that are not shown on the Plans will be recognized by the Engineer when the following is provided by the Surveyor: Field notes identifying type and location of the monument, and a description of the point the monument marks, with the reason to preserve its location. Monuments not

shown on the Plans will be considered additional work and paid by Item G135.020.0000, Extra Three Person Survey Partyincidental to this bid item and will not receive additional payment.

The Surveyor shall complete a State of Alaska Land Survey Monument Record form for each primary and secondary monument referenced, removed, installed, relocated, or replaced. Provide the required survey information on the form according to statutory requirements, including section, township and range. Meet requirements for recording at the District Recorder's Office in which the project is located for each monument record. Deliver conforming copies of the recorded forms to the Engineer before monument removal or disturbance, and after setting any final monuments requiring monument records.

Set each monument and monument case accurately to lines established at the required location and in a manner as to ensure being held firmly in place. Set existing monuments and monument cases to be adjusted to new elevations in the manner and at the elevations directed.

Primary Airport Control <u>Station</u> (PAC<u>S</u>) and Secondary Airport Control <u>Station</u> (SAC<u>S</u>) monuments are present <u>at the Airportin the project area as shown on the Plans</u>. This control is important and if disturbed, must be reestablished by the Contracting Agency. For this reason, the Contractor is required to employ all reasonable measures to preserve the existing control monuments in an undisturbed condition. If <u>any PACS</u> or SAC<u>S</u> is are disturbed by the Contractor's actions, the Contractor shall reimburse the <u>City of Kenai State of Alaska</u> for the cost of replacing monuments, performing geodetic surveys and related data processing, and filing the completed survey with the National Geodetic Surveys office. The estimated cost for reestablishing a disturbed monument is approximately \$50,000, but costs will vary depending on location, season, availability of staff, and other factors.

135-3.4 CONTRACTOR FURNISHED ENGINEERING TOOLS. (Not Used).

135-3.5 OFFICE ENGINEERING. Calculate finish grades for the embankments as specified according to Plans and/or specifications. Use information available in the field, on as-builts, or as provided by the Engineer. This work shall be performed by or under the responsible charge of a Professional Land Surveyor or a Professional Engineer currently registered in the State of Alaska.

135-3.6 FINAL TRAVERSE. Within 30 days after the Engineer receives a letter stating that construction activities that may disturb the monuments have ceased, the Surveyor shall run a final closed traverse or suitable GPS survey to verify the positional accuracy of installed survey monuments. Tie into the traverse the primary and secondary monuments placed or replaced and undisturbed City of KenaiDepartment-provided control points. Meet the requirements of a secondary monument for traverse points established during this work. The Surveyor shall sign and stamp—seal a letter that lists each monument and its coordinates. The letter shall certify that the monuments are each located within 0.1-foot—acceptable accuracy of their proposed position based on the project survey control points provided by the City of Kenai Department. Deliver the certification letter and field notes for this work to the Engineer.

135-3.7 EXTRA THREE PERSON SURVEY PARTY. (Not Used).

METHOD OF MEASUREMENT

135-4.1 The work will be measured as follows:

a. Lump Sum. No measurement of quantities will be made.

BASIS OF PAYMENT

135-5.1 Pay Items include all necessary personnel, equipment, transportation, and supplies to accomplish the work described in the Contract, or as directed by the Engineer.

Pay Item G135.010.0000 Construction Surveying by the Contractor, includes all Contractor surveying work described in the Contract.

Payment will be made under:

Item G135.010.0000 Construction Surveying by the Contractor – per lump sum

ITEM G-200 CONTRACTOR QUALITY CONTROL PROGRAM

DESCRIPTION

200-1.1 GENERAL. The Contractor shall assure that all materials and completed construction conform to contract Plans, technical specifications, and other requirements, whether manufactured by the Contractor, or procured from subcontractors or vendors. The Contractor shall establish, provide, and maintain an effective Quality Control Program that details the methods and procedures that will be used. Although guidelines are established and certain minimum requirements are specified herein and elsewhere in the contract technical specifications, the Contractor shall assume full responsibility for accomplishing the stated purpose.

The intent of this section is to enable the Contractor to establish a necessary level of control that will:

- **a.** Adequately provide for the production of acceptable quality materials.
- **b.** Provide sufficient information to assure both the Contractor and the Engineer that the specification requirements can be met.
- c. Allow the Contractor as much latitude as possible to develop their own standard of control.

The Contractor shall be prepared to discuss and present, at the preconstruction conference, their understanding of the quality control requirements. The Contractor shall not begin any construction or production of materials to be incorporated into the completed work until the Quality Control Program has been reviewed and accepted by the Engineer. No partial payment will be made for materials subject to specific quality control requirements until the Quality Control Program has been reviewed.

The quality control requirements contained in this section and elsewhere in the contract technical specifications are in addition to and separate from the acceptance testing requirements. Acceptance testing requirements are the responsibility of the Engineer.

REQUIREMENTS

200-2.1 DESCRIPTION OF PROGRAM.

- a. General Description. The Contractor shall establish a Quality Control Program to perform inspection and testing of each item of work for which it is required by the technical specifications, including those performed by subcontractors. This Quality Control Program shall ensure conformance to applicable specifications and Plans with respect to materials, workmanship, construction, finish, and functional performance. The Quality Control Program shall be effective for control of all construction work performed under this Contract and shall specifically include surveillance and tests required by the technical specifications, in addition to other requirements of this section and any other activities deemed necessary by the Contractor to establish an effective level of quality control.
- b. Quality Control Program. The Contractor shall describe the Quality Control Program in a written document which shall be reviewed and accepted by the Engineer prior to the start of any production, construction, or off-site fabrication. The written Quality Control Program shall be submitted to the Engineer for review at least 5 calendar days before the preconstruction conference. The Contractor's Quality Control Plan and Quality Control testing laboratory must be accepted in writing by the Engineer prior to the start of any production, construction, or off-site fabrication.

The Quality Control Program shall be organized to address, as a minimum, the following items:

(1) Quality control organization;

- (2) Project progress schedule;
- (3) Submittals schedule;
- (4) Inspection requirements;
- (5) Quality control testing plan;
- (6) Documentation of quality control activities and distribution of QC reports;
- (7) Requirements for corrective action when quality control and/or acceptance criteria are not met; and
- (8) Material quality and construction means and methods.

The Contractor shall add any additional elements to the Quality Control Program that are necessary to adequately control all production and/or construction processes required by this contract.

200-2.2 QUALITY CONTROL ORGANIZATION. The Contractor's Quality Control Program shall be implemented by the establishment of a separate quality control organization. An organizational chart shall be developed to show all quality control personnel, their authority, and how these personnel integrate with other management/production and construction functions and personnel.

The organizational chart shall identify all quality control staff by name and function, and shall indicate the total staff required to implement all elements of the Quality Control Program, including inspection and testing for each item of work. If necessary, different technicians can be utilized for specific inspection and testing functions for different items of work. If an outside organization or independent testing laboratory is used for implementation of all or part of the Quality Control Program, the personnel assigned shall be subject to the qualification requirements described below. The organizational chart shall indicate which personnel are Contractor employees and which are provided by an outside organization.

The quality control organization shall consist of the following minimum personnel:

a. Program Administrator. The Program Administrator shall be a full-time employee of the Contractor, or a consultant engaged by the Contractor. The Program Administrator shall have a minimum of 5 years of experience in similar construction and shall have had prior quality control experience on a project of comparable size and scope as the contract.

The Program Administrator shall have full authority to institute any and all actions necessary for the successful implementation of the Quality Control Program to ensure compliance with the contract Plans and technical specifications. The Program Administrator shall have the authority to immediately stop production until materials and/or processes are in compliance with contract specifications. The Program Administrator shall report directly to a responsible officer of the construction firm.

b. Quality Control Technicians. A sufficient number of quality control technicians necessary to adequately implement the Quality Control Program shall be provided. These personnel shall be engineers, engineering technicians, or experienced craftsman with qualifications in the appropriate field equivalent to NICET Level II in Civil Engineering Technology or higher and shall have a minimum of 2 years of experience in their area of expertise.

The quality control technicians shall report directly to the Program Administrator and shall perform the following functions:

- (1) Inspection of all materials, construction, plant, and equipment for conformance to the technical specifications, and as required 200-2.4 below.
- (2) Performance of all quality control tests as required by the technical specifications and 200-2.5 below.

Certification at an equivalent level of qualification and experience, by a state or nationally recognized organization will be acceptable in lieu of NICET certification including WAQTC qualification in any modules for which testing will be performed.

c. Staffing Levels. The Contractor shall provide sufficient qualified quality control personnel to monitor each work activity at all times. Where material is being produced in a plant for incorporation into the work, separate plant and field technicians shall be provided at each plant and field placement location. The scheduling and coordinating of all inspection and testing must match the type and pace of work activity. The Quality Control Program shall state where different technicians will be required for different work elements.

200-2.3 SUBMITTALS SCHEDULE. The Contractor shall submit a detailed listing of all submittals (e.g., mix designs, material certifications) and shop drawings required by the technical specifications conforming to the requirements of Section 01 33 00 Submittal Procedures.

200-2.4 INSPECTION REQUIREMENTS. Quality control inspection functions shall be organized to provide inspections for all definable features of work, as detailed below. All inspections shall be documented by the Contractor as specified by 200.2.7 below.

Inspections shall be performed daily to ensure continuing compliance with contract requirements until completion of the particular feature of work. These shall include the following minimum requirements:

- a. During plant operation for material production, quality control test results and periodic inspections shall be utilized to ensure the quality of aggregates and other mix components, and to adjust and control mix proportioning to meet the approved gradation and other requirements of the technical specifications. All equipment utilized in proportioning and mixing shall be inspected to ensure its proper operating condition. The Quality Control Program shall detail how these and other quality control functions will be accomplished and utilized.
- b. During field operations, quality control test results and periodic inspections shall be utilized to ensure the quality of all materials and workmanship. All equipment utilized in placing, finishing, and compacting shall be inspected to ensure its proper operating condition and to ensure that all such operations are in conformance to the technical specifications and are within the plan dimensions, lines, grades, and tolerances specified. The Program shall document how these and other quality control functions will be accomplished and utilized.

200-2.5 QUALITY CONTROL TESTING PLAN. As a part of the overall Quality Control Program, the Contractor shall implement a quality control testing plan, as required by the technical specifications. The testing plan shall include the minimum tests and test frequencies required by the technical specification Item per the material testing and frequency chart included in Appendix C, as well as any additional quality control tests that the Contractor deems necessary to adequately control production and/or construction processes.

The testing plan can be developed in a spreadsheet fashion and shall, as a minimum, include the following:

- a. Specification item number (e.g., D-701);
- **b.** Item description (e.g., Pipe for Storm Drains and Culverts);

- c. Test type (e.g., gradation, fracture, liquid limit);
- d. Test standard (e.g., ASTM or AASHTO test number, as applicable);
- **e.** Test frequency (e.g., as required by technical specifications or minimum frequency listed in Appendix C when requirements are not stated);
- f. Responsibility (e.g., plant technician); and
- **g.** Control requirements (e.g., target, permissible deviations).

The testing plan shall contain a statistically-based procedure of random sampling for acquiring test samples according to ASTM D 3665. The Engineer shall be provided the opportunity to witness quality control sampling and testing.

All quality control test results shall be documented by the Contractor as required by 200.2.7 below.

200-2.6 MATERIAL SAMPLING AND TESTING. Contractor shall perform material sampling and testing for earthwork materials in accordance with Appendix C.

200.2.7 DOCUMENTATION. The Contractor shall maintain current quality control records of all inspections and tests performed. These records shall include factual evidence that the required inspections or tests have been performed, including type and number of inspections or tests involved; results of inspections or tests; nature of defects, deviations, causes for rejection, etc.; proposed remedial action; and corrective actions taken.

These records must cover both conforming and defective or deficient features, and must include a statement that all supplies and materials incorporated in the work are in full compliance with the terms of the contract. Legible copies of these records shall be furnished to the Engineer daily. The records shall cover all work placed subsequent to the previously furnished records and shall be verified and signed by the Contractor's Program Administrator.

Specific Contractor quality control records required for the contract shall include, but are not necessarily limited to, the following records:

- a. Daily Quality Control Technician Inspection Reports. Each Contractor quality control technician shall maintain a daily log of all inspections performed for both Contractor and subcontractor operations on a form acceptable to the Engineer. These technician's daily reports shall provide factual evidence that continuous quality control inspections have been performed and shall, as a minimum, include the following:
 - (1) Technical specification item number and description;
 - (2) Compliance with approved submittals;
 - (3) Proper storage of materials and equipment;
 - (4) Proper operation of all equipment;
 - (5) Adherence to Plans and technical specifications;
 - (6) Review of quality control tests; and
 - (7) Safety inspection.

The daily inspection reports shall identify inspections conducted, results of inspections, location and nature of defects found, causes for rejection, and remedial or corrective actions taken or proposed.

The daily inspection reports shall be signed by the responsible quality control technician and the Program Administrator. The Engineer shall be provided at least one copy of each daily inspection report on the work day following the day of record. When quality control inspection and test results are recorded and transmitted electronically, the results shall be archived.

- **b.** Daily Quality Control Test Reports. The Contractor shall be responsible for establishing a system which will record all quality control test results. Daily test reports shall document the following information:
 - (1) Technical specification item number and description;
 - (2) Test designation;
 - (3) Location;
 - (4) Date of test;
 - (5) Control requirements;
 - (6) Test results;
 - (7) Causes for rejection;
 - (8) Recommended remedial actions; and
 - (9) Retests.

Test results from each day's work period shall be submitted to the Engineer prior to the start of the next day's work period. When required by the technical specifications, the Contractor shall maintain statistical quality control charts. The daily test reports shall be signed by the responsible quality control technician and the Program Administrator. When quality control daily test results are recorded and transmitted electronically the results shall be archived.

200-2.8 CORRECTIVE ACTION REQUIREMENTS. The Quality Control Program shall indicate the appropriate action to be taken when a process is deemed, or believed, to be out of control (out of tolerance) and detail what action will be taken to bring the process into control. The requirements for corrective action shall include both general requirements for operation of the Quality Control Program as a whole, and for individual items of work contained in the technical specifications.

The Quality Control Program shall detail how the results of quality control inspections and tests will be used for determining the need for corrective action and shall contain clear sets of rules to gauge when a process is out of control and the type of correction to be taken to regain process control.

When applicable or required by the technical specifications, the Contractor shall establish and utilize statistical quality control charts for individual quality control tests. The requirements for corrective action shall be linked to the control charts.

200-2.9 INSPECTION BY THE ENGINEER. All items of material and equipment shall be subject to inspection by the Engineer at the point of production, manufacture, or shipment to determine if the Contractor, producer, manufacturer, or shipper maintains an adequate quality control system in conformance with the requirements detailed herein and the applicable technical specifications and Plans.

In addition, all items of materials, equipment, and work in place shall be subject to inspection by the Engineer at the site for the same purpose.

Inspection by the Engineer does not relieve the Contractor of performing quality control inspections of either on-site or off-site Contractor's or subcontractor's work.

200-2.10 NONCOMPLIANCE.

The Engineer will notify the Contractor of any noncompliance with any of the foregoing requirements. The Contractor shall, after receipt of such notice, immediately take corrective action. Any notice, when delivered by the Engineer or their authorized representative to the Contractor or their authorized representative at the site of the work, shall be considered sufficient notice.

In cases where quality control activities do not comply with either the Contractor's Quality Control Program or the contract provisions, or where the Contractor fails to properly operate and maintain an effective Quality Control Program and no effective corrective actions have been taken after notification of non-compliance the Engineer may:

- a) Order the Contractor to replace ineffective or unqualified quality control personnel or subcontractors and/or
- b) Order the Contractor to stop operations until appropriate corrective action is taken.
- c) Withhold payment in accordance with the General Conditions.

METHOD OF MEASUREMENT

200-3.1 This item will not be measured for payment. The Engineers acceptance of the work constitutes measurement of this item.

BASIS OF PAYMENT

200-4.1 The Contractor shall propose a schedule percentage of payment of the lump sum based upon the implementation of the quality control program for the duration of the project. In this schedule of payment provide a detailed list of items to be completed prior to payment of each scheduled payment. The Engineer may modify in part or reject in its entirety the proposed schedule of payment by the Contractor. In any case, the Engineer will be the final authority in determining the schedule of payment and the acceptance of the work.

Payment will be made under:

Item G200.010.0000 Contractor Quality Control Program - per lump sum

ITEM G-300 CRITICAL PATH METHOD SCHEDULING

DESCRIPTION

300-1.1 Provide and maintain a Critical Path Method (CPM) progress schedule for the project. Use the schedule in coordinating and monitoring of all work under the Contract including activity of subcontractors, manufacturers, suppliers, and utility companies, and reviews by the Department City of Kenai. Update the CPM schedule, as required.

Provide construction Prepare and submit Work Plans.

SUBMITTAL OF SCHEDULE

300-2.1 Submit a detailed initial CPM Schedule at the pre-construction conference for the Engineer's acceptance as set forth below and with each monthly progress payment.

The construction schedule, for the entire project, may not exceed the specified contract time.

Allow the Engineer 14 days to review the initial CPM Schedule. If revisions are required, make them promptly. The finalized CPM Schedule must be completed and accepted prior to commencement of any work on the project.

REQUIREMENTS AND USE OF SCHEDULE

300-3.1

- **a. Schedule Requirements.** Prepare the CPM schedule as a Precedence Diagram Network developed in the activity-on-node format which includes:
 - (1) Activity description
 - (2) Activity duration
 - (3) Resources required for each of the project activities, including:
 - (a) Labor (showing work days per week, holidays, shifts per day, and hours per shift)
 - (b) Equipment (including the number of units of each type of equipment)
 - (c) Materials.

Show on the activity-on-node diagram the sequence and interdependence of all activities required for complete performance of all items of work under this Contract, including shop drawing submittals and reviews and fabrication and delivery activities.

No activity duration may be longer than 15 work days without the Engineer's approval.

The Engineer reserves the right to limit the number of activities on the schedule.

Consider that schedule float time is shared equally with the Department City of Kenai.

The contract completion time will be adjusted only for causes specified in this Contract.

b. Schedule Updates. Hold job site progress meetings with the Engineer for the purpose of updating the CPM Schedule. Meet with the Engineer monthly, or as deemed necessary by the Engineer.

Review progress and verify finish dates of completed activities, remaining duration of uncompleted activities, and any proposed logic and/or time estimate revisions. Submit a revised CPM schedule within 5 working days after this meeting showing the finish dates of completed activities and updated times for the remaining work, including any addition, deletion, or revision of activities required by Contract modification.

- **c. Work Plans.** In addition to the CPM schedule, submit a work plan every 2 weeks during construction, detailing your proposed operations for the forthcoming two weeks. Include:
 - (1) Work activities
 - (2) Manpower involved by trade
 - (3) Work hours
 - (4) Equipment involved
 - (5) Location of the work to be performed
 - (6) All safety and phasing requirements specified in the Construction Safety Phasing Plan (CSPP) included in Exhibit D.
- d. Payment. Progress payment in addition to the amount of this bid item may be withheld if the requirements of this specification are not met. Failure to submit an updated CPM Schedule may result in payments withheld in accordance with the General Conditions.

METHOD OF MEASUREMENT

300-4.1 CPM Scheduling will not be measured for payment.

BASIS OF PAYMENT

300-5.1 At the lump sum price for CPM Scheduling. This price and payment shall be full compensation for all costs associated with the item.

Payment will be made under:

Item G300.010.0000 CPM Scheduling – per lump sum

ITEM P-152 EXCAVATION, SUBGRADE, AND EMBANKMENT

DESCRIPTION

152-1.1 This item consists of excavation, hauling, embankment (or waste disposal), placement, grading and compaction of all materials required to <u>reconstruct the storm drain system from MH 02 to MH 05</u>construct runway safety areas, taxiway safety areas, runways, taxiways, aprons, drainage, buildings, roadways, parking, and other work. Construct according to the specifications, and conform to the dimensions and typical sections shown on the Plans.

MATERIALS

152-2.1 MATERIAL DEFINITIONS. The Contract will designate material to be removed from within the project lines and grades as classified excavation (common, rock, or muck) or as unclassified excavation. Material obtained from outside the project lines and grades is borrow.

All material shall be described as defined below, but no quantity of material shall be defined or paid in more than one category:

- **a. Unclassified Excavation.** All material, regardless of its nature, which is not paid for under another contract item. May include common, rock, or muck.
- **b. Common Excavation.** Suitable material such as silt, sand, gravel, and granular material that does not require blasting or ripping. Not rock or muck.
- **c. Rock Excavation.** Rock that cannot be excavated without blasting or ripping, and boulders containing a volume of more than 0.5 cubic yard.
- **d. Muck Excavation.** Soil, organic matter, and other material not suitable for embankment or foundation material, including material that will decay or produce subsidence in the embankment such as stumps, roots, logs, humus, or peat.
- **e. Drainage Excavation.** Excavation made for the primary purpose of controlling drainage including: intercepting, inlet or outlet ditches; temporary levee construction; or any other type as shown on the Plans.
- **f. Borrow.** Suitable material that is required for the construction of embankment or for other portions of the work. Borrow material shall be obtained from sources within the limits of the airport property but outside the project lines and grades, or from sources outside the airport property.
- g. Foundation Soil. In-situ soil or undisturbed ground.
- h. Ditch Lining. Use crushed or naturally occurring stones that are sound and durable, are not larger than 8 inches in greatest dimension, and containing not more than 50% by weight passing a 3-inch sieve and not more than 5% by weight passing the 1-inch sieve as determined by ATM 304, or as accepted by the Engineer.
- **152-2.2 UNSUITABLE MATERIAL.** Material that does not meet the testing requirement for suitable material. Material containing vegetable or organic matter, such as muck, peat, organic silt, or sod is considered unsuitable for use in embankment construction. Material that is contaminated by hazardous substances, including fuel or oil, in greater quantity than state and federal standards allow is considered unsuitable for use <u>on any component of the project</u>.
- **152-2.3 SUITABLE MATERIAL.** Suitable material may be obtained from classified excavation, unclassified excavation, or borrow. The Engineer will approve material as "suitable" for use in embankment when the material meets the following criteria:

- a. Sand, rock, gravel, silt, concrete, asphalt pavement, and other inorganic material;
- b. Gradation of 100% by weight passing 6 inch screen; and
- c. Meets definition of Non-Frost Susceptible in GCP Subsection 10-03, except delete "6%" and replace with "10%" (passing No. 200 screen). No more than 15% of the minus 3-inch material passes the No. 200 screen as determined by sieve analysis performed in accordance with ATM 304 and has a plastic index of 6 or less as determined in accordance with ATM 205.

The Engineer may, in their discretion, approve oversize material as "suitable" for use in embankment when the material meets the following criteria:

- a. Sand, rock, gravel, silt, concrete, asphalt pavement, and other inorganic material;
- b. Gradation of 100% by weight passing 24-inch screen;
- **c.** Meets definition of Non-Frost Susceptible in GCP Subsection 10-03, except delete "6%" and replace with "10%" (passing No. 200 screen); and
- **d.** Rock is well graded with an even distribution of rock sizes, and can be compacted with a minimal amount of voids.

CONSTRUCTION METHODS

152-3.1 GENERAL. Perform all necessary clearing and grubbing in accordance with Item P-151, installation of storm drain piping in accordance with Item D-701 and construction surveying in accordance with Item G-135, including staking of lines and grades, prior to beginning excavation, grading, and embankment operations in any area.

The suitability of material to be placed in embankments shall be subject to approval by the Engineer. Material with organics, when approved by the Engineer as suitable to support vegetation, may be used on top of the embankment slope.

Unsuitable material shall be disposed of in waste areas shown on the Plans or in locations acceptable to the Engineer. Material contaminated by hazardous substances shall require special handling and disposal, performed according to GCP Subsection 70-11.f. and using methods acceptable to the Engineer.

a. Waste Areas. All waste areas shall be graded to allow positive drainage of the area and of adjacent areas. The surface elevation of waste areas shall not extend above the surface elevation of adjacent usable areas of the airport, unless specified on the Plans or approved by the Engineer. Unsuitable material shall not be left in windrows or piles, and shall not extend into the Obstacle-Free Zone as shown on the plans.

All waste areas shall be protected from erosion according to the SWPPP. Areas where seeding is called for, in which the top layer of soil material has become compacted, by hauling or other activities of the Contractor shall be scarified and disked to a depth of 4 inches, in order to loosen and pulverize the soil.

The Contractor shall obtain all permits required for placing waste in areas they choose, and which are not covered by Department Owner obtained permits. When the Contractor is required to locate a disposal area outside the airport property limits at his/her own expense, he shall obtain and file with the Engineer Project Representative, permission in writing from the property owner for the use of private property for this purpose.

b. Utility Work. Utility work shall be performed, and compensation claims for utility work made, according to GCP Subsection 50-06. If it is necessary to work thorough or around existing utilities or associated structures, the Contractor shall be responsible for and shall take all necessary

precautions to preserve the utilities or provide temporary services. When utilities not shown on the Plans are encountered, the Contractor shall immediately notify the Engineer, and the Engineer will determine the disposition of the utility. The Contractor shall, at no additional cost to the DepartmentCity of Kenai, satisfactorily repair or pay the cost of all damage to utilities or associated structures which may result from any of the Contractor's operations.

152-3.2 EXCAVATION. Excavation for storm drain pipe shall be in accordance with Section D-701. No excavation shall be started until the Contractor has construction surveyed the work, including staking the lines and grades, and the Engineer has reviewed stakes, elevations and measurements of the ground surface. As required in GCP Subsection 40-04, aAll Useable Excavation of suitable material shall be used in the formation of embankment or for other purposes shown on the Plans. All unsuitable material shall be disposed of in waste areas as shown on the Plans or as directed by the Engineer.

When the volume of the Useable Excavation exceeds that required to construct the embankments to the grades indicated, the excess material shall be used to grade the areas of ultimate development or disposed of as directed. When the volume of Useable Excavation is not sufficient for constructing the fill to the grades indicated, borrow shall be used to make up the deficiency.

The grade shall be maintained so that the surface is well drained at all times. When necessary, temporary drains and drainage ditches shall be installed to intercept or divert surface water that may affect the work. All temporary drains and drainage ditches shall be constructed and maintained according to the SWPPP.

In cuts, all loose or protruding rocks on the back slopes shall be scaled or otherwise removed to line of finished grade of slope. All cut-and-fill slopes shall be uniformly dressed to the slope, cross section, and alignment shown on the Plans or as directed by the Engineer.

- a. Selective Grading. When selective grading is required, the more suitable material as designated by the Engineer shall be used in constructing the upper layers of the embankment or pavement structure. If, at the time of excavation, it is not possible to place this material in its final location, it shall be stockpiled in approved areas.
- b. Undercutting. Rock, shale, hardpan, loose rock, boulders, or other material unsatisfactory for runways, taxiways, safety areas, subgrades, roads, shoulders, or any areas intended for turfing shall be excavated to a minimum depth of 12 inches below the subgrade, or to the depth directed by the Engineer. Muck, peat, matted roots, or other yielding material that is unsatisfactory for foundation soil compaction, shall be removed to the depth specified. Unsuitable materials shall be disposed of at locations shown on the Plans. The excavated area shall be backfilled with suitable material, obtained from the grading operations or borrow areas and thoroughly compacted as specified. Where rock cuts are made and backfilled with suitable material. Any pockets created in the rock surface shall be drained according to the details shown on the Plans. The material removed will be paid as P152.010.0000 Unclassified Excavation.
- **c. Overbreak.** Overbreak, including slides, is that portion of any material displaced or loosened beyond the finished work, as planned or authorized by the Engineer. All overbreak shall be graded or removed by the Contractor and disposed of as directed by the Engineer. Payment will not be made for the removal and disposal of overbreak which the Engineer determines as avoidable. Unavoidable overbreak will be paid as P152.010.0000 Unclassified Excavation.
- d. Removal of Structures and Utilities. The Contractor shall accomplish the removal of existing structures and utilities that are specified to be removed or demolished, except when another entity is identified in the Contract to accomplish the work. Existing storm drain piping shall be removed as identified on the Plans. Removed items shall become the responsibility of the Contractor and Contractor shall properly dispose of materials at an approved contractor-provided disposal location. All existing structural foundations shall be excavated and removed to a depth at least 2 feet below the top of subgrade or as indicated on the Plans, and the material disposed of as directed. Holes left after removing foundations shall be backfilled with suitable material and compacted as specified. The material will be paid as P152.010.0000 Unclassified Excavation.

e.d. Foundation Soil Compaction Requirements. In areas of excavation, the top 6 inches of foundation soil under areas serving aircraft or vehicle traffic loadings shall be compacted to a density of not less than 95% of the maximum density as determined by ATM 207, ATM 212, or ATM 309. The in-place field density and moisture content shall be determined according to ATM 213.

Compaction of the foundation soil is a subsidiary cost to excavation.

The Engineer may direct the Contractor to over excavate foundation soil that is soft or compresses excessively, and to backfill excavation with compacted suitable material. The material will be paid as P152.010.0000 Unclassified Excavation.

f. Blasting. Blasting will be permitted only when proper precautions are taken for the safety of all persons, the work, and the property. The Contractor is responsible for blasting operations including the requirements of GCP Subsection 70-10. All damage done to the work or property shall be repaired at the Contractor's expense. All operations of the Contractor in connection with the transportation, storage, and use of explosives shall conform to all federal, state, local regulations, explosive manufacturers' instructions, and approved permits. Blasting is not allowed.

The Contractor shall submit a Safety Plan that includes descriptions of road and runway closures, warning signals; and plans for notification of affected local, state, and federal agencies, the airport manager, and other interested parties. Discuss in the Safety Plan methods for protection of life and health, public and private property, new work or existing work on the project, nearby structures, wetlands, waters and wildlife. When working within airport property include an emergency response contingency to clear runways of debris, to repair damaged navigational or visual aids; and get a NOTAMs before blasting. Hold a safety meeting prior to commencement of blasting operations to address safety issues.

In each distinct blasting area the Contractor shall submit a blasting plan, prepared by a qualified blaster, to the Engineer. This plan must consist of hole size, depth, spacing, burden, type of explosives, type of delay sequence, maximum amount of explosive on any one delay period, depth of rock, and depth of overburden if any. The maximum explosive charge weights per delay included in the plan shall not be increased without submitting a revised blasting plan to the Engineer.

When blasting, the Safety Plan and the Blasting Plan shall conform to FAA Order 7400.2 Procedures for Handling Airspace Matters, Chapter 27, and AC 150/5370-2 Operational Safety on Airports During Construction.

The Contractor shall keep a record of each blast fired, its date, time, and location; the amount of explosives used, maximum explosive charge weight per delay period, and, where necessary, seismograph records identified by instrument number and location. These records shall be made available daily to the Engineer.

The Engineer will keep the submitted plans and records, and has authority to review and reject plans.

152-3.3 BORROW SOURCES. Borrow sources within the airport property if available will be identified on the Plans. Excavation of borrow on airport property shall be made only at these identified locations and within the lines and grades staked.

Borrow sources outside of airport property may be identified in the Contract according to GCP Subsection 60-02. The Contractor shall furnish additional borrow sources if necessary.

Removal of overburden and waste material, permit costs, mineral royalties, and other costs of material source development are subsidiary to Section D-701, and shall be included in the unit price for borrow.

152-3.4 DRAINAGE EXCAVATION. Drainage excavation for intercepting, inlet or outlet drains; for temporary levee construction; or for any other type as designed or as shown on the Plans. The work shall be performed in the proper sequence with the other construction and according to the SWPPP. All suitable material shall be placed in embankment fills; unsuitable material shall be placed in waste areas or as directed by the Engineer. Intercepting ditches shall be constructed prior to starting adjacent excavation operations. All necessary work shall be performed to secure a finish true to line, elevation, and cross section.

The Contractor shall maintain ditches constructed on the project to the required cross section and shall keep them free of debris or obstructions until the project is accepted.

Place and spread ditch lining materials so that the finished face is uniform and conforms to the lines and slope shown on the Plans or as directed.

152-3.5 PREPARATION OF EMBANKMENT AREA. In areas of Clearing and Grubbing, completely break up the subgrade by plowing or scarifying to a minimum depth of 6 inches. Where an embankment is to be constructed to a height of 4 feet or less, or where the embankment supports asphalt or concrete paving, compact the subgrade as indicated in Subsection 152-3.2e. Where the height of fill is greater than 4 feet and the embankment does not support asphalt or concrete paving, compact the subgrade to the density of the surrounding ground before construction of embankment.

When new embankment is placed on slopes steeper than 4:1, the existing ground shall be continuously benched over the areas as the work is brought up in layers. Benching shall be of sufficient width to permit placing of material and compacting operations. Each horizontal cut shall begin at the intersection of the original ground and the vertical side of the previous bench. Material thus cut out and deemed suitable shall be blended and incorporated into the new embankment.

No direct payment shall be made for the work performed under this section. The necessary clearing and grubbing and the quantity of excavation removed will be paid for under the respective items of work.

152-3.6 FORMATION OF EMBANKMENTS. Embankments Trenches shall be formed compacted in successive horizontal layers of not more than 8 inches in loose depth for the full width of the cross section trench, unless otherwise approved by the Engineer.

The grading and compaction operations shall be conducted, and the various soil strata shall be placed, to produce an embankmenta trench as shown on the typical cross section or as directed by the Engineer. Materials such as brush, hedge, roots, stumps, grass and other unsuitable material, shall not be incorporated or buried in the embankmentbackfill.

- a. Suspension of Operations. Operations on earthwork shall be suspended at any time when satisfactory results cannot be obtained because of rain, freezing, moisture content or other unsatisfactory conditions of the field. Frozen material shall not be placed in the embankment-backfill nor shall embankment-backfill be placed upon frozen material. Material shall not be placed on surfaces that are muddy, frozen, or contain frost. The Contractor shall drag, blade, or slope the embankment to provide proper surface drainage.
- **b.a. Soft Foundations.** When embankments are to be constructed across wet or swampy ground, which will not support the weight of heavy hauling and spreading equipment, the Contractor shall use methods of embankment construction, and use hauling and spreading equipment, that will least disturb the soft foundation (defined as having a California Bearing Ratio less than 3). When soft foundations are encountered, and when approved by the Engineer, the lower part of the fill may be constructed by dumping and spreading successive vehicle loads in a uniformly distributed layer of a thickness not greater than that necessary to support the vehicle while placing subsequent layers, after which the remainder of the embankment shall be constructed in layers and compacted as specified. The Contractor shall not be required to compact the soft foundation, and at the Engineer's option, may not be required to clear and grub.

- **e.b. Moisture.** The material in the layer being placed shall be within ±2% of optimum moisture content before rolling to obtain the prescribed compaction. In order to achieve a uniform moisture content throughout the layer, wetting or drying of the material and manipulation shall be performed when necessary. Should the material be too wet to permit proper compaction or rolling, all work on all of the affected portions of the <u>embankment trench</u> shall be delayed until the material has dried to the required moisture content. Watering of dry material to obtain the proper moisture content shall be done with approved equipment that will sufficiently distribute the water. Sufficient equipment to furnish the required water shall be available at all times.
- d-c. Compaction. Rolling operations shall be continued until the embankmentbackfill is compacted to not less than 95% of maximum density as determined by ATM 207 or ATM 212the density shown on the Plans as determined by ATM 207 for AASHTO T 180 or ATM 212. Under all areas serving aircraft or vehicle traffic loadings, the embankment shall be compacted to a density of not less than 98% of the maximum density as determined by ATM 207 or ATM 212. The in-place field density and moisture content shall be determined according ATM 213202.

Keep dumping and rolling areas separate. Do not cover any layer by another until the proper density is obtained.

During construction of the embankment, the Contractor shall route their equipment at all times, both when loaded and when empty, over the layers as they are placed and shall distribute the travel evenly over the entire width of the embankment. The equipment shall be operated in such a manner that hardpan, cemented gravel, clay, or other chunky soil material will be broken up into small particles and become incorporated with the other material in the layer.

In the construction of embankments, layer placement shall begin in the deepest portion of the fill and progress in layers approximately parallel to the finished pavement grade line. Stones or fragmentary rock larger than 3 inches in their greatest dimensions will not be allowed in the top 6 inches of the embankment.

e.d. Oversize Material. (Not Used).

Rock or boulders larger than 2 feet in thickness shall both be disposed of outside the excavation or embankment areas, in places and in the manner designated by the Engineer; or they may be crushed to less than 2 feet thickness and used in the embankment.

- f.e. Subsidiary Costs. Excavation and embankment is a single pay item; there will be no separate measurement or payment. The costs for material source development, blasting, excavation, hauling, placing in layers, compacting, disking, watering, mixing, sloping, grading, and other necessary operations for construction of embankments, are subsidiary and shall be included in the contract unit prices for excavation, borrow, or other pay items. Removal and disposal of existing piping and all trench excavation and backfill associated with pipe installation is subsidiary to D-701 items used for the work.
- g-f. Frozen Material. Frozen material shall not be placed in the embankment section nor shall embankment backfill be placed upon frozen material, unless this construction method is identified in the special provisions, or is part of a Contractor's Progress Schedule that the Engineer has approved.
- **152-3.7 FINISHING AND PROTECTION OF SUBGRADE.** After the subgrade has been substantially completed, the full width shall be conditioned by removing any soft or other unstable material that will not compact properly. The resulting areas and all other low areas, holes or depressions shall be brought to finish subgrade elevation with suitable material. Scarifying, blading, rolling and other methods shall be performed to provide a thoroughly compacted subgrade, whose top is shaped to the lines and grades shown on the Plans.

Grading of the top of subgrade shall be performed so that it will drain readily. The Contractor shall take all precautions necessary to protect the subgrade from damage. The Contractor shall limit hauling over the finished subgrade to that which is essential for construction purposes.

All ruts, ponds or rough places that develop in a completed subgrade shall be repaired, smoothed and recompacted before another layer is placed on top of the subgrade.

No subbase, or surface course shall be placed on the subgrade until the subgrade has been approved by the Engineer. Erosion and sediment control shall be done according to the SWPPP. Work described in this subsection is subsidiary and shall be included in the contract unit prices.

152-3.8 TOLERANCES. In those areas upon which a subbase or base course is to be placed, the top of the subgrade shall be of such smoothness that, when tested with a 12-foot straightedge applied parallel and at right angles to the centerline, it shall not show any deviation in excess of 1/2-inch, or shall not be more than 0.05-foot from true grade as established by grade hubs or pins. Any deviation in excess of these amounts shall be corrected by loosening, adding, or removing materials; reshaping; and recompacting by watering and rolling.

On Runway Safety Areas, intermediate and other designated areas, the surface shall be of such smoothness that it will not vary more than 0.10-foot from true grade as established by grade hubsthe surrounding grades. Any deviation in excess of this amount shall be corrected by loosening, adding or removing materials, and reshaping.

152-3.9 TOPSOIL. When topsoil is specified or required as shown on the plans or under Item T-905, it may be salvaged from stripping or other grading operations. The topsoil shall meet the requirements of Item T-905. The material may be stockpiled at approved locations in conformance with the CSPP.

Upon completion of grading operations, topsoil shall be handled and placed as directed, or as required in Item T-905. No direct payment will be made for topsoil under Item P-152.

METHOD OF MEASUREMENT

152-4.1 This item will not be measured for payment.

BASIS OF PAYMENT

152-5.1 All work, materials, and equipment required to complete the work is subsidiary to Section D-701 and no separate payment will be made.

TESTING REQUIREMENTS

ATM 212	Determining the Standard Density of Coarse Granular Materials using the Vibratory Compactor
ATM 207	WAQTC FOP for AASHTO T 99/ T 180 Moisture-Density Relations of $Soils^\star$
ATM 202	WAQTC FOP for AASHTO T 255/T 265 Moisture Content of Aggregate and Soils
ATM 213	WAQTC FOP for AASHTO T 310 In-Place Density and Moisture Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)*.
ATM 304	WAQTC FOP for AASHTO T 27/T 11 Sieve Analysis of Fine and Coarse Aggregates *

ITEM P-641 EROSION, SEDIMENT, AND POLLUTION CONTROL

The Contractor's qualified personnel, as defined in P-641-1.4, or Contractor's qualified SWPPP Preparer, shall confirm if Construction General Permit coverage is required, and if so, comply with Subsection P-641-2.1 Storm Water Pollution Prevention Plan (SWPPP) Requirements.

641-1.1 DESCRIPTION. Provide project administration and Work relating to control of erosion, sedimentation, and discharge of pollutants, according to this section and applicable local, state, and federal requirements, including the Alaska Pollutant Discharge Elimination System (APDES) Construction General Permit (CGP). The state APDES program is administered by the Alaska Department of Environmental Conservation (ADEC). Section 301(a) of the Clean Water Act (CWA) and 18 AAC 83.015 provide that the discharge of pollutants to the waters of the United States (U.S.) is unlawful except as allowed by the CGP.

Temporary erosion control measures shall be in accordance with the Erosion and Sediment Control Plan (ESCP); the approved Construction Safety and Phasing Plan (CSPP), and AC 150/5370-2, *Operational Safety on Airports During Construction*. The temporary erosion control measures contained herein shall be coordinated with the permanent erosion control measures specified as part of this contract to the extent practical to assure economical, effective, and continuous erosion control throughout the construction period.

Temporary erosion and sediment control measures may include work outside the construction limits such as borrow pit operations, equipment and material storage sites, waste areas, and temporary plant sites, when such areas are included in the Project Zone.

Temporary control measures shall be designed, installed, and maintained:

- a. outside of safety areas of active runways and taxiways, and
- **b.** to minimize the creation of wildlife attractants that have the potential to attract hazardous wildlife on or near airports.

DEFINITIONS AND TERMS

641-1.2 These definitions apply only to Item P-641.

ACTIVE TREATMENT SYSTEM (ATS) OPERATOR. The Contractor's qualified representative who is responsible for maintaining and operating an active treatment system (as defined in the CGP) for storm water runoff.

ALASKA CERTIFIED EROSION AND SEDIMENT CONTROL LEAD (AK-CESCL). A person who has completed training, testing, and other requirements of, and is currently certified as, an AK-CESCL from an AK-CESCL Training Program (a program developed under a Memorandum of Understanding between the Department and others). The Department City recognizes AK-CESCLs as "qualified personnel" required by the CGP. An AK-CESCL must be recertified every three years. See subsection 641-1.2. QUALIFIED PERSON for the definition.

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION (ADEC). The state agency authorized by the Environmental Protection Agency (EPA) to administer the APDES.

ALASKA POLLUTANT DISCHARGE ELIMINATION SYSTEM (APDES). A system administered by ADEC that issues and tracks permits for storm water discharges.

BEST MANAGEMENT PRACTICES (BMPs). Temporary or permanent structural and non-structural devices, schedules of activities, prohibition of practices, maintenance procedures, and other management practices to prevent or minimize the discharge of pollutants to waters of the United States. BMPs also include, but are not limited to, treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from material storage.

CLEAN WATER ACT (CWA). Federal Water Pollution Control Amendments of 1972, as amended (33 U.S.C. 1251 et seq.).

CONSTRUCTION ACTIVITY. Physical activity by the Contractor, Subcontractor or utility company; that may result in erosion, sedimentation, or a discharge of pollutants into storm water. Construction Activity includes soil disturbing activities (e.g. clearing, grubbing, grading, excavating); and establishment of construction materials or equipment storage or maintenance areas (e.g. material piles, borrow area, concrete truck chute washdown, fueling); and industrial activities that may discharge storm water and are directly related to the construction process (e.g. concrete or asphalt batch plants).

CONSTRUCTION GENERAL PERMIT (CGP). The permit authorizing storm water discharges from Construction Activities, issued and enforced by ADEC. It authorizes storm water discharges provided permit conditions and water quality standards are met.

ELECTRONIC NOTICE OF INTENT (ENOI). The electronic Notice of Intent submitted to ADEC, to obtain coverage under the CGP.

ELECTRONIC NOTICE OF TERMINATION (ENOT). The electronic Notice of Termination submitted to ADEC, to end coverage under the CGP.

ENVIRONMENTAL PROTECTION AGENCY (EPA). A federal agency charged to protect human health and the environment.

ERODIBLE STOCKPILE. Any material storage area or stockpile consisting of mineral aggregate, organic material, or a combination thereof, with greater than 5% passing the No. 200 sieve, and any material storage where wind or water transports sediments or other pollutants from the stockpile. Erodible Stockpile also includes any material storage area or stockpile, where the Engineer determines there is potential for wind or water transport, of sediments or other pollutants away from the stockpile.

EROSION AND SEDIMENT CONTROL PLAN (ESCP). (Not used).

FINAL STABILIZATION. Is defined in this item as it is defined in Appendix C of the CGP.

HAZARDOUS MATERIAL CONTROL PLAN (HMCP). The Contractor's detailed project specific plan for prevention of pollution from storage, use, transfer, containment, cleanup, and disposal of hazardous material (including, but are not limited to, petroleum products related to construction activities and equipment). The HMCP is included as an appendix to the SWPPP.

INSPECTION. An inspection required by the CGP or the SWPPP, usually performed together by the Contractor's SWPPP Manager and Department's Storm Water Lead and/or Inspector.

MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) PERMIT. (Not used).

MULTI-SECTOR GENERAL PERMIT (MSGP). The APDES General Permit for storm water discharges associated with industrial activity.

OPERATOR(S). The party or co-parties associated with a regulated activity that has responsibility to obtain permit coverage under the CGP. "Operator" for the purpose of the CGP and in the context of storm water associated with construction activity, means any party associated with a construction project that meets either of the following two criteria:

- **a.** The party has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or
- **b.** The party has day to day operational control of those activities at a project which are necessary to ensure compliance with a SWPPP for the site or other permit conditions (e.g. they are authorized to direct workers at a site to carry out activities required by the SWPPP or comply with other permit conditions).

POLLUTANT. Any substance or item meeting the definition of pollutant contained in 40 CFR § 122.2. A partial listing from this definition includes: dredged spoil, solid waste, sediment, sewage, garbage, sewage sludge, chemical wastes, biological materials, wrecked or discarded equipment, rock, sand, cellar dirt and industrial or municipal waste.

PROJECT ZONE. The physical area provided by the Department City for construction. The Project Zone includes the area of highway or facility under construction, project staging and equipment areas, and material and disposal sites; when those areas, routes and sites, are provided by the Contract.

Material sites, material processing sites, disposal sites, haul routes, <u>and</u> staging and equipment storage areas; that are furnished by the Contractor or a commercial operator; are not included in the Project Zone.

QUALIFIED PERSON. A person knowledgeable in the principles and practice of erosion and sediment controls. A Qualified Person must be certified either under the AK-CESCL training program. One of the following training and certification programs may substitute for AK-CESCL certification: ENVIROCERT's Certified Professional in Erosion & Sediment Control (CPESC), Certified Erosion, Sediment, and Stormwater Inspector (CESSWI), The Certified Professional in Stormwater Quality (CPSWQ), or CISEC's Certified Inspector of Sediment and Erosion Control (CISEC). For additional information, see Appendix C of the CGP.

RECORDS. Any record, report, information, document or photograph required to be created or maintained pursuant to the requirements of the CGP, the CGP storm water requirements of the Clean Water Act; and applicable local, state, and federal laws and regulations regarding document preservation.

SPILL PREVENTION, CONTROL AND COUNTERMEASURE PLAN (SPCC PLAN). The Contractor's detailed plan for petroleum spill prevention and control measures that meet the requirements of 40 CFR 112.

SPILL RESPONSE FIELD REPRESENTATIVE. The Contractor's representative with authority and responsibility for managing, implementing, and executing the HMCP and SPCC Plan.

STORM EVENT. A rainfall event that produces more than 0.5-inch of precipitation in 24 hours and that is separated from the previous storm event by at least 3 days of less than 0.1-inch of rain per day.

STORM WATER POLLUTION PREVENTION PLAN (SWPPP). The Contractor's detailed project specific plan to minimize erosion and contain sediment within the Project Zone, and to prevent discharge of pollutants that exceed applicable water quality standards. The SWPPP includes, but is not limited to, amendments, records of activities, inspection schedules and reports, qualifications of key personnel, and all other documentation, required by the CGP and this specification, and other applicable local, state, and federal laws and regulations.

STORM WATER POLLUTION PREVENTION PLAN TWO (SWPPP2). (Not used).

SUBCONTRACTOR SPILL RESPONSE COORDINATOR. The subcontractor's representative with authority and responsibility for coordinating the subcontractor's activities in compliance with the HMCP and SPCC Plan.

SUBCONTRACTOR SWPPP COORDINATOR. The subcontractor's representative with authority to direct the subcontractor's work, and who is responsible for coordination with the Superintendent and SWPPP Manager Storm Water Lead, and for the subcontractor's compliance with the SWPPP.

SUPERINTENDENT. The Contractor's duly authorized representative in responsible charge of the work. The Superintendent has responsibility and authority for the overall operation of the Project and for Contractor furnished sites and facilities directly related to the Project.

SWPPP AMENDMENT. A revision or document that adds to, deletes from, or modifies the SWPPP.

SWPPP MANAGERSTORM WATER LEAD. The Contractor's qualified representative who conducts Inspections, updates SWPPP records, and has authority to suspend work and to implement corrective actions required for CGP compliance.

SWPPP PREPARER. The Contractor's qualified representative who is responsible for developing the initial SWPPP.

TEMPORARY STABILIZATION. Protecting soils from erosion and sediment loss by rainfall, snow melt, runoff, or wind with a temporary vegetative and/or non-vegetative protection cover. Temporary stabilization may include a combination of seeding, geotextiles, mulches, surface tackifiers, rolled erosion control products, low erodible gravel or paving, or the mentioned BMP's combined together with trackwalking.

U.S. ARMY CORPS OF ENGINEERS PERMIT (USACE PERMIT). A USACE Permit for construction in the waters of the U.S. Such permit may be issued under Section 10 of the Rivers and Harbors Act of 1899, or Section 404 of the Clean Water Act.

UTILITY SPILL RESPONSE COORDINATOR. The Utility's representative with authority and responsibility for coordinating the Utility's activities in compliance with the HMCP and SPCC Plan.

UTILITY SWPPP COORDINATOR. The Utility's representative with authority to direct the Utility's work, and who is responsible for coordination with the Superintendent and SWPPP ManagerStorm Water Lead, and for the Utility's compliance with the SWPPP.

641-1.3 PLAN AND PERMIT SUBMITTALS.

For plans listed in GCP subsection 80-03d (the SWPPP, HMCP, and SPCC), use the Contractor submission and Department-City/Engineer review deadlines identified in Subsection 641-1.3.

Partial and incomplete submittals will not be accepted for review. Any submittal that is re-submitted or revised after submission, but before the review is completed, will restart the submittal review timeline. No additional Contract time or additional compensation will be allowed due to delays caused by partial or incomplete submittals, or required re-submittals.

a. Storm Water Pollution Prevention Plan. Submit an electronic copy and three <u>a</u> hard copiesy of the SWPPP to the Engineer for approval. Deliver these documents to the Engineer at least 21 days before beginning Construction Activity. Organize and bind the SWPPP and related documents for submittal according to the requirements of Subsection 641-2.1b

The Department Engineer will review the SWPPP submittals within 14 days after they are received. Submittals will be returned to the Contractor, and marked as either "rejected" with reasons listed or as "approved" by the Department Engineer. When the submittal is rejected, the Contractor must revise and resubmit the SWPPP. The 14 day review period will restart when the contractor submits an electronic copy and three-a hard copies copy of the revised SWPPP to the Engineer for approval.

After the SWPPP is approved by the Department Engineer, the Contractor must sign and certify the approved SWPPP using Form 25D-111. See Subsection 641-1.3d for further SWPPP submittal requirements.

- b. Hazardous Material Control Plan. The HMCP Template can be found at the following webpage: http://www.dot.state.ak.us/stwddes/dcsconst/pop_constforms.shtml. Submit an electronic copy and three https://www.dot.state.ak.us/stwddes/dcsconst/pop_constforms.shtml. Submit an electronic copy approval. The HMCP submittal and review timeline, and signature requirements are the same as the SWPPP.
- c. Spill Prevention, Control and Countermeasure Plan. When a SPCC Plan is required under Subsection 641-2.3, submit an electronic copy and three <u>a</u> signed hard copies <u>copy</u> of the SPCC Plan to the Engineer. Deliver these documents to the Engineer at least 21 days before beginning

Construction Activity. The <u>Department-City</u> reserves the right to review the SPCC Plan and require modifications.

d. CGP Coverage. The Contractor is responsible for permitting of Contractor and subcontractor Construction Activities related to the Project, including any material sites, waste disposal sites, borrow and fill sites, and equipment and material storage areas not covered by a different permit. Do not use the SWPPP for Construction Activities outside the Project Zone where the Department City is not an operator. Use a SWPPP2 for Construction Activities outside the Project Zone.

After <u>Department_Engineer_approval</u> of the SWPPP and prior to beginning Construction Activity, submit an eNOI with the required fee to ADEC for coverage under the Construction General Permit (CGP). Submit a copy of the signed eNOI and ADEC's written acknowledgement (by letter or other document), to the Engineer as soon as practicable and no later than three days after filing eNOI or receiving a written response.

Do not begin Construction Activity until the conditions listed in Subsection 641-3.1a are completed.

The <u>Department-City</u> will submit an eNOI to ADEC for Construction Activities inside the Project Zone. The Engineer will provide the Contractor with a copy of the <u>Department's-City';s</u> eNOI and ADEC's written acknowledgment (by letter or other document), for inclusion in the SWPPP.

Before Construction Activities occur, transmit to the Engineer an electronic copy of the approved and certified SWPPP, with signed Delegations of Signature Authorities on Forms 25D-107 and 25D-108 appropriate forms, SWPPP Certifications on appropriate forms Forms 25D-111 and 25D-109, both permittee's signed eNOIs, and ADEC's written acknowledgement.

- e. Ending CGP Coverage. Submit an eNOT to ADEC within 30 days after the Engineer has determined the conditions listed in Subsection 641-3.1f have been met. Submit a copy of the signed eNOT and ADEC's acknowledgement letter to the Department Engineer within three days of filing the eNOT or receiving a written response.
- f. ADEC SWPPP Review. When CGP Part 2.1.3, requires ADEC SWPPP review:
 - (1) Transmit a copy of the Department Engineer-approved SWPPP to ADEC using delivery receipt confirmation;
 - (2) Transmit a copy of the delivery receipt confirmation to the Engineer within seven (7) days of receiving the confirmation; and
 - (3) Retain a copy of delivery receipt confirmation in the SWPPP.
- **g.** Local Government SWPPP Review. When local government or the CGP Part 2.1.4, requires local government review:
 - (1) Transmit a copy of the DepartmentCity/Engineer-approved SWPPP and other information as required to local government, with the required fee. Use delivery receipt confirmation;
 - (2) Transmit a copy of the delivery receipt confirmation to the Engineer within seven days of receiving the confirmation;
 - (3) Transmit a copy of any comments by the local government to the Engineer within seven days of receipt;
 - (4) Amend the SWPPP as necessary to address local government comments and transmit SWPPP Amendments to the Engineer within seven days of receipt of the comments;
 - (5) Include a copy of local government SWPPP review letter in the SWPPP; and

- (6) File a notification with local government that the project is ending.
- h. Modifying Contractor's eNOI. When required by the CGP Part 2.7, modify your eNOI to update or correct information within 30 calendar days of the change. Reasons for modification include a change in start or end dates, change in Owner/Operator address and contact information, change in site information, any changes in number of acres to be disturbed, change in decision to use or not use treatment chemicals, or change in location of SWPPP records.

The Contractor must submit an eNOT and then submit a new eNOI instead of an eNOI modification when the operator has changed.

641-1.4 PERSONNEL QUALIFICATIONS. Provide documentation in the SWPPP that the individuals serving in these positions meet the personnel qualifications.

- **a.** The SWPPP Preparer:
 - (1) Total disturbed acreage 20 acres or less, must meet at least one of the following qualifications:
 - (a) Current certification as a Certified Professional in Erosion and Sediment Control (CPESC);
 - (b) Current certification as AK-CESCL, and at least two years' experience in erosion and sediment control, as a SWPPP Manager or SWPPP writer, or equivalent. Provide documentation including project names, project timelines, and work responsibilities demonstrating the experience requirement; or
 - (c) Professional Engineer registered in the State of Alaska with current certification as AK-CESCL.
 - (2) Total disturbed acreage greater than 20 acres, meet 641-1.4a(1) above, and complete a SWPPP Preparation course.
- **b.** The Superintendent must meet the following qualifications:
 - (1) Current certification as AK-CESCL; and
 - (2) Duly authorized representative, as defined in Appendix A, Part 1.12.3 of the CGP.
- c. The <u>SWPPP ManagerStorm Water Lead</u> must have current certification as AK-CESCL<u>if the disturbed acreage is more than 5 acres</u>. The <u>SWPPP ManagerStorm Water Lead</u> must meet the experience, and authority requirements identified in the CGP for the Storm Water Lead and Storm Water Inspector positions.
- d. The Active Treatment System (ATS) operator must have current certification as AK-CESCL, and be knowledgeable in the principles and practices of treatment systems in general, and the operation of the project-specific ATS. The ATS operator must have at least three months field experience with ATS, or completion of an ATS manufacturer's training course, or completion of system operator certification course.
- **e.** The Department City accepts people having any of the following certificates as equivalent to AKCESCL, if the certificates are current according to the sponsoring organization's policies:
 - (1) CPESC
 - (2) CISEC
 - (3) CESSWI
 - (4) CPSWQ

641-1.5 SIGNATURE/CERTIFICATION REQUIREMENTS AND DELEGATIONS.

- **a. eNOI and eNOT**. The eNOI and eNOT must be signed and certified by a responsible corporate officer according to CGP Appendix A, Part 1.12. Signature and certification authority for the eNOI and eNOT cannot be delegated.
- b. Delegation of Signature Authority for Other SWPPP Documents and Reports. Use <u>108the form located on page 4 of the ADEC 2016 CGP SWPPP Template, or other approved form (see Section 641-2.1b) Form 25D-108 to delegate signature authority and certification authority to the Superintendent position <u>responsible for signing and certifying the SWPPP Inspection Reports and other reports required by the CGP, according to CGP</u> Appendix A, Part 1.12.3., for the SWPPP, Inspection Reports and other reports required by the CGP. The Superintendent position is responsible for signing and certifying the SWPPP, Inspection Reports, and other reports required by the CGP, except the eNOI and eNOT.</u>

The City is delegating the City's SWPPP inspection duties and signature authority on all reports required by the Construction General Permit, including SWPPPs and SWPPP storm water inspection forms to the Contractor in accordance with the Signature Requirements and Penalties of the current APDES CGP.

Once the Contractor's SWPPP is approved, the Engineer will provide the Department's City's delegation on Form 25D-107to the Contractor, which the Contractor must include in the SWPPP.

- **c. Subcontractor Certification**. Subcontractors must certify on Form 25D-105, that they have read and will abide by the CGP and the conditions of the project SWPPP.
- **d. Signatures and Initials**. Handwrite signatures or initials on CGP documents and SWPPP forms, wherever a signature or initial is required.

641-1.6 RESPONSIBILITY FOR STORM WATER PERMIT COVERAGE.

- a. The Department and the Contractor are jointly is responsible for permitting and permit compliance within the Project Zone.
- e.b. An entity that owns or operates, a commercial plant, (as defined in GCP subsection 80-01d. or material source, or disposal site outside the Project Zone, is responsible for permitting and permit compliance. The Contractor has sole responsibility to verify that the entity has appropriate permit coverage. GCP subsection 70-02 The Construction Agreement and General Conditions, Special Conditions, and Section A-120 describes the requirement to obtain permits, and to provide permit documents to the Engineer.
- d. The Contractor shall indemnify, defend and hold the City harmless for any and all fines resulting from non-compliance with the permit conditions. The Department is not responsible for permitting or permit compliance, and is not liable for fines resulting from noncompliance with permit conditions:.
- e. For areas outside the Project Zone;
- f. For Construction Activity and Support Activities outside the Project Zone; and
- g.c. For commercial plants, commercial material sources, and commercial disposal sites.

641-1.7 UTILITY. (RESERVED FOR REGIONS)

641-2.1 STORM WATER POLLUTION PREVENTION PLAN (SWPPP) REQUIREMENTS.

a. SWPPP Preparer and Pre-Construction Site Visit.

Use a SWPPP Preparer to develop the SWPPP and associated documents, according to the requirements of the CGP and COE-<u>USACE</u> permit. The SWPPP Preparer must put their name, qualifications (including the expiration date of any certifications), title and company name in the SWPPP.

The SWPPP Preparer must conduct a pre-construction inspection at the Project site before construction activity begins. If the SWPPP Preparer is not a Contractor employee, the SWPPP Preparer must visit the site accompanied by the Contractor. Give the Department Engineer at least seven days advance notice of the site visit, so that the Department Engineer may participate.

During the pre-construction inspection, the SWPPP Preparer must identify, or if a draft of the SWPPP has already been prepared verify that the SWPPP fully addresses and describes:

- (1) Opportunities to phase construction activities;
- (2) Appropriate BMPs and their sequencing; and
- (3) Sediment controls that must be installed prior to beginning Construction Activities.

Document the SWPPP Preparer's pre-construction inspection in the SWPPP on Form 25D-106, SWPPP Pre-Construction Site Visit, including the names of attendees and the date.

b. Developing the SWPPP.

Use the Department's ESCPCity's, Environmental commitments, <u>permit conditions</u>, and other Contract documents as a starting point for developing the SWPPP. The approved SWPPP replaces the ESCP.

Develop the SWPPP with sections and appendices, according to the current Alaska State Department of Transportation (DOT&PF) SWPPP template. Include information required by the Contract and described in the CGP Part 5.0.

- (1) Obtain the following forms after they have been completed by the Department and include them in the SWPPP:
 - (a) SWPPP Delegation of Signature Authority DOT&PF (25D-107)
 - (b) SWPPP Certification for DOT&PF (25D-109)
 - (c) SWPPP Delayed Action Item Report (25D-113), if needed
- (2) Use the following Department forms for recording information in the SWPPP:
 - (a) SWPPP Amendment Log (25D-114)
 - (b) SWPPP Certification for Contractor (25D-111)
 - (c) SWPPP Construction Site Inspection Report (25D-100)
 - (d) SWPPP Corrective Action Log (25D-112)
 - (e) SWPPP Daily Record of Rainfall (25D-115)

- (f) SWPPP Delegation of Signature Authority Contractor (25D-108)
- (g) SWPPP Grading and Stabilization Activities Log (25D-110)
- (h) SWPPP Pre-Construction Site Visit (25D-106)
- (i) SWPPP Project Staff Tracking (25D-127)
- (i) SWPPP Subcontractor Certification (25D-105)
- (k) SWPPP Training Log (25D-125)
- (I) SWPPP Noncompliance (25D-143)

SWPPP Template, forms, and instructions are available online at:

- https://dec.alaska.gov/water/wastewater/stormwater/construction
- http://www.dot.state.ak.us/stwddes/dcsconst/pop constforms.shtml
- http://www.muni.org/Departments/project_management/WM/Pages/Watershed%20Documents.aspx
- http://www.dot.state.ak.us/stwddes/dcsconst/pop_constforms.shtml

Compile the SWPPP in three ring binders with tabbed and labeled dividers for each section and appendix.

c. SWPPP Considerations and Contents.

- (1) The SWPPP must provide erosion and sediment control measures for all Construction Activity within the Project Zone. Construction activity outside the Project Zone must have permit coverage, using a separate SWPPP2, and separate Contractor Inspections.
- (2) The SWPPP must consider the activities of the Contractor and all subcontractors and utility companies performing work-in the Project Zone. The SWPPP must describe the roles and responsibilities of the Contractor, subcontractors, and utility companies, and the Department with regard to implementation of the SWPPP. The SWPPP must identify all operators for the Project, including utility companies performing Construction Activity, and identify the areas:
 - (a) Over which each operator has operational control; and
 - **(b)** Where the Department City and Contractor are co-operators.
- (3) For work outside the Project Zone the SWPPP must identify the entity that has storm water permit coverage, the operator, and the areas that are:
 - (a) Dedicated to the Project and where the Department City is not an operator; and
 - **(b)** Not dedicated to the project, but used for the project.
- (4) Account for the Contractor's construction methods and phasing. Identify the amount of mean annual precipitation.
- (5) Comply with the CGP Part 1.4.3 Authorized Non-Storm Water Discharges. List locations where authorized non-storm water will be used, including the types of water that will be used on-site.
- (6) Include the Department's City's Anti-degradation Analysis in the SWPPP if storm water from the Project Zone discharges into receiving water that is considered a high quality water and that constitutes an outstanding national resource, according to CGP Part 2.1.6.

- (7) Where the project intersects a Public Water System (PWS), the Engineer will notify the PWS contact for the Department and Contractor according to the CGP Part 4.10. The Contractor Amend Shall append a copy of the communications in Appendix Qto the SWPPP.
- (8) There are special requirements in the CGP Part 3.2, for storm water discharges into an impaired water body, and they may include monitoring of storm water discharges. For Projects meeting the permit criteria, the Contractor shall implement a monitoring plan approved by the Department City/Engineer for the storm water within the Project Zone, and shall provide the required information and reports for inclusion in the SWPPP. The Contractor is responsible for monitoring and reporting outside the Project Zone.
- (9) Preserve natural topsoil unless infeasible. Delineate the site according to CGP Part 4.2.1. Use stakes, flags, or silt fence, etc. to identify areas where land disturbing activities will occur and areas that will be left undisturbed. Minimize the amount of soil exposed during Construction activity according to CGP Part 4.2.2.
- (10)Comply with CGP Part 4.4, and the ADEC General Permit for Excavation Dewatering (AKG002000), requirements for dewatering for trenches and excavations.
- (11) The SWPPP must identify specific areas where potential erosion, sedimentation, or pollution may occur. The potential for wind erosion must be addressed. The potential for erosion at drainage structures must be addressed.
- (12)Describe methods and time limits, to initiate temporary or final soil stabilization, CGP Part 4.5.1.1. Begin stabilization no later than the end of the next work day, following the day when the earth-disturbing activities have permanently ceased on any portion of the site or temporarily ceased on any portion of the site and will not resume for a period exceeding:
 - (a) Seven days for areas with mean annual precipitation 40 inches or greater; or
 - (b) Fourteen days for areas with mean annual precipitation less than 40 inches.
 - (c) Time allotted to complete temporary and final stabilization, Subsection 641-2.1(c)(13)
- (13) Within seven days of initiating final stabilization, CGP Part 4.5.1.4, either complete final stabilization or continue maintenance of work until final stabilization is complete. Complete temporary stabilization within fourteen days of initiating stabilization, CGP Part 4.5.1.2.
- (14)Include in the "Stabilize Soils" section of the SWPPP, a description of how you will minimize the amount of disturbed and unstabilized ground in the fall season. Identify anticipated dates of fall freeze-up and spring thaw. Describe how you will stabilize areas when it is close to or past the seasonal time of snow cover or frozen conditions, and before the first seasonal thaw. Include a plan for final stabilization.
- (15)Plans for Active Treatment Systems must be submitted to ADEC for review at least 14 days prior to use of the system and the Operator of the ATS identified in the SWPPP. Any use of treatment chemicals must be identified on the NOI, documented in the SWPPP, and meet with the requirements in the CGP Part 4.6.
- (16) The SWPPP must provide designated areas for equipment and wheel washing, equipment fueling and maintenance, chemical storage, staging or material storage, waste or disposal sites, concrete washouts, paint and stucco washouts, and sanitary toilets. These activities must be done in designated areas that are located, to the extent practicable, away from drain inlets, conveyance channels, and waters of the US. No discharges are allowed from concrete washout, paint and stucco washout; or from release oils, curing compounds, fuels, oils, soaps, and solvents. Equipment and wheel washing water that doesn't contain detergent may be discharged on-site if it is treated before discharge.

- (17) Design temporary BMPs for a 2-2-year 24-24-hour precipitation amount. Describe BMPs in the SWPPP and in SWPPP Amendments, including source controls, sediment controls, discharge points, and temporary and final stabilization measures. Describe the design, placement, installation, and maintenance of each BMP, using words and drawings as appropriate. Describe the design capacity of sediment basins (including sediment ponds and traps). Provide a citation to the BMP Manual or publication used as a source for the BMP, including the manufacturer's or BMP manual specifications for installation (CGP Part 5.3.6.2). If no published source was used to select or design a BMP, then the SWPPP or SWPPP amendment must state that "No BMP manual or publication was used for this design."
- (18) Describe the sequence and timing of activities that disturb soils and of BMP implementation and removal. Phase earth disturbing activities to minimize unstabilized areas, and to achieve temporary or final stabilization quickly. Whenever practicable incorporate final stabilization work into excavation, embankment and grading activities. Include drawings showing each phase of the project with the BMPs implemented in the phase.
- (19) Provide a legible site map or set of maps in the SWPPP, showing the entire site and identifying boundaries of the property where construction and earth-disturbing activities will occur, as described in the CGP Part 5.3.5. Include all BMPs on the site map.
- (20)Identify the inspection frequency in the SWPPP.
 - (a) For areas of the state where the mean annual precipitation is less than 40 inches:
 - (1) Inspect at least once every seven calendar days; or
 - (2) Inspect at least once every 14 calendar days and within 24 hours of the end of a storm event that resulted in a discharge from the site.
 - **(b)** For areas of the state where the mean annual precipitation is 40 inches or greater:
 - (1) Inspect at least once every seven calendar days.
- (21)Linear Project Inspections, described in CGP Part 6.5, are not applicable to this contract.
- (22)The SWPPP must cite and incorporate applicable requirements of the Project permits, environmental commitments, COE_USACE permit, and commitments related to historic preservation. Make additional consultations or obtain permits as necessary for Contractor specific activities that were not included in the Department's-City's permitting and consultation.
- (23) The SWPPP is a dynamic document. Keep the SWPPP current by noting installation, modification, and removal of BMPs, and by using amendments, SWPPP amendment logs, Inspection Reports, corrective action logs, records of land disturbance and stabilization, and any other records necessary to document storm water pollution prevention activities and to satisfy the requirements of the CGP and this specification. See Subsection 641-3.3 for more information.
- d. Recording Personnel and Contact Information in the SWPPP.
 - Identify the SWPPP Manager as the Storm Water Lead and Storm Water Inspector positions in the SWPPP. Document the SWPPP Manager's Storm Water Lead and Storm Water Inspector responsibilities in Section 2.0 Storm Water Contacts, of the SWPPP template and:
 - (1) Identify that the <u>Storm Water Lead SWPPP Manager</u> does not have authority to sign inspection reports (unless the <u>Storm Water Lead SWPPP Manager</u> is also the designated project Superintendent).

(2) Identify that the <u>Storm Water Lead SWPPP Manager</u> cannot prepare the SWPPP unless the <u>Storm Water Lead SWPPP Manager</u> meets the Contract requirements for the SWPPP Preparer.

Include in the SWPPP proof of AK-CESCL or equivalent certifications for the Superintendent and Storm Water LeadSWPPP Manager, and for any acting Superintendent and acting Storm Water LeadSWPPP Manager. If the Superintendent or Storm Water Lead SWPPP Manager is replaced permanently or temporarily, by an acting Superintendent or acting Storm Water LeadSWPPP Manager; record in the SWPPP (use Form 25D-127) the names of the replacement personnel, the date of the replacement. For temporary personnel record their beginning and ending dates.

Provide 24–24-hour contact information for the Superintendent and Storm Water LeadSWPPP Manager. The Superintendent and Storm Water Lead SWPPP Manager must have 24–24-hour contact information for all Subcontractor SWPPP Coordinators and Utility SWPPP Coordinators.

Include in the SWPPP proof of AK-CESCL or equivalent certifications of ATS operators. Record names of ATS operators and their beginning and ending dates, on Form 25D-127.

The Department will provide proof of AK-CESCL, or equivalent certifications for the Department's Project Engineer, Storm Water Inspectors, and Monitoring Person (if applicable), and names and dates they are acting in that position. Include the Department's staff certifications in Appendix D. Include Department's staff names, dates acting, and assignments, in Section 2.0 of the SWPPP.

641-2.2 HAZARDOUS MATERIAL CONTROL PLAN (HMCP) REQUIREMENTS.

- a. Prepare the HMCP using the DOT&PF template located at the following DOT&PF link; http://www.dot.state.ak.us/stwddes/dcspubs/forms.shtml for prevention of pollution from storage, use, containment, cleanup, and disposal of all hazardous material, including petroleum products related to construction activities and equipment. Include the HMCP as an appendix to the SWPPP. Compile Material Safety Data Sheets in one location and reference that location in the HMCP.
- **b.** Designate a Contractor's Spill Response Field Representative with 24-hour contact information. Designate a Subcontractor Spill Response Coordinator for each subcontractor. The Superintendent and Contractor's Spill Response Field Representative must have 24-hour contact information for each Subcontractor Spill Response Coordinator and the Utility Spill Response Coordinator.
- **c.** List and give the location and estimated quantities of hazardous materials (Including materials or substances listed in 40 CFR 117 and 302, and petroleum products) to be used or stored on the Project. Hazardous materials must be stored in covered storage areas. Include secondary containment for all hazardous material storage areas.
- d. Identify the locations where fueling and maintenance activities will take place, describe the activities, and list controls to prevent the accidental spillage of petroleum products and other hazardous materials. Controls include placing absorbent pads or other suitable containment under fill ports while fueling, under equipment during maintenance or repairs, and under leaky equipment.
- e. List the types and approximate quantities of response equipment and cleanup materials available on the Project. Include a list and location map of cleanup materials, at each different work site and readily available off site (materials sources, material processing sites, disposal sites, staging areas, etc.). Spill response materials must be stored in sufficient quantity at each work location, appropriate to the hazards associated with that site.
- f. Describe procedures for containment and cleanup of hazardous materials. Describe a plan for the prevention, containment, cleanup, and disposal of soil and water contaminated by spills. Describe a plan for dealing with contaminated soil and water encountered during construction. Clean up spills or contaminated surfaces immediately.

- **g.** Describe methods of disposing of waste petroleum products and other hazardous materials generated by the Project, including routine maintenance. Identify haul methods and final disposal areas. Assure final disposal areas are permitted for hazardous material disposal.
- h. Describe methods of complying with the requirements of AS 46.04.010-900, Oil and Hazardous Substances Pollution Control, and 18 AAC 75. Include contact information for reporting hazardous materials and petroleum product spills to the Project Engineer and reporting to federal, state, and local agencies.

641-2.3 SPILL PREVENTION, CONTROL AND COUNTERMEASURE PLAN (SPCC PLAN) REQUIREMENTS.

Prepare and implement an SPCC Plan when required by 40 CFR 112 when both of the following conditions are present on the Project:

- a. Oil or petroleum products from a spill may reach navigable waters (as defined in 40 CFR 112); and
- **b.** Total above ground storage capacity for oil and any petroleum products is greater than 1,320 gallons (not including onboard tanks for fuel or hydraulic fluid used primarily to power the movement of a motor vehicle or ancillary onboard oil-filled operational equipment, and not including containers with a storage capacity of less than 55 gallons)

Reference the SPCC Plan in the HMCP and SWPPP.

641-2.4 RESPONSIBILITY AND AUTHORITY OF THE SUPERINTENDENT AND SWPPP MANAGERSTORM WATER LEAD.

The Superintendent is responsible for the overall operation of the Project and all Contractor furnished sites and facilities directly related to the Project. The Superintendent shall sign and certify the SWPPP, Inspection Reports, and other reports required by the CGP, except the NOI and NOT. The Superintendent may not delegate the task or responsibility of signing and certifying the SWPPP submitted under Subsection 641-1.3.a, Inspection Reports, and other reports required by the CGP <u>unless the requirements in CGP Appendix A, Part 1.12.3</u> are met.

The Superintendent may assign certain duties to the SWPPP Storm Water LeadManager.

- a. Ensuring Contractor's and subcontractor's compliance with the SWPPP and CGP;
- **b.** Ensuring the control of erosion, sedimentation, or discharge of pollutants;
- **c.** Directing and overseeing installation, maintenance, and removal of BMPs;
- d. Performing Inspections; and
- e. Updating the SWPPP including adding amendments and forms.

When Bid Item P641.070.0000 is part of the Contract, the <u>Storm Water Lead SWPPP Manager</u> must be available at all times to administer SWPPP requirements, and be physically present within the Project Zone or the project office, for at least eight hours per day when construction activities are occurring.

The Superintendent and <u>Storm Water Lead SWPPP Manager</u> shall be knowledgeable in the requirements of this Item P-641, the SWPPP, CGP, BMPs, HMCP, SPCC Plan, environmental permits, environmental commitments, and historic preservation commitments.

The Superintendent and <u>Storm Water Lead SWPPP Manager</u> shall have the Contractor's complete authority and be responsible for suspending construction activities that do not conform to the SWPPP or CGP.

641-2.5 MATERIALS. Use materials suitable to withstand hydraulic, wind, and soil forces, and to control erosion and trap sediments according to the requirements of the CGP and the Specifications.

- a. Seed Mix. Use the seed mixture specified in Item T-901, or as directed by the Engineer.
- **b. Soil Stabilization.** Use soil stabilization material as specified in <u>ADEC's Alaska Storm Water Guide</u> or other recognized BMP manualltem P-682 and T-908.
- c. Silt Fence. Use silt fences as specified in <u>ADEC's Alaska Storm Water Guide or other recognized</u> BMP manualltem P-680.
- d. Straw. Use straw and straw products certified weed free of prohibited and restricted noxious weed seed and quarantined pests, according to Alaska Administrative Code, Title 11, Chapter 34 (11 AAC 34). When straw or straw products certified according to 11 AAC 34 are not available, use non-certified products manufactured within Alaska before products manufactured in another state, country or territory. Grass, legumes, or any other herbaceous plants produced as hay, shall not be substituted for straw or straw products.
- **e. Other.** Use Oregon Scientific RGR126 wireless rain gauge with temperature, or Taylor 2751 Digital Wireless Rain Gauge with Thermometer, or approved equivalent.

CONSTRUCTION REQUIREMENTS

- 641-3.1 GENERAL. Comply with the SWPPP and the requirements of the CGP Part 5.0.
 - **a. Before Construction Activity may Begin.** The following actions must be completed before Construction Activity begins:
 - (1) The SWPPP Preparer must visit the Project, the visit must be documented in the SWPPP—Form (25D-106), and the SWPPP must be developed (or amended) with findings from the visit;
 - (2) The SWPPP must be approved by the Engineer on Form 25D-109;
 - (3) The Contractor must be authorized to begin by the Engineer;
 - (4) The Project eNOIs for the Department City and for the Contractor, as well as any other eNOIs if there are additional operators, must be listed as Active Status on the ADEC website;
 - **(5)** The Department City/Engineer-approved SWPPP must be submitted to ADEC and Local Government (when required); and
 - **(6)** The Contractor has transmitted to the Engineer an electronic copy and at least-one hardcopy of the approved SWPPP.
 - (7) The Delegation of Authority (Forms 25D-108 and 25D-107) for both the Contractor and DOT&PF Engineer are is signed.
 - (8) Begin winter construction activity according to CGP Part 4.12.2, provided actions (1), (3), and (7) are completed. If winter construction activities may extend beyond spring thaw, the following actions must be completed before spring thaw:
 - (a) Actions (1) through (7), listed above, and
 - **(b)** Appropriate control measures to minimize erosion and sediment runoff during spring thaw and summer rainfall are installed.
 - **(9)** Post notices. Include the following information:

- (a) Copy of all eNOIs related to this project;
- (b) Location of the SWPPP.

Post notices on the outside wall of the Contractor's project office, and near the main entrances of the construction project. Protect postings from the weather. Locate postings so the public can safely read them without obstructing construction activities or the traveling public (for example, at an existing pullout). Do not use retroreflective signs for the SWPPP posting. Do not locate SWPPP signs in locations where the signs may be confused with traffic control signs or devices. Update the notices if the listed information changes.

- (10)Install an outdoor rain gauge per manufacturer's guidance in a readily accessible location on the Project. Projects may utilize the nearest National Weather Service (NWS) precipitation gauge station, if within 20 miles of the project, to determine rainfall amounts during storm events.
- (11)Delineate the site for both land disturbing activities and areas that will be left undisturbed.
- (12)Install sediment controls and other BMPs that must be placed prior to the initiation of Construction Activity.
- b. During Construction. Before subcontractors or utility companies begin soil disturbing activities, provide to them copies of applicable portions of the SWPPP, and require them to sign a SWPPP Subcontractor Certification, Form 25D-105. Include SWPPP Subcontractor Certifications as an appendix to the SWPPP. Ensure subcontractors and utility companies understand and comply with the SWPPP and the CGP. Inform subcontractors and utility companies of SWPPP amendments that affect them in a timely manner. Coordinate with subcontractors and utility companies doing work in the Project Zone so BMPs, including temporary and final stabilization are installed, maintained, and protected from damage.

Provide on-going training to employees and subcontractors, on control measures at the site and applicable storm water pollution prevention procedures. Training must be specific to the installation, maintenance, protection, and removal of control measures CGP 4.14. Training must be given at a frequency that will be adequate to ensure proper implementation and protection of control measures, and no less frequently than once a month during construction activity. Document on the SWPPP Training Log, Form 25D-125, the dates and attendees to these trainings. Include the SWPPP Training Log as an appendix to the SWPPP.

Notify the Engineer immediately if the actions of any utility company or subcontractor do not comply with the SWPPP and the CGP.

Comply with GCP subsection 70-11 Protection and Restoration of Property and Landscape. Concrete washout must be fully contained.

Comply with CGP Part 4.8.2 for fueling and maintenance activities. Place absorbent pads or other suitable containment under fill ports while fueling, under equipment during maintenance or repairs, and under leaky equipment.

Comply with requirements of the HMCP and SPCC Plan, and all local, state and federal regulations that pertain to the handling, storage, containment, cleanup, and disposal of petroleum products or other hazardous materials.

Keep the SWPPP and HMCP current (refer to Subsection 641-2.1.c, SWPPP Considerations and Contents.

c. Pollutant Reporting Requirements. If an incident of non-compliance occurs that may endanger health or the environment a report must be made, CGP, Appendix A, Part 3.4:

- (1) Verbally, immediately report the incident to the Engineer,
- (2) Verbally report to ADEC within 24 hours after the permittee becomes aware of the incident, and
- (3) In writing, report to ADEC within five days after the permittee becomes aware of the circumstances. To report in writing, complete the written noncompliance report on Form 25D-143, and file the written report with ADEC. Coordinate the report with the Engineer. Include in the report:
 - (a) A description of the noncompliance and its causes;
 - (b) The exact dates and times of noncompliance;
 - (c) If not yet corrected the anticipated time the project will be brought back into compliance; and
 - (d) The corrective action taken or planned to reduce, eliminate and prevent reoccurrence.
 - **(e)** Notify the Engineer and COE-USACE Regulatory Program immediately if there is incident of noncompliance with COE-USACE Permits.
- **d. Hazardous Materials Reporting Requirements.** Any release of a hazardous substance must be reported immediately, to the Engineer as soon as the person has knowledge of the discharge.

Report spills of petroleum products or other hazardous materials to the Engineer and other agencies as required by law, and according to CGP Part 9.3.

- (1) To water:
 - (a) Any amount released must be reported immediately to the Engineer, ADEC, and the Coast Guard.
- (2) To land:
 - (a) Any release of a petroleum product in excess of 55 gallons must be reported as soon as the person has knowledge of the discharge CGP Part 9.3.2.
 - **(b)** Any release of a petroleum product in excess of 10 gallons but less than 55 gallons must be reported to the Engineer and must be reported to ADEC within 48 hours after the person has knowledge of the discharge CGP Part 9.3.2.
 - (c) Any release of a petroleum product in excess of 1 gallon to 10 gallons must be recorded and logged and provided to ADEC on a monthly basis.
- (3) Use the HMCP and SPCC Plan (if available) for contact information to report spills to regulatory agencies.
- (4) Within seven calendar days of knowledge of the release, provide a description of the release, the circumstances leading to the release, and the date of the release to the nearest ADEC Area Response Team Office listed CGP Part 9.3.2.
- (5) Implement measures to prevent the reoccurrence of and to respond to such releases.
- **e. Corrective Action and Maintenance of BMPs.** Implement maintenance as required by the CGP, SWPPP, and manufacturer's specifications, whichever is more restrictive.
 - (1) Implement corrective action:

- (a) If an incident of noncompliance with the SWPPP, or CGP is identified;
- **(b)** If an Inspection or the Engineer identifies the SWPPP or any part of the SWPPP is ineffective in preventing erosion, sedimentation or the discharge of pollutants;
- (c) If a required BMP was not installed according to the SWPPP schedule or phasing, or was installed incorrectly, or was not installed according to the CGP Part 4.0;
- (d) If a BMP is not operating as intended, has not been maintained in an effective operation condition, or is unable to effectively perform the intended function;
- (e) If sediment accumulates more than one-third of the distance of the above-ground height of the silt fence;
- **(f)** If sediment accumulates to more than one-half retention height for an inlet BMP, check dam, berm, wattle, or other control measures;
- (g) If a prohibited discharge of pollutants, as specified in CGP Part 4.7, is occurring or will occur; or
- (h) If there is accumulation of sediment or other pollutants, that is in or near any storm water conveyance channels, or that may enter a discharge point or storm sewer system. If there is accumulation of sediment or other pollutants that is being tracked outside the project zone.
- (2) Implement corrective actions so that they comply with the following time requirements:
 - (a) For conditions that are easily remedied (i.e. removal of tracked sediment, maintenance of control measure, or spill clean-up), initiate corrective action within 24 hours and complete as soon as possible;
 - **(b)** If a discharge occurs during a local 2-year, 24-hour storm event, initiate a corrective action the day after the storm event ends;
 - (c) If installation of a new control measure is needed or an existing control measure requires redesign and reconstruction or replacement to make it operational, the corrective action must be completed within seven calendar days from the time discovered.
 - (d) For all other conditions initiate corrective actions so both of the following requirements are met:
 - (1) Corrective action is completed in time to protect water quality; and
 - (2) Corrective action is completed no later than the Complete-by-Date that was entered in an Inspection Report (see Subsection 641-3.3.b for more information).

If a corrective action is not implemented within the time requirements of this section, document the situation in the SWPPP, notify the Engineer and implement corrective action as soon as possible.

If a corrective action could affect a subcontractor, notify the subcontractor within three days of taking the corrective action. Require in your written subcontract, that subcontractors must notify the Contractor within 24 hours of becoming aware of a condition that requires a corrective action.

f. Stabilization.

- (1) Stabilization may be accomplished using temporary or permanent measures. Initiate stabilization of disturbed soils, erodible stockpiles, disposal sites, and of erodible aggregate layers so that all of the following conditions are satisfied:
 - (a) Not later than the end of the next work day, following the day when the earth-disturbing activities have temporarily or permanently ceased (CGP 4.5.1.1).
 - (b) As soon as necessary to avoid erosion, sedimentation, or the discharge of pollutants; and
 - (c) As identified in the SWPPP.
- (2) Land may be disturbed and stabilized multiple times during a project. Coordinate work to minimize the amount of disturbed soil at any one time. Do not disturb more soil than you can stabilize with the resources available.
- (3) Temporarily stabilize from wind and water erosion portions of disturbed soils, portions of stockpiles, and portions of disposal sites, that are not in active construction. Temporary stabilization measures may require a combination of measures including but not limited to vegetative cover, mulch, stabilizing emulsions, blankets, mats, soil binders, low-erodible cover, dust palliatives, or other approved methods.
- (4) When temporary or permanent seeding is required, provide a working hydro seeding equipment located within 100 miles of the project by road; with 1,000 gallons or more tank capacity, paddle agitation of tank, and the capability to reach the seed areas with an uniform mixture of water, seed, mulch and tackifier. If the project is located in an isolated community the hydro-seeder must be located at the project.
- (5) Before applying temporary or permanent seeding, prepare the surface to be seeded to reduce erosion potential and to facilitate germination and growth of vegetative cover. Apply seed and maintain seeded areas. Reseed areas where growth of temporary vegetative cover is inadequate to stabilize disturbed ground.
- (6) Apply permanent seed according to Item T-901, within the time periods allowed by the CGP and the contract, at locations where seeding is indicated on the plans and after land-disturbing activity is permanently ceased.
- (7) When installing a culvert or other drainage structure where stream bypass is not used, install temporary or final stabilization concurrently or immediately after placing the culvert or drainage structure in a manner that complies with the SWPPP, applicable project permits and prevents discharge of pollutants. Install temporary or final stabilization:
 - (a) At the culvert or drainage structure inlet and outlet; and
 - **(b)** In the areas upstream and downstream that may be disturbed by the process of installing the culvert, culvert end walls, culvert end sections, or drainage structure.
- (8) Before deactivating a stream bypass or stream diversion used for construction of a bridge, culvert, or drainage structure, install final or temporary stabilization when approved by the Engineer:
 - (a) At the inlet and outlet of the culvert, drainage structure, or bridge;
 - **(b)** In the area upstream and downstream of the culvert, drainage structure, or bridge, that is disturbed during installation or construction of the culvert, drainage structure, or bridge; and
 - (c) Under the bridge.

Within seven days of initiating final stabilization, either complete final stabilization or continue maintenance of work until final stabilization is complete, CGP Part 4.5.1.5.

Complete temporary stabilization within 14 day of initiating stabilization, CGP Part 4.5.1.2.

g. Ending CGP Coverage and BMP Maintenance in the Project Zone.

- (1) The Engineer will determine the date that all the following conditions for ending CGP coverage have been met within the Project Zone:
 - (a) Land disturbing activities have ceased;
 - **(b)** Final Stabilization has been achieved on all portions of the Project Zone, according to the CGP PART Part 4.5.2 (including at Department City furnished material sources, disposal sites, staging areas, equipment areas, etc.); and
 - (c) Temporary BMPs have been removed.
- (2) After the Engineer has determined the conditions for ending CGP coverage have been met, the Department-Engineer will:
 - (a) Send written notice to the Contractor with the date that the conditions were met;
 - (b) Submit an eNOT to ADEC; and
 - (c) Provide a copy of the eNOT and ADEC's acknowledgement letter to the Contractor.

The Contractor is responsible for ending permit coverage within the Project Zone, by submitting an eNOT to ADEC within 30 days of meeting the conditions for ending CGP coverage. The Contractor is responsible for BMP maintenance and SWPPP updates until permit coverage is ended.

If the Contractor's CGP eNOI acreage includes Support Activities and any other areas where the Department City is not an Operator, the Contractor may not be able to file an eNOT at the same time as the DepartmentCity. In this case, the Contractor must amend the SWPPP and separate SWPPP2(s), to indicate the Department's City CGP coverage has ended, and the DepartmentCity is no longer an Operator within the Project Zone.

The Contractor must indicate in the SWPPP the areas that have reached Final Stabilization, and the dates land disturbing activities ended and Final Stabilization was achieved. The Contractor must submit an eNOT to ADEC, and insert copies of the Department's City's and the Contractor's eNOTs with ADEC's acknowledgement letters in the appendix of the SWPPP.

The Contractor must submit a copy of each signed eNOT and ADEC's acknowledgement letter to the Department City/Engineer within three days of filing the eNOT or receiving a written response.

The Contractor is responsible for coordinating local government inspections of work and ending permit coverage with local government. See Subsection 641-1.3e for more information.

h. Transmit final SWPPP.

Transmit one copy of the final SWPPP, including all amendments, appendices and maps, to the Engineer; when the project eNOTs are filed, or within 30 days of the Department's City's eNOT being filed, whichever is sooner. Transmittal must be by both electronic and at least one hard copy.

641-3.2 SWPPP DOCUMENTS, LOCATION ON-SITE, AVAILABILITY, AND RECORD RETENTION.

The SWPPP and related documents maintained by the Contractor are the Record for demonstrating compliance with the CGP. Copies of SWPPP documents transmitted to the Engineer under the

requirements of this specification are informational and do not relieve the Contractor's responsibility to maintain complete records as required by the CGP and this specification.

Keep the SWPPP, HMCP, and SPCC Plan at the on-site project office. If there is not an on-site project office, keep the documents at a locally available location that meets CGP requirements and is approved by the Engineer. Records may be moved to another office for record retention after the eNOTs are filed. Records may be moved to another office during winter shutdown. Update on-site postings if records are relocated during winter shutdown. Provide the Department Engineer with copies of all Records.

Retain Records and a copy of the SWPPP, for at least three years after the date of eNOT. If EPA or ADEC inspects the project, issues a Notice of Violation (NOV), or begins investigation for a potential NOV before the retention period expires, retain the SWPPP and all Records related to the SWPPP and CGP until at least three years after EPA and/or ADEC has determined all issues related to the investigation are settled.

The SWPPP and related documents must be made available for review and copy, to the Department City and other regulatory agencies that request them. See CGP Parts 5.10, 6.6 and 9.5.

641-3.3 SWPPP INSPECTIONS, AMENDMENTS, REPORTS, AND LOGS. Perform Inspections, prepare Inspection Reports, and prepare SWPPP Amendments in compliance with the SWPPP and the CGP. Update SWPPP Corrective Action Log Form—25D-112, SWPPP Amendment Log Form—25D-114, SWPPP Grading and Stabilization Activities Log Form—25D-110, SWPPP Project Staff Tracking Form—25D-127, and SWPPP Daily Record of Rainfall Form—25D-115. For active projects update the Records daily.

a. Inspection during Construction. Conduct Inspections according to the schedule and requirements of the SWPPP and CGP.

Inspections required by the CGP and SWPPP must be performed by the Contractor's SWPPP ManagerStorm Water Lead and/or Storm Water Inspector. The Contractor shall give the Project Representative or Engineer's designated representative the opportunity to participate in inspections performed by the Contractor the Department's Storm water Inspector jointly, unless approved by the Engineer, when:

- (1) One of the inspectors is not on site, access is only by air, and weather delayed or canceled flights;
- (2) One of the inspectors is sick;
- (3) The project is on a reduced frequency inspection schedule with no staff on site, the only access to the site is by air, and it is economical to send only one inspector; or
- (4) When the Engineer determines a safety concern that makes joint inspection impracticable.

When this is the case, the Operator who conducts the Inspection must provide a copy of the Inspection Report to the other Operator within three days of the Inspection date and document the date of the report transmittal.

b. Inspection Reports. Use only the DOT&PF SWPPP Construction an approved sSite ilnspection report, fForm 25D-100 to record Inspections. Changes or revisions to Form 25D-100 are not permitted; except for adding or deleting data fields that list: Location of Discharge Points, and Site Specific BMPs. Complete all fields included on the Inspection Report report form; do not leave any field blank.

Insert a Complete-by-Date for each corrective action listed that complies with:

- (1) Subsection 641-3.1d, and
- (2) The CGP.

Provide a copy of the completed, unsigned Inspection Report to the Engineer by the end of the next business day following the inspection.

The Superintendent must shall review, correct errors, and sign and certify the Inspection Report, within three days of the date of Inspection. The Engineer may coordinate with the Superintendent to review and correct any errors or omissions before the Superintendent signs the report. Corrections are limited to adding missing information or correcting entries to match field notes and conditions present at the time the Inspection was performed. Deliver the signed and certified Inspection Report to the Engineer on the same day the Superintendent signs it.

The Engineer will sign and certify the Inspection Report and will return the original to the Contractor within three working days.

The Contractor shall allow the Engineer to make corrections to the SWPPP. The Engineer may make corrections after the Superintendent has signed and certified the Inspection Report. The Engineer will initial and date each correction. If the Engineer makes corrections, the Superintendent must recertify the Inspection Report by entering a new signature and date in the white space below the original signature and date lines. Send a copy of the recertified Inspection Report to the Engineer on the day it is recertified.

If subsequent corrections to the certified Inspection Report are needed, document the corrections in an amendment memo that addresses only the omitted or erroneous portions of the original Inspection Report. The Superintendent and the Engineer must bothshall sign and certify the amendment memo. The issuance of an amendment memo does not relieve the Contractor of liquidated damages that may have been incurred as a result of the error on the original certified inspection report.

- c. Inspection before Seasonal Suspension of Work. Conduct an Inspection before seasonal suspension of work to confirm BMPs are installed and functioning according to the requirements of the SWPPP and CGP.
- **d.** Reduced Inspection Frequencies. Conduct Inspections according to the inspection schedule indicated in the approved SWPPP. Any change in inspection frequency must be approved by the Engineer, and beginning and ending dates documented as an amendment to the SWPPP.

If the Engineer approves and the entire site is stabilized, the frequency of inspections may be reduced to at least one inspection every 30 days. At actively staffed sites, inspect within two business days of the end of a storm event that results in a discharge from the site.

When work is suspended due to fall freeze-up, the Engineer may suspend inspection requirements after fourteen days of freezing conditions if:

- (1) Soil disturbing activities are suspended; and
- (2) Soil stabilizing activities are suspended.

Inspections must resume according to the normal inspection schedule identified in the SWPPP, at least 21 days before anticipated spring thaw. See CGP Part 6.2.3.

The Engineer may waive requirements for updating the Grading and Stabilization Activities Log and Daily Record of Rainfall during seasonal suspension of work. If so, resume collecting and recording weather data on the Daily Record of Rainfall form one month before thawing conditions are expected to result in runoff. Resume recording land disturbance and stabilization activities on the Grading and Stabilization Activities Log when Construction Activity resumes.

e. Stabilization before Fall Freeze up and Spring Thaw. Stabilize Construction Activities within the Project Zone with appropriate BMPs prior to the anticipated date of fall freeze up, in accordance with the CGP, Part 4.12.

Exceptions to stabilization prior to anticipated date of fall freeze up include:

- (1) When stabilization activities are precluded by snow cover or frozen ground conditions prior to the anticipated date of fall freeze up, or
- (2) When winter construction activity is authorized by the Engineer and conducted according to the contract.

Stabilize Construction Activities within the Project Zone with appropriate BMPs prior to spring thaw, as defined in the CGP.

- f. Inspection before Project Completion. Conduct Inspection to ensure Final Stabilization is complete throughout the Project, and temporary BMPs that are required to be removed are removed. Temporary BMPs that are biodegradable and are specifically designed and installed with the intent of remaining in place until they degrade, may remain in place after project completion.
- g. Items and Areas to Inspect. Conduct Inspections of the areas required by the CGP and SWPPP.
- h. SWPPP Amendments and SWPPP Amendment Log. The Superintendent and the SWPPP ManagerStorm Water Lead are the only persons authorized to amend the SWPPP and update the SWPPP Amendment Log, Form 25D-114. The Superintendent or the SWPPP ManagerStorm Water Lead must sign and date amendments to the SWPPP and updates to the SWPPP Amendment Log.

SWPPP Amendments must be approved by the Engineer.

Amendments must occur:

- (1) Whenever there is a change in design, construction operation, or maintenance at the construction site that has or could cause erosion, sedimentation or the discharge of pollutants that has not been previously addressed in the SWPPP;
- (2) If an Inspection identifies that any portion of the SWPPP is ineffective in preventing erosion, sedimentation, or the discharge of pollutants;
- (3) Whenever an Inspection identifies a problem that requires additional or modified BMPs
- (4) Whenever a BMP is modified during construction, or a BMP not shown in the original SWPPP is added;
- (5) If the Inspection frequency is modified (note beginning and ending dates); or
- **(6)** When there is a change in personnel who are named in the SWPPP, according to Subsection 641-2.1d.

Amend the SWPPP narrative as soon as practicable after any change or modification, but in no case, later than seven days following identification of the need for an amendment. Every SWPPP Amendment must be signed and dated. Cross-reference the amendment number with the Corrective Action Log or SWPPP page number, as applicable. When a BMP is modified or added, describe the BMP according to Subsection 641-2.1c.

Keep the SWPPP Amendment Log current. Prior to performing each scheduled Inspection, submit to the Engineer a copy of the pages of the Amendment Log that contain new entries since the last submittal. Include copies of any documents amending the SWPPP.

Keep the SWPPP Amendment Log as an appendix to the SWPPP.

- i. Site Maps. Document installation, routine maintenance, and removal of BMPs by making notes on the SWPPP Site Maps. Include the date and the recording person's initials by these notes. Identify areas where Construction Activities begin, areas where Construction Activities temporarily or permanently cease, and areas that are temporarily or permanently stabilized.
- j. Corrective Action Log. The Superintendent and SWPPP ManagerStorm Water Lead are the only persons authorized to make entries on the SWPPP Corrective Action Log, Form 25D-112. Document the need for corrective action within 24 hours of either:
 - (1) Identification during an inspection; or
 - (2) Discovery by the Department's City's/Engineer's or Contractor's staff, a subcontractor, or a regulatory agency inspector.

Modification or replacement of a BMP, installation of a new BMP not shown in the original SWPPP, overdue BMP maintenance, or other reasons listed as corrective actions in 641-3.1d must be documented on the Corrective Action Log.

Within 24 hours of discovery, update the Corrective Action Log, Form 25D-112, with the date of discovery and proposed corrective action. If discovered during an inspection, update log with inspection date and proposed corrective actions noted on the Inspection Report. If discovered outside of an inspection, update the log with the date of discovery, the proposed corrective action, and the date the corrective action was completed.

After the corrective action has been accomplished, note in the Corrective Action Log the action taken and if a SWPPP amendment was needed. Date and initial the entry.

Keep the Corrective Action Log current and submit a copy to the Engineer prior to performing each scheduled SWPPP Inspection.

Keep the Corrective Action Log as an appendix to the SWPPP.

k. Grading and Stabilization Activities Log. The Superintendent and SWPPP ManagerStorm Water Lead are the only persons authorized to date and initial entries on the SWPPP Grading and Stabilization Activities Log, Form 25D-110. Use the SWPPP Grading and Stabilization Activities Log, to record land disturbance and stabilization activities.

Keep the Grading and Stabilization Activities Log current and submit a copy to the Engineer prior to performing each scheduled SWPPP Inspection. Keep the Grading and Stabilization Activities Log organized and completed to demonstrate compliance with the CGP Part 4.5.

Keep the Grading and Stabilization Activities Log as an appendix to the SWPPP.

I. Daily Record of Rainfall. Use <u>a SWPPP Daily daily Record record</u> of Rainfall form, Form 25D-115, to record weather conditions at the Project. Update the form daily and include the initials of the person recording each day's entry. Submit a copy to the Engineer prior to performing each scheduled Inspection. Keep the Daily Record of Rainfall as an appendix to the SWPPP.

m. Staff Tracking Log.

Use the a SWPPP Project project Staff staff Tracking Form form 25D-127, to keep staff records current. Include Records of the AK-CESCL or equivalent qualifications for the Superintendent, SWPPP ManagerStorm Water Lead, ATS operator, any acting Superintendent and acting Storm Water LeadSWPPP Managers, and beginning and end dates for temporary personnel assignments related to administration of the CGP or Item P-641. Update the SWPPP Staff Tracking Log within 24 hours of any changes in personnel, qualifications, or other staffing items related to administration of the CGP or Item P-641.

641-3.4 FAILURE TO PERFORM WORK.

The Engineer has authority to suspend work and withhold monies according to GCP subsections 50-01 and 80-06 for the reasons listed under GCP subsection 80-06 and for an incident of noncompliance with the CGP or SWPPP, that may endanger health or the environment or for failure to perform work related to Item 641.

An incident of noncompliance includes, but is not limited to, the Contractor's failure to:

- a. Obtain appropriate permits before Construction Activities occur;
- **b.** Perform SWPPP Administration;
- c. Perform timely Inspections;
- d. Update the SWPPP;
- e. Transmit updated SWPPP, Inspection Reports, and other updated SWPPP forms to the Engineer;
- **f.** Maintain effective BMPs to control erosion, sedimentation, and pollution in accordance with the SWPPP, the CGP, and applicable local, state, and federal requirements;
- g. Perform duties according to the requirements of Item P-641; or
- **h.** Meet requirements of the CGP, SWPPP, or other permits, laws, and regulations related to erosion, sediment, or pollution control.
- i. Any other requirements established or included in the contract.

No additional Contract time or additional compensation will be allowed due to delays caused by the Engineer's suspension of work.

641-3.5 ACCESS TO WORK.

The Project, including any related off-site areas or support activities, must be made available for inspection, or sampling and monitoring, by the Department City and other regulatory agencies. See CGP, Part 6.6.

METHOD OF MEASUREMENT

641-4.1 This item will not be measured for payment.

BASIS OF PAYMENT

641-5.1 See Subsection 641-3.4 Failure to Perform Work, for additional work and payment requirements.

- a. Item P641.030.0000 Temporary Erosion, Sediment and Pollution Control. At the Contract lump sum price for all work associated with Erosion, Sediment, and Pollution Control including all labor, supervision, material, equipment, and incidentals to install, maintain, remove and dispose of temporary erosion, sedimentation, and pollution control BMPs identified in the SWPPP and SPCC Plan.
- b. Subsidiary Items. Temporary erosion, sediment and pollution control measures that are required outside the Project Zone are subsidiary. Work required by the HMCP and SPCC Plan including hazardous material storage, containment, removal, cleanup and disposal, are subsidiary to Item P641.030.0000 Erosion, Sediment and Pollution Control Administration.

- c. Work under other pay items. Work that is paid for directly or indirectly under other pay items will not be measured and paid for under Item P-641. This work includes but is not limited to:
 (1) Dewatering;
 (2) Shoring;
 - (4) Permanent seeding;
 - (5) Installation and removal of temporary work pads;
 - (6) Temporary accesses;
 - (7) Temporary drainage pipes and structures;
 - (8) Diversion channels;
 - (9) Settling impoundment; and
 - (10) Filtration.

(3) Bailing;

Permanent erosion, sediment and pollution control measures will be measured and paid for under other Contract items when shown on the bid schedule.

a. Work at the Contractor's Expense. Temporary erosion, sediment and pollution control measures that are required due to carelessness, negligence, or failure to install temporary or permanent controls as scheduled or ordered by the Engineer, or for the Contractor's convenience, are at the Contractor's expense.

Payment will be made under:

Item P641.030.0000 Temporary Erosion, Sediment, and Pollution Control – per lump sum

ITEM P-660 RETROREFLECTIVE MARKERS AND CONES

DESCRIPTION

660-1.1 Furnish and install airport retroreflective markers and traffic cones in accordance with the Plans, the safety plan, and the specifications at the locations indicated on the Plans or as directed by the Engineer. Assemble and install markers using all materials and incidentals necessary to place completed markers into operation to the satisfaction of the Engineer. Remove existing reflective marker cones and threshold markers for salvage and offer to the owner for possession.

MATERIALS

660-2.1 MARKERS.

- a. Type I Marker. (Not Used).
- b. Type II Marker. (Not Used).
- c. Cone, 18-Inch. Reflective traffic cone, 18 inches in height, orange color. Fit each cone with retro-reflective sheeting to the height specified on the Plans. When no height dimension is specified, fit with a 7-inch wide band of retro-reflective sheeting centered on the cone. Use pressure sensitive, flexible, high intensity retroreflective sheeting, conforming to ASTM D4956, Type III. Provide the appropriate sheeting color(s) as indicated on the Plans or if none is indicated supply with white colored band. Provide each cone with an certified anchoring tether of weather and corrosion resistant material capable of securing the assembly to prevent foreign object debris (FOD) hazard to aircraft. similar to the tether required for Type II Markers that are frangible.

CONSTRUCTION REQUIREMENTS

660-3.1 Install markers and/or cones at the locations shown on the Plans, called for in the specifications or as directed by the Engineer. Stabilize Type II Markers by using the manufacturer's recommended methods of driving the supporting posts into the ground or providing a certified mounting system. If frangible Type II Markers or cones are provided, secure the tether to a hard point in accordance with AC 150/5345-39 per the manufacturer's recommendations.

Remove existing reflective markers and threshold marking panels as shown on the Plans or as directed for salvage and offer to the owner for possession. Markers not claimed by the owner become the property of the Contractor to be disposed of in a manner approved by the Engineer.

METHOD OF MEASUREMENT

660-4.1 This item will not be measured for payment.

BASIS OF PAYMENT

660-5.1 Furnishing, installation, maintenance, and removal of cones used for airport safety shall be subsidiary to Section A-110 Airport Safety Requirements.

ITEM P-670 HAZARDOUS AREA BARRIERS

DESCRIPTION

670-1.1 Provide barriers for use on the project required under GCP subsection 70-09per the CSPP and as shown in the Plans. Provide each barrier complete with flasher unit and flag in accordance with the dimensions, design, and details shown on the Plans. Haul and place barriers as shown on the Plans or as directed by the Engineer. Relocate barriers as conditions warrant.

When used during periods of darkness, such barricades, warning signs and hazard markings shall be suitably illuminated. Barricades shall be spaced as shown on the plans; however spacing shall never exceednet more than 25 feet apart.

Provide additional flasher units and flags, when specified, for use on Department-supplied barriers.

MATERIALS

670-2.1 Use materials that conform to the following:

- a. Hazard Marker Barrier, Timber. (Not Used).
- b. Hazard Marker Barrier, Plastic. Provide 10-inch by 10-inch by 8-foot nominal dimension portable water-ballast barriers made from high impact, safety orange and white, UV-resistant, high density polyethylene (HDPE) plastic. Provide barriers with pre-molded flag staff and flasher bracket attachment holes. Provide barriers that are designed as a modular system to allow assembly/disassembly and nesting for compact storage, and to permit the option of physically bolting multiple barriers together to provide a continuous barrier wall. Provide 6-inch by 72-inch reflective striping panel for attachment to one side of each barrier.

670-2.2 FLAG. Provide heavy vinyl coated nylon, 18-inch by 18-inch flag with an integral diagonal metal or plastic stay to make the flag self-supporting. Provide flag in color fluorescent orange and mounted on a 3/4-inch by 30-inch staff.

670-2.3 FLASHER UNIT. Provide battery-operated omnidirectional flashing red light. Provide flasher unit with mounting bracket designed for the appropriate barrier type.

- a. Flasher Unit for Timber Barrier. (Not Used).
- b. Flasher Unit for Plastic Barrier.

Composition High impact, polycarbonate plastic lens and base

Flashing Rate 60 flashes per minute
Brightness 6,000 millicandela (mcd)

LED Total of 3 red

Photo Cell Allows for solar light to automatically shut off in higher level light conditions and

turn on in lower light conditions

CONSTRUCTION REQUIREMENTS

670-3.1 GENERAL. On the top side and at opposite ends of each barrier, mount one flag and one flasher unit per manufacturer's instructions. Tether flag to the barrier.

- a. Hazard Marker Barrier, Timber. (Not Used).
- **b.** Hazard Marker Barrier, Plastic. Fill barriers with water for ballast in accordance with manufacturer's recommendations. When shown on the Plans or directed by the Engineer, interlock

barrier units using manufacturer recommended connectors to form a continuous wall separating the hazardous work area from aircraft movement areas. Adhere reflective striping panels to one side of each barrier.

670-3.2 DELIVERY. Deliver hazard marker barriers, flasher units, and flags to the project site prior to commencing work on the project within the Air Operations Area.

670-3.3 STORAGE. (Not Used).

METHOD OF MEASUREMENT

670-4.1 This item will not be measured for payment.

BASIS OF PAYMENT

670-5.1 All work, materials, and equipment required to complete the work described herein is subsidiary to Item A-110 Airport Safety Requirements and no separate payment will be made.

ITEM P-671 RUNWAY AND TAXIWAY CLOSURE MARKERS

DESCRIPTION

671-1.1 Furnish, install, and maintain runway and/or taxiway closure markers at the locations shown on the Plans or as directed by the Engineer. Where a new runway is built to replace an existing runway, install runway closure markers on the old runway immediately after the new runway has been opened for operations. Place markers as shown on the Plans or as directed by the Engineer. Relocate markers as required. Materials supplied under this item may be used as temporary closure markers as required in GCP subsection 80-04 A-110 Airport Safety Requirements.

Kenai Municipal Airport has Lighted X's available for the Contractor's use. Contractor shall verify availability and condition of Lighted X's during bidding. Contractor shall confirm that Owner provided materials conform to requirements of this specification or shall supply their own at no additional cost to the Owner.

MATERIALS

671-2.1 Use materials that conform to the following.

- a. Vinyl Mesh Panel.
 - (1) Panel Material. High tenacity vinyl coated polyester mesh fabric, 9 ounces per square yard (oz/yd²), 70% closed mesh allowing water to flow through. Use 3.0 oz/yd² woven polyester fabric, coated after weaving with 6.0 oz/yd² coating of poly vinyl chloride, color traffic yellow. Minimum tensile strength 230 by 200 pounds (lbs) grab method and 200 by 140 lbs strip method. Meet ASTM D 471 for water absorption, 7 days @160°F, 5.0% maximum weight gain and ASTM D 750 for weathering, 2,500 hours, no appreciable change in color, no cracking, minimum crazing.
 - (2) Seams, Perimeter Hem, and Thread. Double flat felled seams, double stitched, and 3-ply perimeter hem sewn with UV resistant #92 bonded polyester thread.
 - (3) **Grommets.** No. 2 brass rolled-rim spur grommets installed through hem at 30-inch intervals along marker perimeter.
 - (4) Anchors. 3/8-inch diameter deformed reinforcing steel at least 18 inches long, including a hook formed as a 4-inch segment bent perpendicular to the anchor stem.
- b. Snow Fence Panel.
 - (1) Panel Material. Wire-supported wood lathe snow fence, pre-treated with a suitable wood stain.
 - (2) Paint Type: (select one)
 - (a) AASHTO M248, Type F (Alkyd resin)
 - (b) FSS TT-P-19D(1) Paint Latex (Acrylic emulsion, Exterior).
 - (3) Paint Color: Traffic Yellow, #33538
 - (4) Anchors: 3/8-inch diameter deformed reinforcing steel at least 18 inches long, including a hook formed as a 4-inch segment bent perpendicular to the anchor stem.

c. Temporary Illuminated Panel.

(1) Federal Aviation Administration (FAA) Advisory Circular (AC) 150/5345-53, Airport Lighting Equipment Certification Program (ALECP). The AC 150/5345-53, the latest certified equipment list, and the address list of certified airport lighting equipment manufacturers are available on the FAA webpage at: https://www.faa.gov/airports/engineering/airport_lighting/.

CONSTRUCTION REQUIREMENTS

671-3.1 Meet the following requirements.

- a. Vinyl Mesh Panel. Secure by driving anchors into the embankment through all grommets.
- **b. Snow Fence Panel.** Apply to the upper side of the panels, two coats of paint that result in a dense and consistent color. Construct panels double layered, with upper layer wood lathe oriented to lower lathe at right angles to provide a solid yellow appearance.

Combine standard manufactured widths to provide plan dimensions, if necessary.

Secure panels by driving anchors into the embankment at 30-inch intervals around the perimeter of each panel. If more than one standard manufactured width is combined to obtain plan dimensions, provide anchors on each strip.

c. Temporary Illuminate Panel. Locate the marker where shown on the plans or as directed by the Engineer. The contractor shall maintain an uninterrupted operation of the closure marker. Maintenance records shall be kept by the Contractor for all portable lighted markers and will be turned in to the Engineer when construction is complete. Must be able to be set up by one person in less than five (5) minutes.

METHOD OF MEASUREMENT

671-4.1 This item will not be measured for payment.

BASIS OF PAYMENT

671-5.1 All work, materials, and equipment required to complete the work described herein is subsidiary to item A-110 Airport Safety Requirements and no separate payment will be made.

TESTING REQUIREMENTS

	. ,
ASTM D 471	Rubber Property – Effect of Liquids

ASTM D 750 Rubber Deterioration in Carbon-Arc Weathering Apparatus

ITEM T-901 SEEDING

DESCRIPTION

901-1.1 This work consists of preparing the ground and applying seed and fertilizer in conformance with the Plans and Specifications.

The intent of this work is to provide a living vegetative cover in the areas indicated on the Plans and to maintain the cover for the term of the Contract.

MATERIALS

901-2.1 SEED. Provide the seed mixture as specified in the Special Provisions Table 1. Provide seed collected or harvested within 2 years of the targeted seeding date. Provide all seed in pure live seed (PLS) unless otherwise directed.

TABLE 1 SEED MIX DESIGN

Seed Type	<u>% By Wt.</u>	Min. % Purity	Min % Germination
Annual Ryegrass	<u>5%</u>	90%	<u>85%</u>
Kentucky Bluegrass - Kenai	30%	90%	<u>85%</u>
Kentucky Bluegrass - Alene	<u>25%</u>	90%	<u>85%</u>
Boreal Fescue	40%	90%	<u>85%</u>

Provide seed true of genus and species. Meet the applicable requirements of the State of Alaska Seed Regulations, 11 AAC 34, Articles 1 and 4, and the Federal Seed Act, 7 CFR Part 201.

The Engineer will review requests for species or cultivar substitution(s); genus substitution is not allowed. Substitution requests need to be submitted a minimum of 60 calendar days in advance of delivery.

- a. Prohibited and Restricted Noxious Weeds and Quarantined Pests. Provide seed and appliances certified to be free of prohibited noxious weeds or quarantined pests, and certified to contain no more than the maximum allowable tolerances for restricted noxious weeds, according to Alaska Administrative Code, Title 11, Chapter 34 (11 AAC 34).
 - (1) Seed or appliances found to contain prohibited noxious weeds or quarantined pests will be rejected, according to 11 AAC 34.020(a) and 11 AAC 105-180, respectively.
 - (2) Seed or appliances found to contain restricted noxious weed seed in excess of the maximum allowable tolerance per pound will be rejected, according to 11 AAC 34.020(b).
 - (3) Prohibited and restricted noxious weeds are listed in 11 AAC 34.020, and can be viewed at the following webpage: http://plants.alaska.gov/invasives/noxious-weeds.htm.
- **b. Labeling.** Ensure each bag or container of individual seed species is labeled to meet requirements of 11 AAC 34.010. Do not remove labels from bags or containers.
- c. Certification. Certify seed is free of prohibited noxious weeds and restricted noxious weeds are within allowable tolerances. Provide to the Engineer no later than 10 days prior to seeding 4-<u>a</u> signed copies copy of a statement signed by the vendor identifying the lot number or lot numbers,

certifying each lot of seed has been tested within the preceding nine months, by a recognized seed testing laboratory, a member of the Association of Official Seed Certifying Agency (AOSCA), or the Alaska Plant Materials Center.

Include the following in each certification:

- (1) name and address of laboratory
- (2) date of test
- (3) lot number
- (4) seed name
- (5) percent pure seed
- (6) percent germination
- (7) percent weed content
- (8) percent inert matter

Seed will be rejected if:

- **a.** Contains prohibited noxious weeds;
- **b.** Contains restricted noxious weeds above maximum allowable tolerances;
- c. Not certified as tested within the preceding nine months;
- d. Wet, moldy, or otherwise damaged in transit or storage; or
- e. Containers do not have labels or the labels have been removed.

Seed may be rejected for:

f. Discrepancies in the lot numbers listed on the statement to the lot numbers indicated on the labels of the seed containers.

The Contractor shall immediately remove rejected seed from the project premises. If seed is rejected for containing prohibited noxious weeds or for exceeding maximum allowable tolerances of restricted noxious weeds, dispose of rejected seed according to 11 AAC 34.075(g).

901-2.2 FERTILIZER. Provide a <u>20-20-1016-16-16</u> fertilizer containing no cyanamid compounds or hydrated lime. Tolerances of the chemical ingredients shall be plus or minus 2%.

Use standard commercial fertilizer supplied separately or in mixtures, and in moisture proof containers. Mark each container with the total net weight and with the manufacturer's guaranteed analysis of the contents showing the percentage for each ingredient.

CONSTRUCTION METHODS

901-3.1 SOIL PREPARATION. Clear all areas to be seeded of stones 4 inches in diameter and larger and of all sticks, stumps, noxious weeds, and other debris or irregularities that might interfere with the seeding operation, growth of grass, or subsequent maintenance of the grass covered areas.

Just prior to seeding, roughen the surface of all areas to be seeded by track-walking transversely up and down the slopes or using a scarifying slope board. Round the top and bottom of the slopes, when necessary,

to facilitate tracking and to create a pleasing appearance, but do not disrupt drainage flow lines. Where fill is adjacent to wetlands, keep the equipment entirely on the fill slope.

<u>Contractor shall maintain existing vegetative growth to the greatest extent possible and seed/reseed areas as required.</u>

901-3.2 SEEDING SEASONS. Seed and fertilize between May 15 and August 15.

Do not seed during windy conditions or when climatic conditions or ground conditions would hinder placement or proper growth.

901-3.3 APPLICATION. Apply seed uniformly at a rate of 5 pounds per 1,000 square feet. Apply fertilizer uniformly over the area to be seeded at a rate of 12.5 pounds per 1,000 square feet. The hydraulic method shall be used. Apply seed and fertilizer at the rates specified in the Special Provisions. Use either of the following methods:

a. Hydraulic Method.

- (1) Mix a slurry of seed, fertilizer, water, and other components as required by the Special Provisions this specification. Add seed to the slurry mixture no more than 30 minutes before application.
- (2) Use hydraulic seeding equipment that will maintain a continuous agitation and apply a homogeneous mixture through a spray nozzle. The pump must produce enough pressure to maintain a continuous nonfluctuating spray that will reach the extremities of the seeding area, without causing damage to the seed bed. Use a hose attachment to reach areas where a fixed nozzle cannot reach.
- (3) If mulch material is required, add it to the water slurry in the hydraulic seeder after adding the proportionate amounts of seed and fertilizer.
- (4) Apply slurry at a rate that distributes all materials evenly.
- b. Dry Method. (Not Used).

901-3.4 MAINTENANCE OF SEEDED AREAS. Protect seeded areas against traffic using approved warning signs or barricades. Repair surfaces that are gullied or otherwise damaged following seeding by regrading and reseeding, as directed. Maintain seeded areas in a satisfactory condition until final inspection and acceptance of the work.

Keep temporary erosion control measures in place until the vegetation is accepted.

Water the seeded areas, as required, for proper germination and growth. Use equipment that can acceptably water all seeded areas without vehicular traffic on seeded areas.

Reseed any seeded areas not showing evidence of satisfactory growth, as directed.

901-3.5 FINAL ACCEPTANCE. Final acceptance will be based on <u>Contractor conformance to Plans and Specifications and performance during surface preparations, applications of seed/fertilizer, maintenance of <u>seeded areas</u> the following criteria and must provide 70% vegetative coverage of the seeded area. If seeding is completed by July 15th, coverage must be attained by September 30th. If seeding is completed by August 15th, coverage must be attained by June 15th of the following season. Final acceptance will be based on the Engineers approval.</u>

METHOD OF MEASUREMENT

901-4.1 This item will not be measured for payment.

BASIS OF PAYMENT

901-5.1 All work, materials, and equipment required to complete the work described herein is subsidiary to Item D-701 Pipe for Storm Drains and Culverts and no separate payment will be made.	

ITEM T-905 TOPSOIL

DESCRIPTION

905-1.1 This item shall consist of preparing the ground surface for topsoil application, removing topsoil from designated stockpiles or areas to be stripped on the site or from approved sources off the site, and placing and spreading the topsoil on prepared areas in accordance with this specification at the locations shown on the plans or as directed by the Engineer.

MATERIALS

905-2.1 TOPSOIL. Provide a natural friable surface soil without admixtures of undesirable subsoil, refuse, or foreign materials and reasonably free from roots, clods, hard clay, noxious weeds, tall grass, brush sticks, stubble or other litter, and which is free draining and non-toxic.

The gradation shall conform to selected Class in Table 1 when tested according to ATM 304 If no class is indicated, meet the grading requirements in Table 1 for Class A topsoil.

TABLE 905-1. TOPSOIL GRADING

Sieve Designation	Percent Passing By Weight		
	CLASS A	CLASS B	
3 in	-	100	
1/2 in.	100	-	
No. 4	95-100	75-100	
No. 16	64-90	50-95	
No. 200	30-60	20-80	
Organic Matter	10-40	5 min.	

Percent of organic matter will be determined by loss-on-ignition of oven dried samples using ATM 203.

When necessary, amend natural topsoil to meet the above specifications, using approved materials and methods.

CONSTRUCTION METHODS

905-3.1 PREPARING THE GROUND SURFACE. Where grades in the areas to be topsoiled have not been established, sS mooth-grade the areas to match existing the grades and as shown on the Plans. Maintain the prescribed grades in an even and properly compacted condition to prevent the formation of low places or pockets where water will stand.

Clear the surface of the area to be topsoiled of all stones larger than 2 inches in any diameter and all litter or other material which may be detrimental to proper bonding, the rise of capillary moisture, or the proper growth of the desired planting.

Immediately prior to dumping and spreading the topsoil, loosen the surface, by approved means, to a minimum depth of 2 inches to facilitate bonding of the topsoil to the covered subgrade soil.

905-3.2 OBTAINING TOPSOIL. Prior to the stripping of topsoil from designated the project areas, remove any vegetation, stumps and large roots, rubbish or stones found on such areas, which may interfere with subsequent operations, using approved methods.

When suitable topsoil is available on the site, remove this material from the designated areas to the depth directed. Spread the topsoil on areas already tilled and smooth-graded, or stockpile in approved areas. Grade the stockpile sites and adjacent areas which have been disturbed if required and put into a condition acceptable for seeding.

When suitable topsoil is secured off the airport site, locate and obtain the supply, subject to approval. Notify the Engineer sufficiently in advance of operations in order that necessary measurements and tests can be made. Remove the topsoil from approved areas and to the depth as directed. Haul the topsoil to the site of the work and stockpile or spread as required.

905-3.3 PLACING TOPSOIL. Spread the topsoil evenly on the prepared areas to a uniform depth of 4 inches after compaction. Do not spread when the ground or topsoil is frozen or excessively wet.

After spreading, break up any large stiff clods and hard lumps with a pulverizer or other effective means. Rake up and dispose of all stones or rocks (2 inches or more in diameter), roots, litter, or any foreign matter. After spreading, compact the topsoil with a cultipacker or by other approved means. The compacted topsoil surface shall conform to the required lines, grades, and cross sections. Promptly remove any topsoil or other dirt falling upon pavements or other surface courses.

Track topsoil with a dozer to make track marks running perpendicular to the direction of drainage.

METHOD OF MEASUREMENT

905-4.1 This item will not be measured for payment.

BASIS OF PAYMENT

905-5. All work, materials, and equipment required to complete the work described herein is subsidiary to Item D-701 Pipe for Storm Drains and Culverts and no separate payment will be made.

TESTING REQUIREMENTS

ATM 304 WAQTC FOP for AASHTO T 27/T 11 Sieve Analysis of Fine and Coarse Aggregates

ITEM T-908 MULCHING

DESCRIPTION

908-1.1 This work consists of providing, placing, and maintaining soil stabilization material where shown on the Plans.

MATERIALS

- **908-2.1 MULCH.** Virgin/recycled wood fiber, recycled paper (wood cellulose), or an acceptable blend containing up to 50% recycled paper, with the following characteristics:
 - **a.** Contains no growth or germination inhibiting factors.
 - **b.** Will remain in uniform suspension in water under agitation and will blend with grass seed, fertilizer and other additives to form a homogeneous slurry, when required.
 - **c.** Will form a uniform, blotter-like ground cover on application, having moisture absorption and percolation properties and the ability to cover and hold grass seed in contact with soil.
 - d. Will not form a hard crust upon drying.
 - e. Dyed a suitable color to facilitate inspection of its placement.

Ship the mulch in packages of uniform weight (plus or minus 5%) bearing the name of the manufacturer and the air-dry weight content.

Use a commercial tackifier on all slopes 4:1 or steeper. Use the amount recommended by the manufacturer.

908-2.2 ROLLED MATTING. Use materials that conform to one of the following standards:

- **a. Unbleached Single Jute Yarn.** Use yarn that is loosely twisted and not varying in thickness more than one-half its normal diameter. Provide jute mesh in rolled strips conforming to the following requirements.
 - (1) Width: 45 to 48 inches, ± 1-inch.
 - (2) 78 warp-ends per width of cloth (minimum).
 - (3) 41 weft-ends per yard (minimum).
 - (4) Weight: 1.22 pounds per linear yard, ± 5%
- b. Knitted Straw Matting. Commercially manufactured erosion control blanket. Use netting which is biodegradable. Straw shall be from oats, wheat, rye, rice, or other approved grain crops that are free from noxious weeds, mold, or other objectionable material. May contain coconut or other natural fiber to reinforce the straw. Follow the manufacturer's published recommendations.

908-2.3 STAPLES. U-shaped staples for anchoring matting, approximately 6 inches long and 1-inch wide. Machine-made: No. 11 gage or heavier steel wire. Hand-made: 12-inch lengths of No. 9 gage or heavier steel.

CONSTRUCTION METHODS

908-3.1 SURFACE PREPARATION. Smooth the surface and backfill all gullies and potholes before application. Remove all sticks and other foreign matter that prevents contact of the mulch or matting and the soil.

Ensure that the surface is moist at the time of placement. If area is to be seeded, soil preparation shall conform to subsection 901-3.1.

908-3.2 APPLICATION. Apply mulch at an application rate of 2,500 lbs/acre, based on dry weight.seil stabilization material at the rate specified in the Special Provisions. If seeding is specified, c_Complete the application of mulch or matting within 24 hours after seed is placed. When matting is shown on the plans, staple matting every 5 feet at overlapped joints and edges or as recommended by the manufacturer. Do not use vehicles or equipment which cause rutting or displacement of the subgrade or topsoil.

908-3.3 MAINTENANCE. Reshape and reseed any damaged areas and repair the mulch or matting as required.

Maintain the mulch or matting until all work on the project is complete and accepted.

METHOD OF MEASUREMENT

908-4.1 This item will not be measured for payment.

BASIS OF PAYMENT

908-5.1 All work, materials, and equipment required to complete the work described herein is subsidiary to Item D-701 Pipe for Storm Drains and Culverts and no separate payment will be made.

Appendix A – Environmental Permits

1. CATEX – 2021 Improved Airfield Drainage

APPENDIX A. DOCUMENTED CATEX

Airport sponsors may use this form for projects eligible for a categorical exclusion (CATEX) that have greater potential for extraordinary circumstances or that otherwise require additional documentation, as described in the Environmental Orders (FAA Order 1050.1F and FAA Order 5050.4B).

To request a CATEX determination from the FAA, the sponsor should review potentially affected environmental resources, review the requirements of the applicable special purpose laws, and **consult with the Airports District Office or Regional Airports Division Office staff** about the type of information needed. The form and supporting documentation should be completed in accordance with the provisions of FAA Order 5050.4B, paragraph 302b, and submitted to the appropriate FAA Airpor5ts District/Division Office. The CATEX cannot be approved until all information/documentation is received and all requirements have been fulfilled.

Name of Airport, LOC ID, and location:

Kenai Airport, ENA, Kenai Alaska

Project Title:

Kenai Municipal Airport 2021 Improved Airfield Drainage

Give a brief, but complete description of the proposed project, including all project components, justification, estimated start date, and duration of the project. Include connected actions necessary to implement the proposed project (including but not limited to moving NAVAIDs, change in flight procedures, haul routes, new material or expanded material sources, staging or disposal areas). Attach a sketch or plan of the proposed project. Photos can also be helpful.

The City of Kenai, owner and operator of the Kenai Municipal Airport (ENA), in cooperation with the Federal Aviation Administration (FAA), is proposing to reconstruct a section of storm drainpipe along the north end of Runway 02L/20R, in Kenai, Alaska. The project is located on United States Geological Survey Quadrangle Kenai C-4; Section 29 of Township 6N, Range 11W, Seward Meridian; Latitude 60.579776°N, Longitude 151.238948°W (Figure 1).

The purpose of the proposed project is to maintain and improve existing storm drain facilities. The project will replace the existing storm drainpipe between Manhole (MH) 02 and MH 05 (Figure 2). The existing storm drainpipe is experiencing joint separation, which allows storm water to outflow and groundwater to infiltrate the system resulting in pipe settlement and development of sinkholes. Sinkholes at the ground surface have developed in the immediate vicinity of the underground storm drainpipe. Proposed improvements include the following (Figure 2):

- Excavate approximately 3,000 cubic yards (cy) of existing material (in-situ) to expose the existing storm drainpipe. Exposure of the storm drainpipe will require a trench approximately 20 feet wide by 500 feet long. The total area of ground disturbance is approximately 0.25 acres.
- Remove existing storm drainpipe and place approximately 300 cy of pipe bedding material (sand) around the new pipe.

- Replace 326 linear feet of pipe with 18-inch diameter polyethylene (PE) pipe between MH 2 and MH 4.
- Replace 162 linear feet of pipe with 20-inch PE pipe between MH 4 and MH 5.
- Backfill using previously excavated material.
- Reseed disturbed area.

Construction is anticipated to begin and be completed during summer/fall 2021. All proposed work will occur on previously disturbed ground near the end of the runway. The proposed staging area is currently located at the material storage site. This material site is an existing, designated site provide by the airport on airport property. Access to and from the proposed project area is primarily via existing roads; however, approximately 350 feet of the access road will travel over existing vegetation to access the site. Temporary impacts to existing vegetation within the project area will occur due to the operation of heavy machinery as it travels over existing vegetated area.

Give a brief, but complete, description of the proposed project area. Include any unique or natural features within or surrounding airport property.

The Kenai Airport (ENA) is a public-use airport that primarily serves commercial and general aviation activity. The proposed project area is located at north end of Runway 02L/20R. The project area is an open vegetated field. The area is routinely maintained due to its proximity to the active runway.

Identify the appropriate CATEX paragraph(s) from Order 1050.1F (paragraph 5-6.1 through 5-6.6) or 5050.4B (Tables 6-1 and 6-2) that apply to the project. Describe if the project differs in any way from the specific language of the CATEX or examples given as described in the Order.

Actions involving acquisition, repair, replacement, maintenance, or upgrading of grounds, infrastructure, buildings, structures, or facilities that generally are minor in nature normally do not individually or cumulatively have a significant effect on the human environment (Order 1050.1F, paragraph 5-6.4). Therefore, the proposed action, which includes trenching and backfilling associated with replacement of storm drainpipe, meets the condition of a Documented Categorical Exclusion listed under paragraph 5-6.4.0

The circumstances one must consider when documenting a CATEX are listed below along with each of the impact categories related to the circumstance. Use FAA Environmental Orders 1050.1F, 5050.4B, and the Desk Reference for Airports Actions, as well as other guidance documents to assist you in determining what information needs to be provided about these resource topics to address potential impacts. Keep in mind that both construction and operational impacts must be included. Indicate whether or not there would be any effects under the particular resource topic and, **if needed**, cite available references to support these conclusions. Additional analyses and inventories can be attached or cited as needed.

Effective Date: June 2, 2017 ARP SOP No. 5.1

5-2.b(1) National Historic Preservation Act (NHPA) resources

	YES	NO
Are there historic/cultural resources listed (or eligible for listing) on the National Register of Historic Places located in the Area of Potential Effect? If yes, provide a record of the historic and/or cultural resources located therein and check with your local Airports Division/District Office to determine if a Section 106 finding is required.		
A review of the National Register of Historic Places as well as the City of Kenai's Historic Preservation Commission's web pages did not identify any culturally sensitive sites within the project Area of Potential Effect (APE). The APE included the direct footprint of the disturbance area and a 50-foot buffer around the project area.		
On March 18, 2021, the City of Kenai, on behalf of the FAA, submitted a combined initiation and findings consultation letter per Section 106 of the National Historic preservation Act (NHPA) to the State Historic Preservation Officer (SHPO). On March 19, 2021, HDL, on behalf of the City of Kenai and the FAA, initiated consultation with Tribes and certified local governments requesting information regarding known cultural resources or areas of cultural significance including:		
 Kenaitze Indian Tribe Salamatof Tribe Cook Inlet Region, Inc. City of Kenai Kenai Peninsula Borough Alaska Association of Historic Preservation 		
On March 22, 2021, the Kenai Peninsula Borough (KPB) Planning Department confirmed their department does not have any record of cultural resources within the project APE nor did they identify any cultural sites during their review of the AHRS database. No additional comments were received from Tribes or other consulting parties.		
On April 13, 2021, the SHPO concurred with the finding of No Historic Properties Affected. Section 106 consultation documents are included in Appendix A.		
Does the project have the potential to cause effects? If yes, describe the nature and extent of the effects.		
The project involves ground disturbance, excavation, and fill activities that have the potential to effect undiscovered resources.		
Is the project area undisturbed? If not, provide information on the prior disturbance (including type and depth of disturbance, if available)		
The project area has been previously disturbed. The proposed project will replace existing pipe.		

	YES	NO
Will the project impact tribal land or land of interest to tribes? If yes, describe the nature and extent of the effects and provide information on the tribe affected. Consultation with their THPO or a tribal representative along with the SHPO may be required.		
5-2.b(2) Department of Transportation Act Section 4(f) and 6(f) resources		
	YES	NO
Are there any properties protected under Section 4(f) (as defined by FAA Order 1050.1F) in or near the project area? This includes publicly owned parks, recreation areas, and wildlife or waterfowl refuges of national, state or local significance or land from a historic site of national, state or local significance.		
Will project construction or operation physically or constructively "use" any Section 4(f) resource? If yes, describe the nature and extent of the use and/or impacts, and why there are no prudent and feasible alternatives. See 5050.4B Desk Reference Chapter 7.		
Will the project affect any recreational or park land purchased with Section 6(f) Land and Water Conservation Funds? If so, please explain, if there will be impacts to those properties.		
5-2.b(3) Threatened or Endangered Species		
	YES	NO
Are there any federal or state listed endangered, threatened, or candidate species or designated critical habitat in or near the project area? This includes species protected by individual statute, such as the Bald Eagle.		
According to the U.S. Fish and Wildlife Service's (USFWS) Information for Planning and Consultation (IPaC) online database, there are no listed threatened or endangered species or designated critical habitat within the vicinity of the airport		

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	YES	NO
Does the project affect or have the potential to affect, directly or indirectly, any federal or state-listed, threatened, endangered or candidate species, or designated habitat under the Endangered Species Act? If yes, Section 7 consultation between the FAA and the US Fish & Wildlife Service, National Marine Fisheries Service, and/or the appropriate state agency will be necessary. Provide a description of the impacts and how impacts will be avoided, minimized, or mitigated. Provide the Biological Assessment and Biological Opinion, if required.		
Does the project have the potential to take birds protected by the Migratory Bird Treaty Act? Describe steps to avoid, minimize, or mitigate impacts (such as timing windows determined in consultation with the US Fish & Wildlife Service). According to the USFWS IPaC, the following migratory birds could occur in the vicinity of the airport:		
 American Golden-plover (<i>Pluvialis dominica</i>) Bristle-thighed Curlew (<i>Numenium tahitensis</i>) Hudsonian Godwit (<i>Limosa haemastica</i>) Lesser Yellowlegs (<i>Tringa flavipes</i>) Olive-sided Flycatcher (<i>Contopus cooperi</i>) Rusty Blackbird (<i>Euphagus carolinus</i>) Semipalmated Sandpiper (<i>Calidris pusilla</i>) Short-billed Dowitcher (<i>Limnodromus griseus</i>) Whimbrel (<i>Numenius phaeopus</i>) Each of the species listed are Birds of Conservation Concern throughout their entire range in the U.S. Ground disturbace is required to expose and replace the existing pipe however, impacts to migratory birds is not anticiapted.		

5-2.b (4) Other Resources

Items to consider include:

a. Fish and Wildlife Coordination Act	YES	NO
Does the project area contain resources protected by the Fish and Wildlife Coordination Act? If yes, describe any impacts and steps taken to avoid, minimize, or mitigate impacts.		
Wetlands and water bodies are present in the vicinity of the proposed project. The proposed project involves impacts to wetlands.		
Suitable eagle nesting habitat exists in the vicinity of the proposed project. During previous site visits, no nests were identified within the project area or in the vicinity of the project area. If any nests are discovered within 0.5 mile of the project area during construction, the USFWS will be consulted for guidance on how to proceed.		
b. Wetlands and Other Waters of the U.S.	YES	NO
Are there any wetlands or other waters of the U.S. in or near the project area? Although the USFWS National Wetland Inventory (NWI) and Cook Inlet wetlands both identified palustrine wetlands within the project vicinity, the NWI was the only database that identified wetlands within the project footprint. No navigable waters were identified within the project area.		

Has wetland delineation been completed within the proposed project area? If yes, please provide U.S. Army Corps of Engineers (USACE) correspondence and jurisdictional determination. If delineation was not completed, was a field check done to confirm the presence/absence of wetlands or other waters of the U.S.? If no to both, please explain what methods were used to determine the presence/absence of wetlands. A review of existing wetland data was completed on March 24, 2021. The following sources of existing environmental data and wetlands mapping were used to prepare a map of the project area containing wetland and waterbody locations. NWI Cook Inlet Wetlands 2012 aerial imagery provided by the KPB Alaska Department of Fish and Game Anadromous Waters Catalog U.S. Geological Survey Quadrangle Map Kenai C-4 SE 4-foot elevation data from KPB's Terrain Viewer	
The location and boundaries of wetlands are documented in a wetland memorandum (Appendix B). No navigable waters were identified within the project area. Field wetland determinations have not been completed for the proposed project.	
If wetlands are present, will the project result in impacts, directly or indirectly (including tree clearing)? Describe any steps taken to avoid, minimize or mitigate the impact.	
The proposed project would remove and replace existing soil and pipeline materials in-kind. Approximately 300 cy of additional pipe bedding material (sand) will be placed in wetlands, resulting in a total 0.07 acres of permanent impacts to wetlands. Permanent impacts include the placement of sand material at the base of the trench (approximately 6 feet wide). Temporary impacts to wetlands include the excavation and backfilling of a 14-foot wide trench needed to install new drainpipe.	
Avoidance of wetlands is not feasible based on the proposed project need. The contractor will be required to minimize disturbance to the maximum amount practicable during construction and only place the necessary amount of fill. Once the drainpipe has been replaced, the area will be backfilled with existing native soils, topsoiled, seeded, and returned to pre-construction conditions. No mitigation for the project is proposed.	

Is a USACE Clean Water Act Section 404 permit required? If yes, does the project fall within the parameters of a general permit? If so, which general permit?		
The proposed project is covered under the USACE's the Nationwide Permit (NWP) 58 Utility Line Activities for Water and Other Substances. Per NWP 58, submittal of a Pre-Construction Notification (PCN) is only required if a section 10 permit is required or if a discharge will result in the loss of greater than 1/10-acre of waters of the U.S. Since the proposed project does not impact a navigable water and discharged fill will not result in the loss of greater than 1/10-acre of water of the U.S., submittal of a PCN is not required. A memo reviewing both wetland data and the USACE NWP 58 permitting requirements for the proposed project is attached (Appendix B).		
c. Floodplains	YES	NO
Will the project be located in, encroach upon or otherwise impact a floodplain? If yes, describe impacts and any agency coordination or public review completed including coordination with the local floodplain administrator. Attach the FEMA map if applicable and any documentation.		\boxtimes
A review of Federal Emergency Management Agency (FEMA) flood maps indicate the project area is located on Flood Insurance Rate Map Panel 0200122030A. The proposed project is located in FEMA mapped Zone D, which is defined by FEMA as an area of undetermined, but possible, flood hazards. Due to the location and surrounding topography of the proposed project, encroachment or impacts to an existing floodplain are not anticipated.		
d. Coastal Resources	YES	NO
Will the project occur in or impact a coastal zone as defined by the State's Coastal Zone Management Plan? If yes, discuss the project's consistency with the State's CZMP. Attach the consistency determination if applicable.		
The State of Alaska's Coastal Zone Management Program is no longer in effect and a coastal consistency review is not applicable.		
Will the project occur in or impact the Coastal Barrier Resource System as defined by the US Fish and Wildlife Service?		\boxtimes
There are no designated coastal barrier resources in the project area.		
e. National Marine Sanctuaries	YES	NO
Is a National Marine Sanctuary located in the project area? If yes, discuss the potential for the project to impact that resource.		
There are no National Marine Sanctuaries in the project area.		

f. Wilderness Areas	YES	NO
Is a Wilderness Area located in the project area? If yes, discuss the potential for the project to impact that resource.		
The project is not located in a designated Wilderness Area.		
g. Farmland	YES	NO
Is there prime, unique, state, or locally important farmland in/near the project area? Describe any significant impacts from the project.		
There is no prime, unique, state, or locally important farmland in/near the project area.		
Does the project include the acquisition and conversion of farmland? If farmland will be converted, describe coordination with the US Natural Resources Conservation and attach the completed Form AD-1006.		
h. Energy Supply and Natural Resources	YES	NO
Will the project change energy requirements or use consumable natural resources either during construction or during operations?		
A permanent change in energy requirements is not anticipated as part of the proposed project. Consumable natural resources, such as diesel and gasoline, will temporarily increase during construction; however, the increase is not measurable relative to the normal energy consumption in the region.		
Will the project change aircraft/vehicle traffic patterns that could alter fuel usage either during construction or operations?		
i. Wild and Scenic Rivers	YES	NO
Is there a river on the Nationwide Rivers Inventory, a designated river in the National System, or river under State jurisdiction (including study or eligible segments) near the project?		
There are no rivers with the project vicinity listed on the Nationwide Rivers Inventory.		
Will the project directly or indirectly affect the river or an area within ¼ mile of its ordinary high water mark?		

j. Solid Waste Management	YES	NO
Does the project (either the construction activity or the completed, operational facility) have the potential to generate significant levels of solid waste? If so, discuss how these will be managed.		
5-2.b(5) Disruption of an Established Community		
	YES	NO
Will the project disrupt a community, planned development or be inconsistent with plans or goals of the community?		
Are residents or businesses being relocated as part of the project?		
5-2.b(6) Environmental Justice		
(-) (-)		
	YES	NO
Are there minority and/or low-income populations in/near the project area?	YES	NO 🖂
	YES	NO 🖂
Are there minority and/or low-income populations in/near the project area? According to the Alaska Department of Commerce, Community, and Economic Development 2010 data, approximately 77% of the population in Kenai identifies as white, and 11% of the population identifies as American Indian or Alaska Native. The	YES	NO 🖂
Are there minority and/or low-income populations in/near the project area? According to the Alaska Department of Commerce, Community, and Economic Development 2010 data, approximately 77% of the population in Kenai identifies as white, and 11% of the population identifies as American Indian or Alaska Native. The median household income in Kenai is approximately \$59,000. Will the project cause any disproportionately high and adverse impacts to minority	YES	NO
Are there minority and/or low-income populations in/near the project area? According to the Alaska Department of Commerce, Community, and Economic Development 2010 data, approximately 77% of the population in Kenai identifies as white, and 11% of the population identifies as American Indian or Alaska Native. The median household income in Kenai is approximately \$59,000. Will the project cause any disproportionately high and adverse impacts to minority and/or low-income populations? Attach census data if warranted. The proposed project is located on airport property. There will not be any direct or indirect effect to minority and/or low-income populations.	YES	NO
Are there minority and/or low-income populations in/near the project area? According to the Alaska Department of Commerce, Community, and Economic Development 2010 data, approximately 77% of the population in Kenai identifies as white, and 11% of the population identifies as American Indian or Alaska Native. The median household income in Kenai is approximately \$59,000. Will the project cause any disproportionately high and adverse impacts to minority and/or low-income populations? Attach census data if warranted. The proposed project is located on airport property. There will not be any direct or	YES	NO NO

	YES	NO
Will the project require a permanent road relocation or closure? If yes, describe the nature and extent of the relocation or closure and indicate if coordination with the agency responsible for the road and emergency services has occurred.		
5-2.b(8) Noise		
	YES	NO
Will the project result in an increase in aircraft operations, nighttime operations, or change aircraft fleet mix?		
Will the project cause a change in airfield configuration, runway use, or flight patterns either during construction or after the project is implemented?		
Does the forecast exceed 90,000 annual propeller operations, 700 annual jet operations or 10 daily helicopter operations or a combination of the above? If yes, a noise analysis may be required if the project would result in a change in operations.		
Has a noise analysis been conducted, including but not limited to generated noise contours, a specific point analysis, area equivalent method analysis, or other screening method. If yes, provide that documentation.		
Could the project have a significant impact (DNL 1.5 dB or greater increase) on noise levels over noise sensitive areas within the 65+ DNL noise contour?		
		•
5-2.b(9) Air Quality		
	YES	NO
Is the project located in a Clean Air Act non-attainment or maintenance area?		

	YES	NO
If yes, is it listed as exempt, presumed to conform or will emissions (including construction emissions) from the project be below <i>de minimis</i> levels (provide the paragraph citation for the exemption or presumed to conform list below, if applicable) Is the project accounted for in the State Implementation Plan or specifically exempted? Attach documentation.		
Does the project have the potential to increase landside or airside capacity, including an increase of surface vehicles?		
Could the project impact air quality or violate local, State, Tribal or Federal air quality standards under the Clean Air Act Amendments of 1990 either during construction or operations?		
5-2.b (10) Water Quality		
	YES	NO
Are there water resources within or near the project area? These include groundwater, surface water (lakes, rivers, etc.), sole source aquifers, and public water supply. If yes, provide a description of the resource, including the location (distance from project site, etc.).		
The storm drain that is being repaired is located in a wetland area. The storm drain discharges into the airports floatplane basin, which is located approximately 600 feet west of the project area.		
In order to properly replace the storm drainpipe dewatering is anticipated. The project area will be dewatered and water will be discharged to the vegetated areas surrounding the project area. Since the project is replacing material in-kind, permanent impacts to water quality are not anticipated.		
Will the project impact any of the identified water resources either during construction or operations? Describe any steps that will be taken to protect water resources during and after construction.		
Will the project increase the amount or rate of stormwater runoff either during construction or during operations? Describe any steps that will be taken to ensure it will not impact water quality.		

	YES	s NO
Does the project have the potential to violate federal, state, tribal or local water quality standards established under the Clean Water and Safe Drinking Water Acts?		
Are any water quality related permits required? If yes, list the appropriate permits.		
Dewatering the project area is required to adequately install the storm drainpipe. Water will be discharged to a vegetated area adjacent to the project area.		
The contractor will be required to obtain Alaska Pollutant Discharge Elimination System (APDES) General Permit for Excavation Dewatering. Additionally, if a significant amount of water will be used during dewatering activities, an Alaska Department of Natural Resources (ADNR) Temporary Water Use Permit (TWUP) may need to also be obtained by the contractor.	:	
5-2.b(11) Highly Controversial on Environmental Grounds		
	YES	NO NO
Is the project highly controversial? The term "highly controversial" means a substantial dispute exists as to the size, nature, or effect of a proposed federal action. The effects of an action are considered highly controversial when reasonable disagreement exists over the project's risks of causing environmental harm. Mere opposition to a project is not sufficient to be considered highly controversial on environmental grounds. Opposition on environmental grounds by a federal, state, or local government agency or by a tribe or a substantial number of the persons affected by the action should be considered in determining whether or not reasonable disagreement exists regarding the effects of a proposed action.		
5-2.b(12) Inconsistent with Federal, State, Tribal or Local Law		
	YES	NO
Will the project be inconsistent with plans, goals, policy, zoning, or local controls that have been adopted for the area in which the airport is located?		
Is the project incompatible with surrounding land uses?		

5-2 .b (13) Light Emissions, Visual Effects, and Hazardous Materials

a. Light Emissions and Visual Effects	YES	NO
Will the proposed project produce light emission impacts?		
Will there be visual or aesthetic impacts as a result of the proposed project and/or have there been concerns expressed about visual/aesthetic impacts?		
b. Hazardous Materials	YES	NO
Does the project involve or affect hazardous materials?		
Will construction take place in an area that contains or previously contained hazardous materials?		
If the project involves land acquisition, is there a potential for this land to contain hazardous materials or contaminants?		
Will the proposed project produce hazardous and/or solid waste either during construction or after? If yes, how will the additional waste be handled?		

5-2 .b (14) Public Involvement

	YES	NO
Was there any public notification or involvement? If yes, provide documentation.		
There was no formal public notification associated with this project. The City of Kenai and FAA consulted with Tribes, certified local governments, and other interested parties under Section 106 of the NHPA.		
On March 29, 2021, the FAA sent government-to-government consultation letters to the Kenaitze and Salamatof Tribes. The purpose of government-to-government consultation is to ensure that Federally Recognized Tribes are given the opportunity to provide meaningful and timely input regarding proposed FAA actions that uniquely or significantly affect Tribes. No responses were received.		
Government-to-Government consultation letters are included in Appendix C.		
5-2 .b (15) Indirect/Secondary/Induced Impacts		
	YES	NO
Will the project result in indirect/secondary/induced impacts?		
When considered with other past, present, and reasonably foreseeable future projects, on or off airport property and regardless of funding source, would the proposed project result in a significant cumulative impact?		

ARP SOP No. 5.1

Permits

List any permits required for the proposed project that have not been previously discussed. Provide details on the status of permits.

NWP 58 – Utility Line Activities for Water and Other Substances

APDES General Permit for Excavation Dewatering

ADNR TWUP

Environmental Commitments

List all measures and commitments made to avoid, minimize, mitigate, and compensate for impacts on the environment, which are needed for this project to qualify for a CATEX.

- 1. If cultural, archaeological, or historical sites are discovered during construction, then all work that may impact the sites will stop. The State Historic Preservation Office will be consulted to determine the appropriate corrective action.
- 2. If contamination or hazardous materials are encountered during construction, all work in the vicinity of the contamination will stop and ADEC would be consulted to determine the appropriate corrective action.
- 3. If active bald or golden eagle nests are found within the project area, a primary zone of a minimum of 330 feet will be maintained as an undisturbed habitat buffer around nesting eagles. If topography or vegetation does not provide an adequate screen or separation, the buffer will be extended to 0.25 mile, or a sufficient distance to screen the nest from human activities. Within the secondary zone (between 330 and 660 feet), no obtrusive facilities or major habitat modifications shall occur. If nesting occurs in sparse stands of trees, treeless areas, or where activities would occur within line-of-sight of the nest, this buffer shall extend up to 0.5 mile. If active Bald or Golden Eagle nests are found within 660 feet of the project area (primary and secondary protection zones), the USFWS would be consulted for guidance on how to proceed.
- 4. To minimize the risk of introducing invasive species and to comply with Executive Order 13112, ground disturbing activities will be kept to a minimum. Disturbed areas will be revegetated with native Alaskan seed in accordance with the ADNR Re-vegetation Manual.
- 5. The contractor will be responsible for obtaining all necessary permits and clearances for material and disposal sites and borrow or equipment storage areas, including compliance with the APDES Construction General Permit for Excavation Dewatering, unless the City of Kenai has obtained the necessary permits.
- 6. The contractor is required to comply with all USACE Nationwide Permit General Conditions and Alaska Regional Conditions that are applicable to the project.

Preparer Information

Point of Contact: Brooke Therries	1		
Address: 3335 Arctic Boulevard			
City: Anchorage		State: Alaska	Zip Code: 99503
Phone: 907-538-4733 (cell)	Email Addre	ss: btherrien@hdlalaska.co	<u>m</u>

Signature: Brooks Therrien Date: May 3, 2021

Airport Sponsor Information and Certification (may not be delegated to consultant)

Provide contact information for the designated sponsor point of contact and any other individuals requiring notification of the FAA decision.

Point of Contact: Scott Curtin		
Address: 210 Fidalgo Avenue		
City: Kenai	State: Alaska	Zip Code : 99611
Phone Number: (907) 283-8240	Email Ad	dress: scurtin@kenai.city
Additional Name(s):	Additiona	al Email Address(es):

I certify that the information I have provided above is, to the best of my knowledge, correct. I also recognize and agree that no construction activity, including but not limited to site preparation, demolition, or land disturbance, shall proceed for the above proposed project(s) until FAA issues a final environmental decision for the proposed project(s) and until compliance with all other applicable FAA approval actions (e.g., ALP approval, airspace approval, grant approval) has occurred.

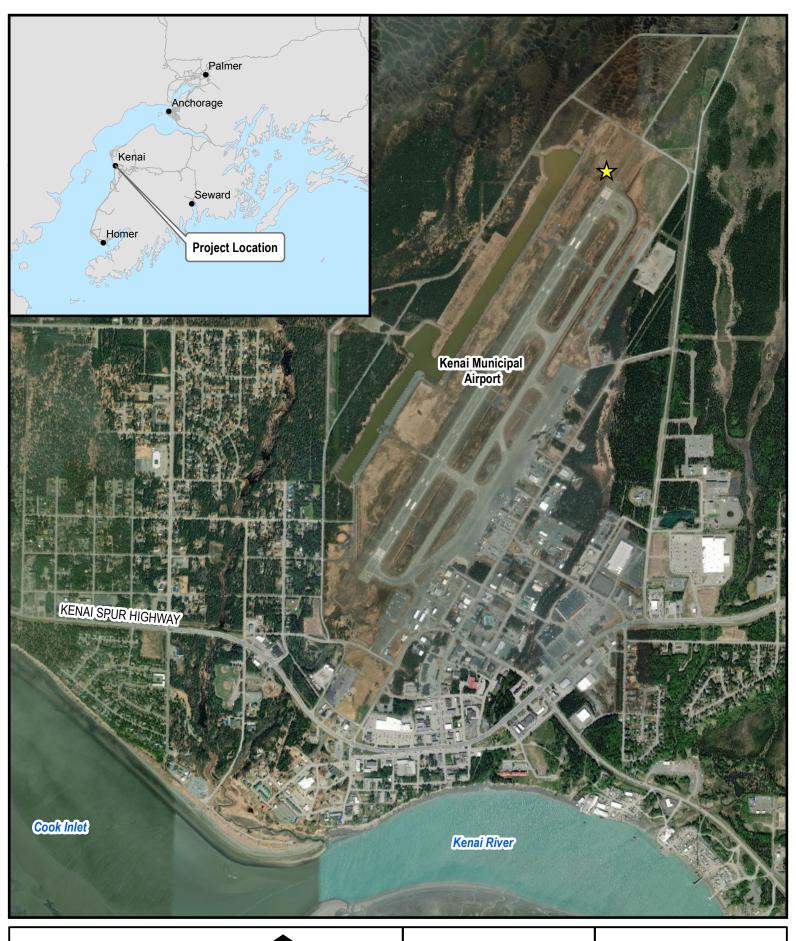
Signature. Date: 5/13/21

ARP SOP No. 5.1 Effective Date: June 2, 2017

FAA Decision

Having reviewed the above information, it is the FAA's decision that the proposed project (s) or development warrants environmental processing as indicated below.

Name of A	irport, LOC ID, and location:	
Kenai Airpo	ort, ENA, Kenai Alaska	
D : (75'4)	1	
Project Titl	le:	
Kenai Airpo	ort Storm Drain Rehabilitation	
	To further NEPA review required. Project 1.F CATEX that applies: 5-6.4.0)	is categorically excluded per (cite applicable
□A	an Environmental Assessment (EA) is req	uired.
□A	an Environmental Impact Statement (EIS)	is required.
	The following additional documentation is environmental evaluation of the proposed	necessary for FAA to perform a complete project.
Name:	Jack Gilbertsen	Title: Lead Environmental Program Manager
	Responsible FAA Official	
Signature:	JACK L Digitally signed by JACK L GILBERTSEN SR Date: 2021.05.19 15:24:15 -08'00'	_ Date: 5/19/2021

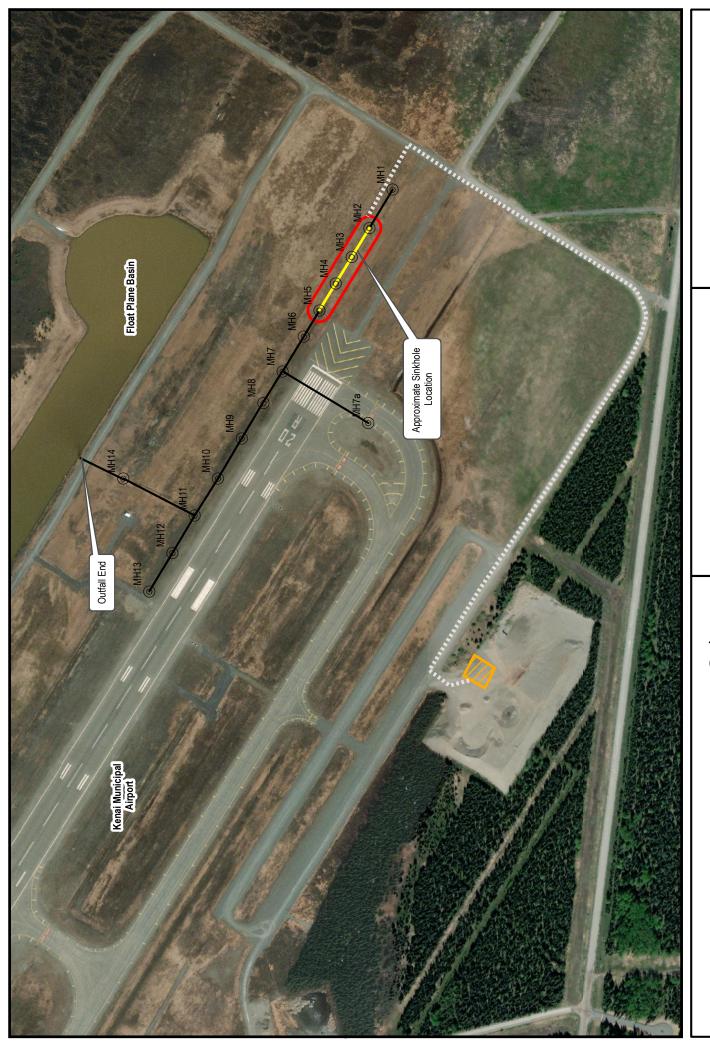






Kenai Municipal Airport 2021 Improved Airfield Drainage Kenai, Alaska March 2021

Figure 1 - Project Location and Vicinity Map



Kenai Municipal Airport 2021 Improved Airfield Drainage Kenai, Alaska March 2021

Figure 2 - Proposed Project Area















Section 106 Consultation

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Agency	Name	Contact updated on	Title	Phone	Email	Address	Website
		Submitted via email on March 18 by City of					
ADNR, DPOR, SHPO	Judy Bittner	Kenai	Chief	269-8715	269-8715 judith.bittner@alaska.gov		
Certified Local Governments							
Kenai Peninsula Borough, Resource Planning Department	Melanie Aeschliman	Submitted via email on March 19 by HDL Planning Director	Planning Director	714-2200	714-2200 MAeschliman@kpb.us	144 North Binkley Street, Soldotna AK 99669	
City of Kenai, Department of Planning & Zoning	Ryan Foster	Submitted via email on March 19 by HDL Planning Director	Planning Director	283-8235	283-8235 rfoster@kenai.city	210 Fidalgo Ave, Kenai , AK99611	
Alaska Association for Historic Preservation, Inc	Trish Neal	Submitted via email on March 19 by HDL President	President	929-9870	929-9870 AKPreservation@gmail.com	P.O Box 102205, Anchorage AK 99510	
Native Corporations							
Cook Inlet Region, Inc.	Andrea Jacuk	Submitted via email on March 19 by HDL Manager Lands	Manager Lands		ajacuk@ ciri.com	P.O. Box 93330, Anchorage, AK 99509-3330 http://www.ciri.com/	http://www.ciri.com/
Tribes							
Kenaitze Indian Tribe	Wayne Wilson	Submitted via email on March 19 by HDL Chairperson	Chairperson	335-7200	335-7200 wwilson@kenaitze.org	P.O. Box 988, Kenai AK 99611-0988	http://kenaitze.org
: 1							

From: Ortiz, Liz M (DNR)

To: <u>Bondurant, Mary (DOT Sponsored)</u>
Cc: <u>Brooke A. Therrien; Ortiz, Liz M (DNR)</u>

Subject: RE: City of Kenai Request for Concurrence to Proceed 3.17.21

Date: Tuesday, April 13, 2021 1:37:30 PM

3130-1R FAA / 2021-00322

Good afternoon,

The Alaska State Historic Preservation Office (AK SHPO) received your correspondence (dated March 18, 2021) concerning the subject project on March 22, 2021. Following our review of the documentation provided, we concur with the finding of No Historic Properties Affected. Please note that our office may need to re-evaluate our concurrence if changes are made to the project's scope or design.

As stipulated in 36 CFR 800.3, other consulting parties such as the local government and Tribes are required to be notified of the undertaking. Additional information provided by the local government, Tribes, or other consulting parties may cause our office to re-evaluate our comments and recommendations. Please note that our response does not end the 30-day review period provided to other consulting parties.

Should unidentified archaeological resources be discovered in the course of the project, work must be interrupted until the resources have been evaluated in terms of the National Register of Historic Places eligibility criteria (36 CFR 60.4), in consultation with our office. Please note that some sites can be deeply buried and that fossils are considered cultural resources subject to the Alaska Historic Preservation Act.

This email serves as our office's official correspondence for the purposes of Section 106. Thank you for the opportunity to review and comment. Please contact Liz Ortiz at 269-8722 or liz.ortiz@alaska.gov if you have any questions or we can be of further assistance.

Liz Ortiz

Archaeologist II - Review and Compliance Alaska State Historic Preservation Office Office of History and Archaeology Department of Natural Resources 550 W. 7th Ave, Suite 1310 Anchorage AK, 99501 (907) 269-8722

liz.ortiz@alaska.gov

We are currently teleworking; email communication is best. Be well!

From: DNR, Parks OHA Review Compliance (DNR sponsored) <oha.revcomp@alaska.gov>

Sent: Monday, March 22, 2021 10:35 AM

To: Bondurant, Mary (DOT Sponsored) <mbondurant@kenai.city>

Cc: Ortiz, Liz M (DNR) < liz.ortiz@alaska.gov>; Brooke A. Therrien < BTherrien@HDLAlaska.com>

Subject: FW: City of Kenai Request for Concurrence to Proceed 3.17.21

Good morning,

The Office of History and Archaeology/Alaska State Historic Preservation Office received your documentation, and its review has been assigned to Liz Ortiz under 2021-00321. We may contact you if we require additional information. Our office ordinarily has 30 calendar days after receipt to complete our review, but our office has entered tolling in response to complications from COVID-19 and our review may be delayed as a result. Please contact the project reviewer or myself by email if you have any questions or concerns.

Best, Sarah

Sarah Meitl Review and Compliance Coordinator Alaska State Historic Preservation Office Office of History and Archaeology

550 West 7th Avenue, Suite 1310 Anchorage, AK 99501-3561 Office: 907-269-8720

sarah.meitl@alaska.gov

Teleworking - Email is the best method of communication.

From: Mary Bondurant < mbondurant@kenai.city >

Sent: Thursday, March 18, 2021 12:53 PM

To: DNR, Parks OHA Review Compliance (DNR sponsored) < oha.revcomp@alaska.gov>

Cc: Brooke A. Therrien < <u>BTherrien@HDLAlaska.com</u>>

Subject: City of Kenai Request for Concurrence to Proceed 3.17.21

Please contact me if you have any questions. Thank you.



March 17, 2021

Judith Bittner
State Historic Preservation Officer
Alaska Office of History and Archaeology
550 West 7th Avenue, Suite 1310
Anchorage, Alaska 99510-3565

Re:

Kenai Municipal Airport 2021 Improved Airfield Drainage Section 106 of the National Historic Preservation Act 36 CFR 800.4(d)(1) Request for Concurrence to Proceed with the Project

Dear Ms. Bittner

The City of Kenai, owner and operator of the Kenai Municipal Airport (ENA), in cooperation with the Federal Aviation Administration (FAA), is proposing to reconstruct a section of storm drainpipe along the north end of Runway 02L/20R, in Kenai, Alaska. The project is located on United States Geological Survey Quadrangle Kenai C-4; Section 29 of Township 6N, Range 11W, Seward Meridian; Latitude 60.579776°N, Longitude 151.238948°W (Figure 1).

The project is funded through the Airports Improvement Program administered by the FAA. Under the program, the City of Kenai is required to submit the necessary documentation to FAA, who acts as the lead agency. Pursuant to 36 CFR 800.4(d)(1), implementing regulations of Section 106 of the National Historic Preservation Act (NHPA), we are combining initiation and findings under Section 106 consultation. The City of Kenai, with support from FAA, finds that the proposed project will not affect known historical sites and there will be "No Historic Properties Affected" by this project.

Project Description

The purpose of the proposed project is to maintain and improve existing storm drain facilities. The project will replace the existing storm drainpipe between Manhole (MH) 02 and MH 05 (Figure 2). The existing storm drainpipe is experiencing joint separation, which allows storm water to outflow and groundwater to infiltrate the system resulting in pipe settlement and development of sinkholes. Sinkholes at the ground surface have developed in the immediate vicinity of the underground storm drainpipe. Proposed improvements include the following (Figure 2):

- Excavate approximately 3,000 cubic yards (cy) of existing material (in-situ) to expose the existing storm drainpipe. Exposure of the storm drainpipe will require a trench approximately 20 feet wide by 500 feet long. The total area of ground disturbance is approximately 0.25 acres.
- Remove existing storm drainpipe and place approximately 300 cy of pipe bedding material (sand) around the new pipe.
- Replace 326 linear feet of pipe with 18-inch diameter polyethylene (PE) pipe between MH 2 and MH 4.
- Replace 162 linear feet of pipe with 20-inch PE pipe between MH 4 and MH 5.
- Backfill using previously excavated material.
- · Reseed disturbed area.

Construction is anticipated to begin and be completed during summer/fall 2021. All proposed work will occur on previously disturbed ground near the end of the runway. The proposed staging area is currently located on a developed lot with access to and from the proposed project area via existing roads. Temporary impacts to existing vegetation within the project area will occur due to the operation of heavy machinery as it travels over existing vegetated area.

Existing Site Conditions

The proposed project area is located at the end of Runway 20. The project area is located in a previously disturbed area that is routinely maintained to support aviation activity.

Area of Potential Effect

The proposed Area of Potential Effect (APE) for this project is shown on Figure 2 and includes the direct footprint where ground-disturbing activities will occur, as well as a 50-foot buffer to account for maneuvering of heavy equipment surrounding the trench site. The total APE is approximately 1.38 acres. An APE for indirect or visual impacts has not been developed because the project will replace the disturbed area in-kind.

Identification Efforts & Finding of Effect

To date, a cultural or historic resource field survey has not been completed specific to the proposed undertaking. Through research of existing information, we understand that the Kenai Townsite Historic District is located south of the Kenai Airport. The proposed undertaking is located solely within the airport property boundary and is surrounded by modern development associated with aviation operations. Ground disturbing activities will only occur as necessary to replace the existing piping as identified on Figure 2. A project-specific cultural resource survey is not planned for the proposed project.

Consultation Efforts

Interested parties that are being contacted for project consultation include Cook Inlet Region, Inc.; Kenaitze Indian Tribe; Salamatof Tribe; City of Kenai; Kenai Peninsula Borough; and the Alaska Association for Historic Preservation.

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The C

The City of Kenai | www.kenai.city

We respectfully request your approval to proceed with the project without completing a project specific cultural resource survey because the proposed undertaking, and all necessary ground-disturbing activities, are located on previously disturbed ground and are entirely within the existing airport boundaries. In addition, we respectfully request your concurrence with our finding of No Historic Properties Affected.

If you have any questions or comments related to the proposed project, contact Brooke Therrien, Environmental Specialist, at (907) 538-4733 (cell), or via email at btherrien@hdlalaska.com. Questions concerning the engineering aspects of the proposed project can be directed to Adam Bruscher, P.E., Project Engineer at (907) 564-2138, or via email at abruscher@hdlalaska.com.

Sincerely,

Mary Bondurant, Airport Manager

Attachments:

Figure 1 – Project Location and Vicinity Map

Figure 2 – Area of Potential & Proposed Project Layout

CC:

Jack Gilbertsen, Lead Environmental Program Manager, FAA Scott Curtin, Public Works Director, City of Kenai Mark Swenson PE, Project Manager, HDL Engineering Consultants, LLC Adam Bruscher PE, Project Engineer, HDL Engineering Consultants

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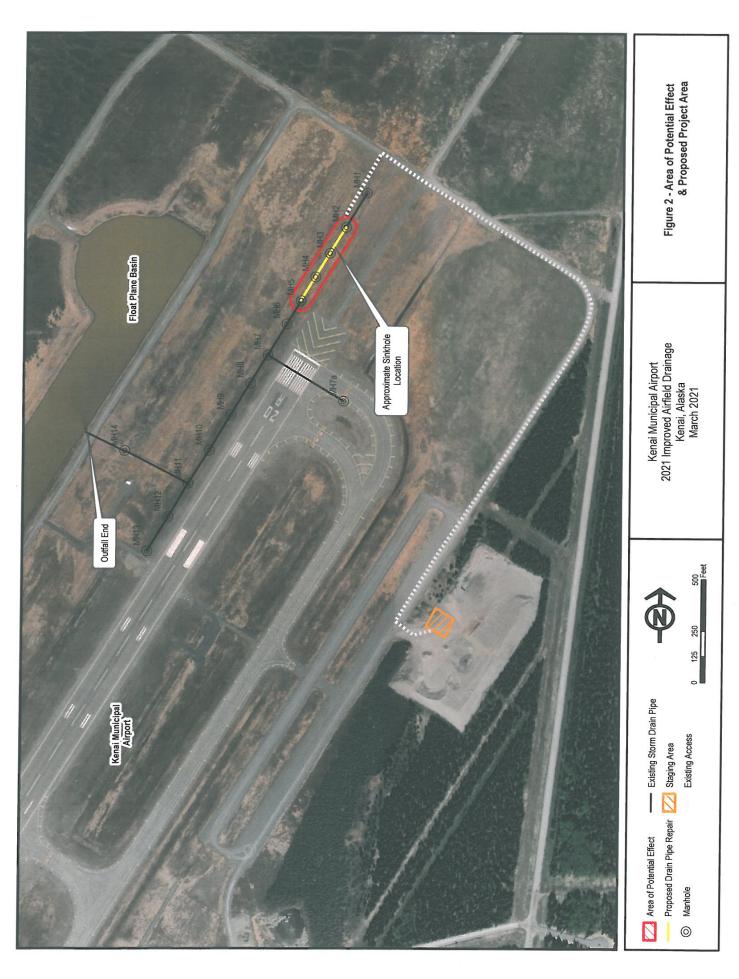
The City of Kenai | www.kenai.city





Kenai Municipal Airport 2021 Improved Airfield Drainage Kenai, Alaska March 2021

Figure 1 - Project Location and Vicinity Map



From: Brooke A. Therrien

To: <u>"AKPreservation@gmail.com"</u>

Subject: Consultation Initiation - Kenai Airport Improved Airfield Drainage

Date: Friday, March 19, 2021 1:12:00 PM

Attachments: <u>image001.png</u>

Alaska Association for Historic Pres.pdf

Hello Ms. Neal,

HDL Engineering Consultants LLC. (HDL), on behalf of the City of Kenai and in cooperation with the Federal Aviation Administration, is proposing to reconstruct a section of storm drain piping along the north end of Runway 02L/20R, in Kenai, Alaska. The project is located on United States Geological Survey Quadrangle Kenai C-4; Section 29 of Township 6N, Range 11W, Seward Meridian; Latitude 60.579776°N, Longitude 151.238948°W.

For the purposes of the National Historic Preservation Act, we are initiating formal consultation with local tribes, certified local governments, and interested parties to assist us in identifying places that may be of traditional religious or cultural importance. Attached is a letter outlining the proposed project and requesting your assistance in identifying places that may be of traditional religious or cultural importance to your organization within the project area. Please feel free to contact myself or HDL's Project Engineer, Adam Bruscher, P.E., via email at abruscher@hdlalaska.com if you have any further questions or comments.

Sincerely,

Brooke Therrien
Environmental Specialist



Engage | Empower | Exceed

3335 Arctic Blvd, Suite 100 | Anchorage, Alaska 99503 main 907-564-2120 | direct 907-564-2159 | cell 907-538-4733 BTherrien@HDLAlaska.com | www.HDLAlaska.com

www.HDLAlaska.com



March 19, 2021

Trish Neal
President
Alaska Association for Historic Preservation, Inc.
P.O. Box 102205
Anchorage, Alaska 99510

Re: Kenai Municipal Airport 2021 Improved Airfield Drainage
Section 106 of the National Historic Preservation Act 36 CFR 800.4(d)(1)

Dear Ms. Neal,

The City of Kenai, owner and operator of the Kenai Municipal Airport (ENA), in cooperation with the Federal Aviation Administration (FAA), is proposing to reconstruct a section of storm drain piping along the north end of Runway 02L/20R, in Kenai, Alaska. The project is located on United States Geological Survey Quadrangle Kenai C-4; Section 29 of Township 6N, Range 11W, Seward Meridian; Latitude 60.579776°N, Longitude 151.238948°W (Figure 1).

For the purposes of the National Historic Preservation Act, we are initiating formal consultation with you to assist us in identifying places that may be of traditional religious or cultural importance to your organization. Please note that we are requesting information only on such places that you believe may be impacted by the proposed project so that we may try to avoid impacts. We would be pleased to discuss with you any confidential areas of concern you may identify and discuss project details.

Project Description

The purpose of the proposed project is to maintain and improve existing storm drain facilities. The project will replace the existing storm drainpipe between Manhole (MH) 02 and MH 05 (Figure 2). The existing storm drainpipe is experiencing joint separation, which allows storm water to outflow and groundwater to infiltrate the system resulting in pipe settlement and development of sinkholes. Sinkholes at the ground surface have developed in the immediate vicinity of the underground storm drainpipe. Proposed improvements include the following (Figure 2):

- Excavate approximately 3,000 cubic yards (cy) of existing material (in-situ) to expose the existing storm drainpipe. Exposure of the storm drainpipe will require a trench approximately 20 feet wide by 500 feet long. The total area of ground disturbance is approximately 0.25 acres.
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Area of Potential Effect

The proposed Area of Potential Effect (APE) for this project is shown on Figure 2 and includes the direct footprint where ground-disturbing activities will occur, as well as a 50-foot buffer to account for maneuvering of heavy equipment surrounding the trench site. The total APE is approximately 1.38 acres. An APE for indirect or visual impacts has not been developed because the project will replace the disturbed area in-kind.

Identification Efforts & Finding of Effect

To date, a cultural or historic resource field survey has not been completed specific to the proposed undertaking. Through research of existing information, we understand that the Kenai Townsite Historic District is located south of the Kenai Airport. The proposed undertaking is located solely within the airport property boundary and is surrounded by modern development associated with aviation operations. Ground disturbing activities will only occur as necessary to replace the existing piping as identified on Figure 2. A project-specific cultural resource survey is not planned for the proposed project.

Consultation Efforts

Interested parties that are being contacted for project consultation include Cook Inlet Region, Inc.; Kenaitze Indian Tribe; Salamatof Tribe; City of Kenai; Kenai Peninsula Borough; and the Alaska Association for Historic Preservation.



If you wish to provide comments related to the proposed project please contact our consultant HDL Engineering Consultants, LCC. For environmental questions, please contact Brooke Therrien, Environmental Specialist at (907) 538-4733 (cell) or via email at btherrien@hdlalaska.com. Questions concerning the engineering aspects of the proposed project can be directed to Adam Bruscher, P.E., Project Engineer at (907) 564-2138, or via email at abruscher@hdlalaska.com.

Sincerely,

Mary Bondurant, Airport Manager

Attachments:

Figure 1 – Project Location and Vicinity Map

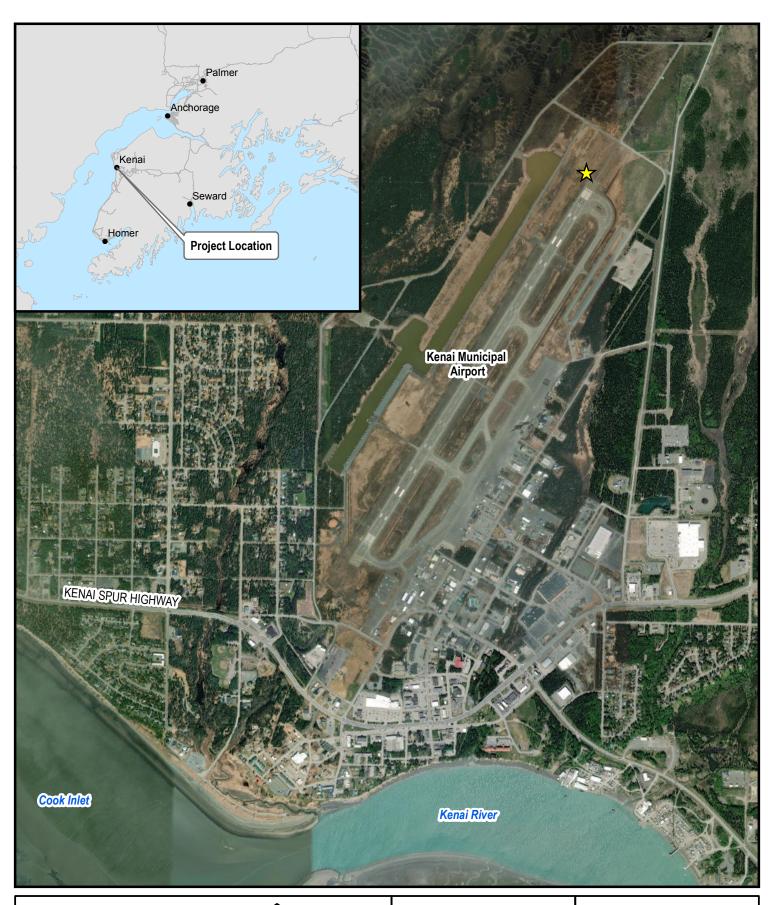
Figure 2 - Area of Potential & Proposed Project Layout

CC:

Jack Gilbertsen, Lead Environmental Program Manager, FAA
Scott Curtin, Public Works Director, City of Kenai
Mark Swenson PE, Project Manager, HDL Engineering Consultants, LLC
Adam Bruscher PE, Project Engineer, HDL Engineering Consultants

Page 3 of 3









Kenai Municipal Airport 2021 Improved Airfield Drainage Kenai, Alaska March 2021

Figure 1 - Project Location and Vicinity Map

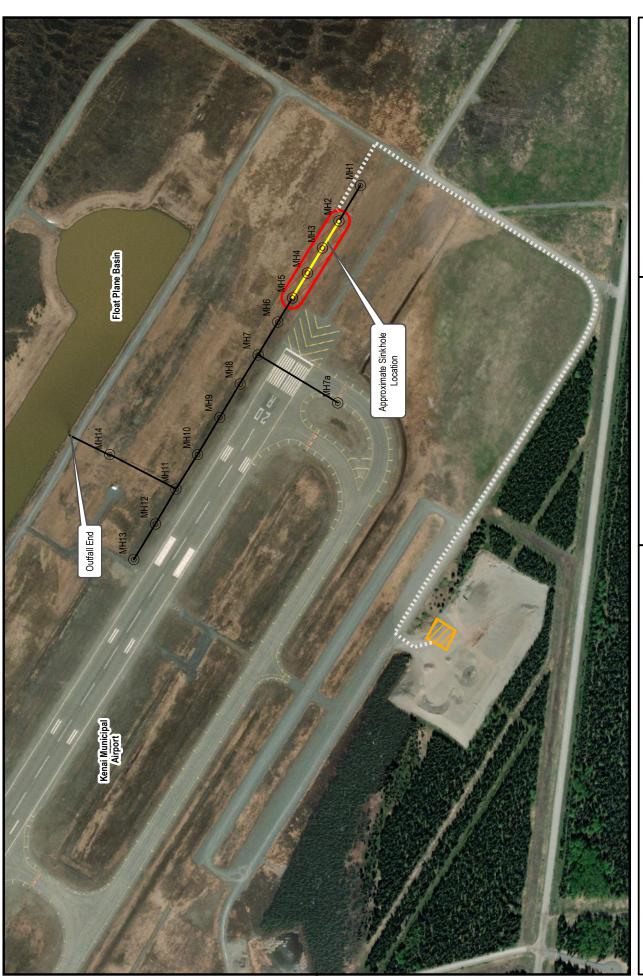


Figure 2 - Area of Potential Effect & Proposed Project Area

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Existing Storm Drain Pipe

Area of Potential Effect

Existing Access

Manhole

Proposed Drain Pipe Repair

ZZ
Staging Area

Kenai Municipal Airport 2021 Improved Airfield Drainage Kenai, Alaska March 2021

> 250 500 Feet

From: Brooke A. Therrien
To: Andrea Jacuk

Subject: Consultation Initiation - Kenai Airport Improved Airfield Drainage

Date: Friday, March 19, 2021 1:13:00 PM

Attachments: CIRI.pdf image001.png

Hello Ms. Jacuk,

HDL Engineering Consultants LLC. (HDL), on behalf of the City of Kenai and in cooperation with the Federal Aviation Administration, is proposing to reconstruct a section of storm drain piping along the north end of Runway 02L/20R, in Kenai, Alaska. The project is located on United States Geological Survey Quadrangle Kenai C-4; Section 29 of Township 6N, Range 11W, Seward Meridian; Latitude 60.579776°N, Longitude 151.238948°W.

For the purposes of the National Historic Preservation Act, we are initiating formal consultation with local tribes, certified local governments, and interested parties to assist us in identifying places that may be of traditional religious or cultural importance. Attached is a letter outlining the proposed project and requesting your assistance in identifying places that may be of traditional religious or cultural importance to your organization within the project area. Please feel free to contact myself or HDL's Project Engineer, Adam Bruscher, P.E., via email at abruscher@hdlalaska.com if you have any further questions or comments.

Brooke Therrien Environmental Specialist



Engage | Empower | Exceed 3335 Arctic Blvd, Suite 100 | Anchorage, Alaska 99503 main 907-564-2120 | direct 907-564-2159 | cell 907-538-4733 BTherrien@HDLAlaska.com | www.HDLAlaska.com

www.HDLAlaska.com



March 19, 2021

Andrea Jacuk Lands Manager Cook Inlet Region, Inc. P.O. Box 93330 Anchorage, Alaska 99509

Re: Kenai Municipal Airport 2021 Improved Airfield Drainage
Section 106 of the National Historic Preservation Act 36 CFR 800.4(d)(1)

Dear Ms. Jacuk,

The City of Kenai, owner and operator of the Kenai Municipal Airport (ENA), in cooperation with the Federal Aviation Administration (FAA), is proposing to reconstruct a section of storm drain piping along the north end of Runway 02L/20R, in Kenai, Alaska. The project is located on United States Geological Survey Quadrangle Kenai C-4; Section 29 of Township 6N, Range 11W, Seward Meridian; Latitude 60.579776°N, Longitude 151.238948°W (Figure 1).

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Project Description

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Existing Site Conditions

The proposed project area is located at the end of Runway 20. The project area is located in a previously disturbed area that is routinely maintained to support aviation activity.

Area of Potential Effect

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The City of Kenai | www.kenai.city

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Mary Bondurant, Airport Manager

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Page 3 of 3









Kenai Municipal Airport 2021 Improved Airfield Drainage Kenai, Alaska March 2021

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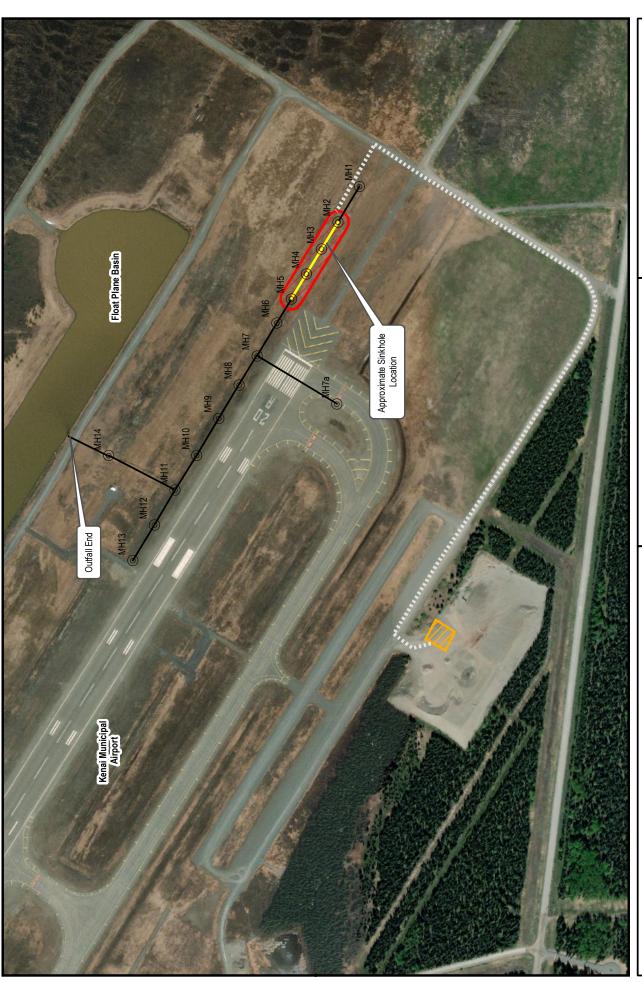


Figure 2 - Area of Potential Effect & Proposed Project Area

Area of Potential Effect

Manhole

Kenai Municipal Airport 2021 Improved Airfield Drainage Kenai, Alaska March 2021

Existing Storm Drain Pipe

Existing Access Proposed Drain Pipe Repair

ZZ
Staging Area

From: Brooke A. Therrien

To: <u>"rfoster@kenai.city"</u>

Subject: Consultation Initiation - Kenai Airport Improved Airfield Drainage

Date: Friday, March 19, 2021 1:22:00 PM

Attachments: <u>image001.png</u> City of Kenai.pdf

Hello Mr. Foster,

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Brooke Therrien Environmental Specialist



Engage | Empower | Exceed 3335 Arctic Blvd, Suite 100 | Anchorage, Alaska 99503 main 907-564-2120 | direct 907-564-2159 | cell 907-538-4733 BTherrien@HDLAlaska.com | www.HDLAlaska.com

www.HDLAlaska.com



March 19, 2021

Ryan Foster Planning Director City of Kenai P.O. Box 988 Kenai, Alaska 99611-0988

Re: Kenai Municipal Airport 2021 Improved Airfield Drainage

Section 106 of the National Historic Preservation Act 36 CFR 800.4(d)(1)

Dear Mr. Foster,

The City of Kenai, owner and operator of the Kenai Municipal Airport (ENA), in cooperation with the Federal Aviation Administration (FAA), is proposing to reconstruct a section of storm drain piping along the north end of Runway 02L/20R, in Kenai, Alaska. The project is located on United States Geological Survey Quadrangle Kenai C-4; Section 29 of Township 6N, Range 11W, Seward Meridian; Latitude 60.579776°N, Longitude 151.238948°W (Figure 1).

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Mary Bondurant, Airport Manager

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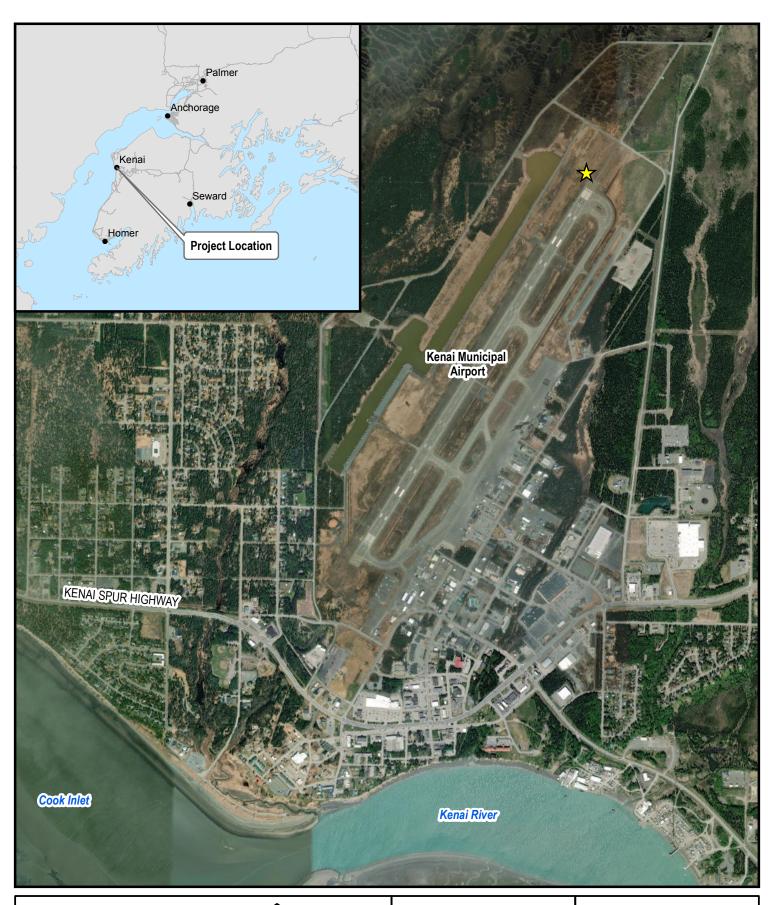
CC:

Jack Gilbertsen, Lead Environmental Program Manager, FAA Scott Curtin, Public Works Director, City of Kenai Mark Swenson PE, Project Manager, HDL Engineering Consultants, LLC

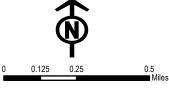
Adam Bruscher PE, Project Engineer, HDL Engineering Consultants

Page 3 of 3









Kenai Municipal Airport 2021 Improved Airfield Drainage Kenai, Alaska March 2021

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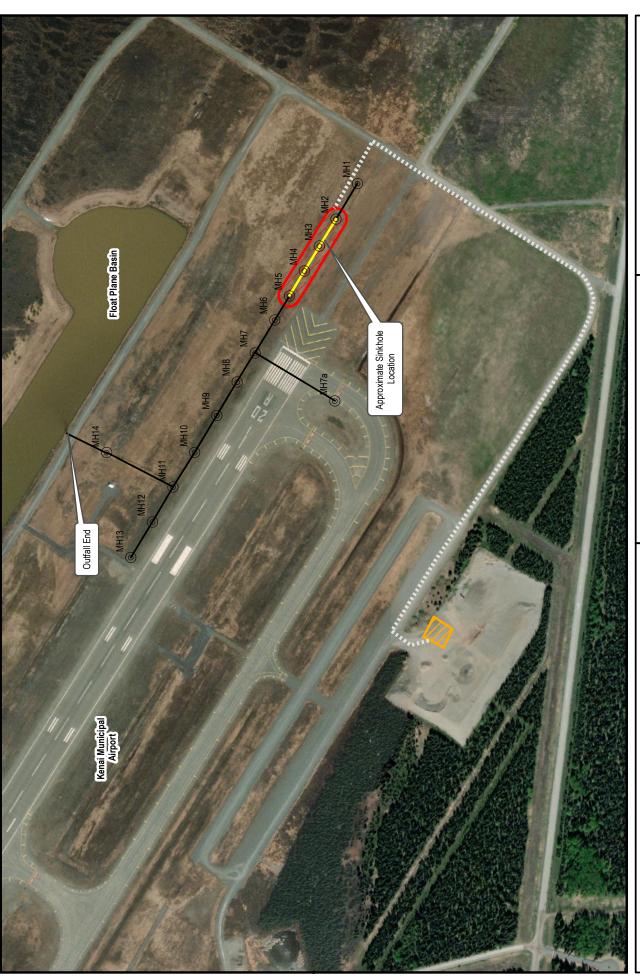


Figure 2 - Area of Potential Effect & Proposed Project Area

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Existing Storm Drain Pipe

Area of Potential Effect

Existing Access

Manhole

Proposed Drain Pipe Repair

ZZ
Staging Area

Kenai Municipal Airport 2021 Improved Airfield Drainage Kenai, Alaska March 2021

000 Feet From: Brooke A. Therrien

To: "MAeschliman@kpb.us"

Subject: Consultation Initiation - Kenai Airport Improved Airfield Drainage

Date:Friday, March 19, 2021 1:15:00 PMAttachments:Kenai Peninsula Borough.pdf

image001.png

Hello Ms. Aeschliman,

HDL Engineering Consultants LLC. (HDL), on behalf of the City of Kenai and in cooperation with the Federal Aviation Administration, is proposing to reconstruct a section of storm drain piping along the north end of Runway 02L/20R, in Kenai, Alaska. The project is located on United States Geological Survey Quadrangle Kenai C-4; Section 29 of Township 6N, Range 11W, Seward Meridian; Latitude 60.579776°N, Longitude 151.238948°W.

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Sincerely,

Brooke Therrien
Environmental Specialist



Engage | Empower | Exceed 3335 Arctic Blvd, Suite 100 | Anchorage, Alaska 99503 main 907-564-2120 | direct 907-564-2159 | cell 907-538-4733 BTherrien@HDLAlaska.com | www.HDLAlaska.com

www.HDLAlaska.com



March 19, 2021

Melanie Aeschliman Planning Director Kenai Peninsula Borough 144 North Binkley Street Soldotna, Alaska 99669

Re: Kenai Municipal Airport 2021 Improved Airfield Drainage
Section 106 of the National Historic Preservation Act 36 CFR 800.4(d)(1)

Dear Ms. Aeschliman,

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Area of Potential Effect

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Page 3 of 3









Kenai Municipal Airport 2021 Improved Airfield Drainage Kenai, Alaska March 2021

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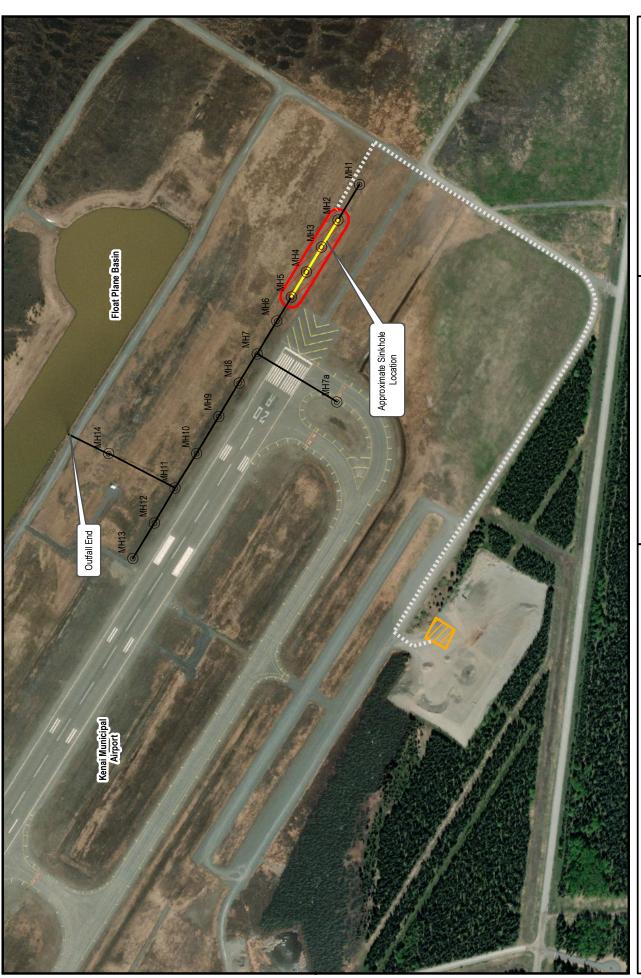


Figure 2 - Area of Potential Effect & Proposed Project Area

Kenai Municipal Airport 2021 Improved Airfield Drainage Kenai, Alaska March 2021

Existing Storm Drain Pipe

Area of Potential Effect

Proposed Drain Pipe Repair

ZZ
Staging Area

Manhole

From: Brooke A. Therrien

To: "wwilson@kenaitze.org"

Subject: Consultation Initiation - Kenai Airport Improved Airfield Drainage

Date: Friday, March 19, 2021 1:18:00 PM

Attachments: <u>image001.png</u> Kenaitze Tribe.pdf

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www.HDLAlaska.com



March 19, 2022

Wayne Wilson Chairperson Kenaitze Indian Tribe P.O. Box 988 Kenai, Alaska 99611-0988

Re: Kenai Municipal Airport 2021 Improved Airfield Drainage

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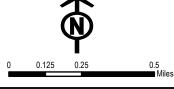
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Kenai Municipal Airport 2021 Improved Airfield Drainage Kenai, Alaska March 2021

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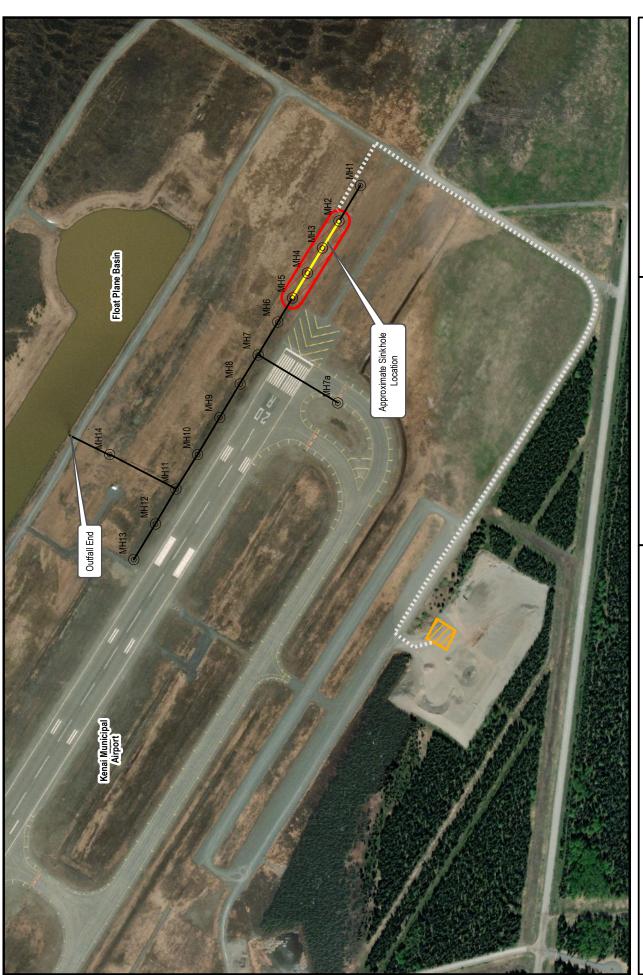


Figure 2 - Area of Potential Effect & Proposed Project Area

Existing Storm Drain Pipe

Area of Potential Effect

Kenai Municipal Airport 2021 Improved Airfield Drainage Kenai, Alaska March 2021

Existing Access

Manhole

Proposed Drain Pipe Repair

ZZ
Staging Area

From: Brooke A. Therrien

"cmonfor@salamatof.com"; "snainc@alaska.net"

Subject: Consultation Initiation - Kenai Airport Improved Airfield Drainage

Date: Friday, March 19, 2021 1:14:00 PM

Attachments: Salamatof Tribe.pdf

image001.png

Hello Mr. Monfor,

HDL Engineering Consultants LLC. (HDL), on behalf of the City of Kenai and in cooperation with the Federal Aviation Administration, is proposing to reconstruct a section of storm drain piping along the north end of Runway 02L/20R, in Kenai, Alaska. The project is located on United States Geological Survey Quadrangle Kenai C-4; Section 29 of Township 6N, Range 11W, Seward Meridian; Latitude 60.579776°N, Longitude 151.238948°W.

For the purposes of the National Historic Preservation Act, we are initiating formal consultation with local tribes, certified local governments, and interested parties to assist us in identifying places that may be of traditional religious or cultural importance. Attached is a letter outlining the proposed project and requesting your assistance in identifying places that may be of traditional religious or cultural importance to your organization within the project area. Please feel free to contact myself or HDL's Project Engineer, Adam Bruscher, P.E., via email at abruscher@hdlalaska.com if you have any further questions or comments.

Sincerely,

Brooke Therrien Environmental Specialist



Engage | Empower | Exceed

3335 Arctic Blvd, Suite 100 | Anchorage, Alaska 99503 main 907-564-2120 | direct 907-564-2159 | cell 907-538-4733 BTherrien@HDLAlaska.com | www.HDLAlaska.com

www.HDLAlaska.com



March 19, 2021

Chris Monfor President Salamatof Tribe P.O. Box 1425 Kenai, Alaska 99611

Re: Kenai Municipal Airport 2021 Improved Airfield Drainage

Section 106 of the National Historic Preservation Act 36 CFR 800.4(d)(1)

Dear Mr. Monfor,

The City of Kenai, owner and operator of the Kenai Municipal Airport (ENA), in cooperation with the Federal Aviation Administration (FAA), is proposing to reconstruct a section of storm drain piping along the north end of Runway 02L/20R, in Kenai, Alaska. The project is located on United States Geological Survey Quadrangle Kenai C-4; Section 29 of Township 6N, Range 11W, Seward Meridian; Latitude 60.579776°N, Longitude 151.238948°W (Figure 1).

For the purposes of the National Historic Preservation Act, we are initiating formal consultation with you to assist us in identifying places that may be of traditional religious or cultural importance to your organization. Please note that we are requesting information only on such places that you believe may be impacted by the proposed project so that we may try to avoid impacts. We would be pleased to discuss with you any confidential areas of concern you may identify and discuss project details.

Project Description

The purpose of the proposed project is to maintain and improve existing storm drain facilities. The project will replace the existing storm drainpipe between Manhole (MH) 02 and MH 05 (Figure 2). The existing storm drainpipe is experiencing joint separation, which allows storm water to outflow and groundwater to infiltrate the system resulting in pipe settlement and development of sinkholes. Sinkholes at the ground surface have developed in the immediate vicinity of the underground storm drainpipe. Proposed improvements include the following (Figure 2):

- Excavate approximately 3,000 cubic yards (cy) of existing material (in-situ) to expose the existing storm drainpipe. Exposure of the storm drainpipe will require a trench approximately 20 feet wide by 500 feet long. The total area of ground disturbance is approximately 0.25 acres.
- Remove existing storm drainpipe and place approximately 300 cy of pipe bedding material (sand) around the new pipe.
- Replace 326 linear feet of pipe with 18-inch diameter polyethylene (PE) pipe between MH 2 and MH 4.
- Replace 162 linear feet of pipe with 20-inch PE pipe between MH 4 and MH 5.
- Backfill using previously excavated material.
- Reseed disturbed area.

Construction is anticipated to begin and be completed during summer/fall 2021. All proposed work will occur on previously disturbed ground near the end of the runway. The proposed staging area is currently located on a developed lot with access to and from the proposed project area via existing roads. Temporary impacts to existing vegetation within the project area will occur due to the operation of heavy machinery as it travels over existing vegetated area.

Existing Site Conditions

The proposed project area is located at the end of Runway 20. The project area is located in a previously disturbed area that is routinely maintained to support aviation activity.

Area of Potential Effect

The proposed Area of Potential Effect (APE) for this project is shown on Figure 2 and includes the direct footprint where ground-disturbing activities will occur, as well as a 50-foot buffer to account for maneuvering of heavy equipment surrounding the trench site. The total APE is approximately 1.38 acres. An APE for indirect or visual impacts has not been developed because the project will replace the disturbed area in-kind.

Identification Efforts & Finding of Effect

To date, a cultural or historic resource field survey has not been completed specific to the proposed undertaking. Through research of existing information, we understand that the Kenai Townsite Historic District is located south of the Kenai Airport. The proposed undertaking is located solely within the airport property boundary and is surrounded by modern development associated with aviation operations. Ground disturbing activities will only occur as necessary to replace the existing piping as identified on Figure 2. A project-specific cultural resource survey is not planned for the proposed project.

Consultation Efforts

Interested parties that are being contacted for project consultation include Cook Inlet Region, Inc.; Kenaitze Indian Tribe; Salamatof Tribe; City of Kenai; Kenai Peninsula Borough; and the Alaska Association for Historic Preservation.

Page 2 of 3



If you wish to provide comments related to the proposed project please contact our consultant HDL Engineering Consultants, LCC. For environmental questions, please contact Brooke Therrien, Environmental Specialist at (907) 538-4733 (cell) or via email at btherrien@hdlalaska.com. Questions concerning the engineering aspects of the proposed project can be directed to Adam Bruscher, P.E., Project Engineer at (907) 564-2138, or via email at abruscher@hdlalaska.com.

Sincerely,

Mary Bondurant, Airport Manager

Attachments:

Figure 1 – Project Location and Vicinity Map

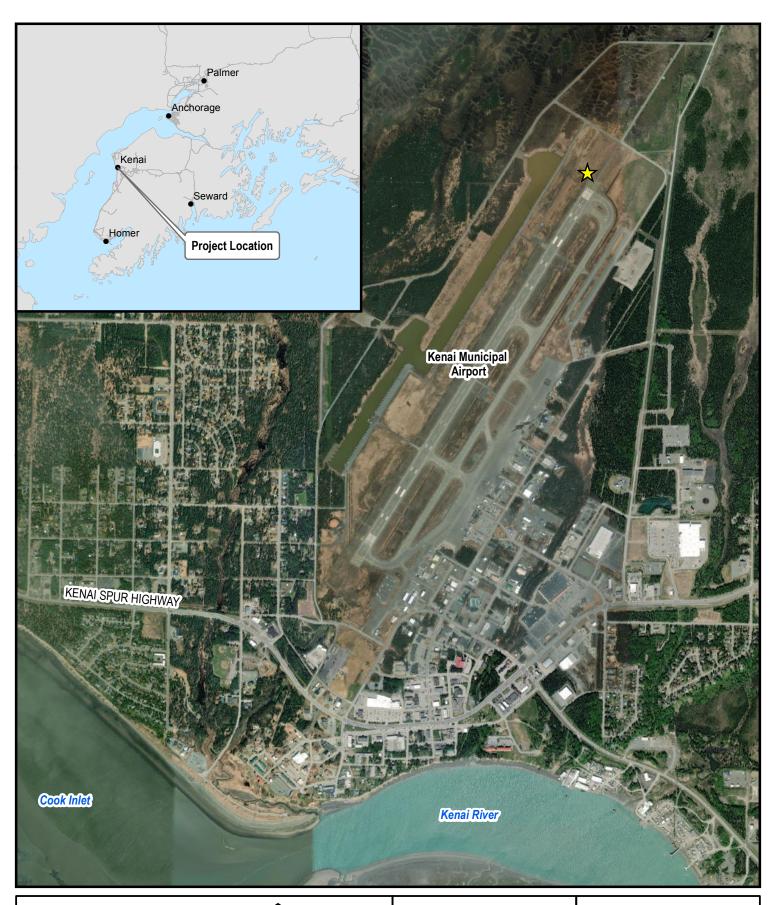
Figure 2 - Area of Potential & Proposed Project Layout

CC:

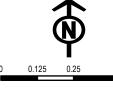
Jack Gilbertsen, Lead Environmental Program Manager, FAA Scott Curtin, Public Works Director, City of Kenai Mark Swenson PE, Project Manager, HDL Engineering Consultants, LLC Adam Bruscher PE, Project Engineer, HDL Engineering Consultants

Page 3 of 3









Kenai Municipal Airport 2021 Improved Airfield Drainage Kenai, Alaska March 2021

Figure 1 - Project Location and Vicinity Map

0.5 Miles

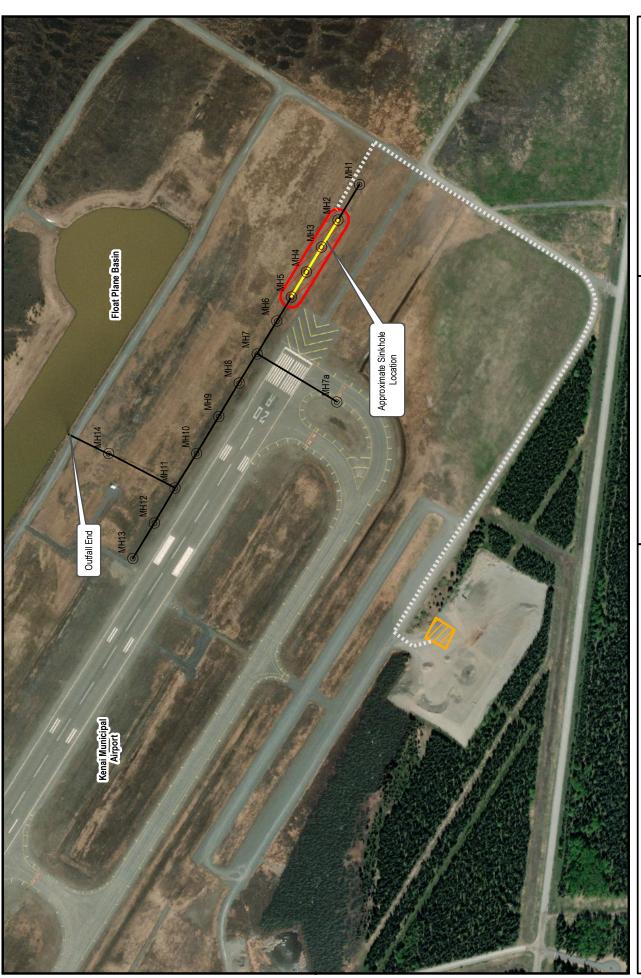


Figure 2 - Area of Potential Effect & Proposed Project Area

Existing Storm Drain Pipe

Area of Potential Effect

Kenai Municipal Airport 2021 Improved Airfield Drainage Kenai, Alaska March 2021

Existing Access

Manhole

Proposed Drain Pipe Repair

ZZ
Staging Area

APPENDIX B

Wetlands	Memor	andum
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Table of Contents

Vetlands MemorandumB-1



MEMORANDUM

DATE: March 25, 2021

TO: File

FROM: Brooke Therrien, Environmental Specialist \mathcal{BT}

RE: Kenai Municipal Airport 2021 Improved Airfield Drainage

No Preconstruction Notification under Nationwide Permit 58 – Utility Line

Activities for Water and Other Substances

CIVIL ENGINEERING

GEOTECHNICAL ENGINEERING

TRANSPORTATION ENGINEERING

ENVIRONMENTAL SERVICES

PLANNING

SURVEYING & MAPPING

CONSTRUCTION ADMINISTRATION

MATERIAL TESTING

RIGHT-OF-WAY SERVICES The purpose of this memorandum is to document the above-referenced project's impacts to waters of the U.S. and notification requirements to the U.S. Army Corps of Engineers.

Project Description

The City of Kenai, owner and operator of the Kenai Municipal Airport (ENA), in cooperation with the Federal Aviation Administration (FAA), is proposing to reconstruct a section of storm drainpipe along the north end of Runway 02L/20R, in Kenai, Alaska. The project is located on United States Geological Survey Quadrangle Kenai C-4; Section 29 of Township 6N, Range 11W, Seward Meridian; Latitude 60.579776°N, Longitude 151.238948°W (Figure 1).

The project would consist of the following improvements (Figure 2):

- Excavate approximately 3,000 cubic yards (cy) of existing material (in-situ) to expose
 the existing storm drainpipe. Exposure of the storm drainpipe will require a trench
 approximately 20 feet wide by 500 feet long.
- Remove existing storm drainpipe and place approximately 300 cy of pipe bedding material (sand) around the new pipe.
- Replace 326 linear feet of pipe with 18-inch diameter polyethylene (PE) pipe between MH 2 and MH 4.
- Replace 162 linear feet of pipe with 20-inch PE pipe between MH 4 and MH 5. Backfill
 using previously excavated material.
- Reseed disturbed area.

Impacts to Waters of the U.S.

The location and boundaries of wetlands are documented in Figure 2. The following sources of existing environmental data and wetlands mapping were used to prepare a map of the project area containing wetland and waterbody locations.

RE: Kenai Municipal Airport 2021 Improved Airfield Drainage No Preconstruction Notification under Nationwide Permit 58 – Utility Line Activities March 25, 2021 Page 2 of 3

- National Wetlands Inventory (NWI)
- Cook Inlet Wetlands
- 2012 aerial imagery provided by the Kenai Peninsula Borough (KPB)
- Alaska Department of Fish and Game Anadromous Waters Catalog
- U.S. Geological Survey Quadrangle Map Kenai C-4 SE
- 4-foot elevation data from KPB's Terrain Viewer

Although the NWI and Cook Inlet wetlands both identified palustrine wetlands within the project vicinity, the NWI was the only database that identified wetlands within the project footprint. No navigable waters were identified within the project area. A review of 4-foot elevation data identified the area slopes from the north to the south (see attached Map titled KPB Terrain Viewer Elevation Map Output).

The proposed project would remove and replace existing soil and pipeline materials in-kind. Approximately 300 cy of additional pipe bedding material (sand) will be placed in wetlands, resulting in a total 0.07 acres of permanent impacts to wetlands (Figure 2). Permanent impacts include the placement of sand material at the base of the trench (approximately 6 feet wide). Temporary impacts to wetlands include the excavation and backfilling of a 14-foot wide trench needed to install new drainpipe for the 14-foot wide trench.

Nationwide Permit Authorization

Nationwide Permit (NWP) 58 (attached) authorizes the discharge of fill material into waters of the U.S. if the following criteria are met:

- a) The activity does not result in the loss of greater than 1/2-acre of waters of the United States for each single and complete project. The proposed project would permanently impact 0.07 acres of wetland by placing approximately 300 cy of pipe bedding material (sand).
- b) There must be no change in pre-construction contours of waters of the United States. Approximately 3,000 cy of top soil will be excavated to expose the existing storm drainpipe. Exposure of the storm drainpipe will require a trench approximately 20 feet wide by 500 feet long. All excavated material will be backfilled and the site will be revegetated with native vegetation.
- c) In wetlands, the top 6 to 12 inches of the trench should normally be backfilled with topsoil from the trench. The trench cannot be constructed or backfilled in such a manner as to drain waters of the United States (e.g., backfilling with extensive gravel layers, creating a french drain effect). All excavated material will be backfilled and the site will be revegetated with native vegetation. The project involves replacing existing storm drainpipe that conveys water only. No additional subsurface collection systems (such as a French drain) or porous fill material will be constructed to cause additional drainage.



B-2

RE: Kenai Municipal Airport 2021 Improved Airfield Drainage No Preconstruction Notification under Nationwide Permit 58 – Utility Line Activities March 25, 2021 Page 3 of 3

The requirement to submit a pre-construction notification (PCN) to USACE applies if the project meets the following criteria:

- (1) A section 10 permit is required. A section 10 permit is not required since no discharges are proposed that would impact a navigable water of the U.S.
- (2) The discharge will result in the loss of greater than 1/10-acre of waters of the United States. (See general condition 32.) (Authorities: Sections 10 and 404). **The discharge will result in the loss of greater than 1/10-acre of waters of the U.S.**

For the reasons highlighted in bold above, the project is authorized under NWP 58 – Utility Line Activities for Water and Other Substances and no PCN is required prior to construction. Nationwide Permit General Conditions 6, 11, 12, 13, 19, and 21 and Alaska Regional Conditions C, D, E and F apply to this project (attached) and should be incorporated into the project plans and specifications.

Enclosed: Figure 1: Project Location and Vicinity Map

Figure 2: Proposed Improvements & Wetlands KPB Terrain Viewer Elevation Map Output

Nationwide Permit 58 – Utility Line Activities for Water and Other Substances

Nationwide Permit General Conditions

Alaska Regional Conditions

cc: Mary Bondurant, Airport Manager City of Kenai

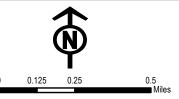
Scott Curtin, Public Works Director, City of Kenai

Mark Swenson PE, Project Manager, HDL Engineering Consultants, LLC Adam Bruscher PE, Project Engineer, HDL Engineering Consultants



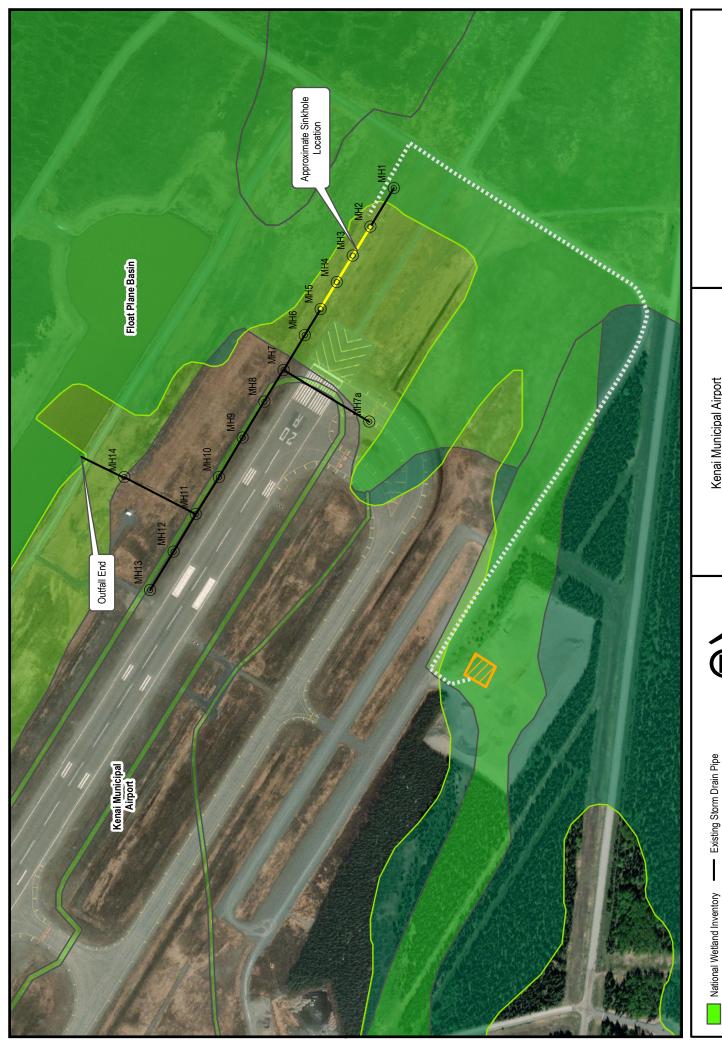






Kenai Municipal Airport 2021 Improved Airfield Drainage Kenai, Alaska March 2021

Figure 1 - Project Location and Vicinity Map



Kenai Municipal Airport
2021 Improved Airfield Drainage
Kenai, Alaska
March 2021

Figure 2 - Proposed Improvements & Wetlands

250

0 125

Proposed Drain Pipe Repair ZZ Staging Area

Proposed Access

Manhole

Cook Inlet Wetlands

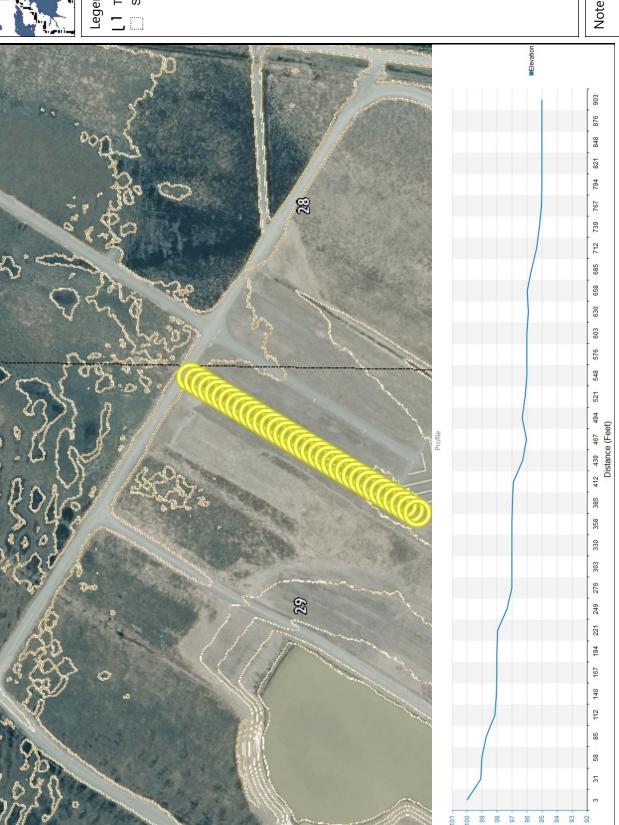


KPB Terrain Viewer Elevation Map Output



Legend

[1 Township Lines Section Lines



This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. Do not use for navigation.

DATE PRINTED: 3/24/2021

Elevation (Feet)

58. Utility Line Activities for Water and Other Substances

Activities required for the construction, maintenance, repair, and removal of utility lines for water and other substances, excluding oil, natural gas, products derived from oil or natural gas, and electricity. Oil or natural gas pipeline activities or electric utility line and telecommunications activities may be authorized by NWPs 12 or 57, respectively. This NWP also authorizes associated utility line facilities in waters of the United States, provided the activity does not result in the loss of greater than 1/2-acre of waters of the United States for each single and complete project.

Utility lines: This NWP authorizes discharges of dredged or fill material into waters of the United States and structures or work in navigable waters for crossings of those waters associated with the construction, maintenance, or repair of utility lines for water and other substances, including outfall and intake structures. There must be no change in pre-construction contours of waters of the United States. A "utility line" is defined as any pipe or pipeline for the transportation of any gaseous, liquid, liquescent, or slurry substance, for any purpose that is not oil, natural gas, or petrochemicals. Examples of activities authorized by this NWP include utility lines that convey water, sewage, stormwater, wastewater, brine, irrigation water, and industrial products that are not petrochemicals. The term "utility line" does not include activities that drain a water of the United States, such as drainage tile or french drains, but it does apply to pipes conveying drainage from another area.

Material resulting from trench excavation may be temporarily sidecast into waters of the United States for no more than three months, provided the material is not placed in such a manner that it is dispersed by currents or other forces. The district engineer may extend the period of temporary side casting for no more than a total of 180 days, where appropriate. In wetlands, the top 6 to 12 inches of the trench should normally be backfilled with topsoil from the trench. The trench cannot be constructed or backfilled in such a manner as to drain waters of the United States (*e.g.*, backfilling with extensive gravel layers, creating a french drain effect). Any exposed slopes and stream banks must be stabilized immediately upon completion of the utility line crossing of each waterbody.

Utility line substations: This NWP authorizes the construction, maintenance, or expansion of substation facilities associated with a utility line in non-tidal waters of the United States, provided the activity, in combination with all other activities included in one single and complete project, does not result in the loss of greater than 1/2-acre of waters of the United States. This NWP does not authorize discharges of dredged or fill material into non-tidal wetlands adjacent to tidal waters of the United States to construct, maintain, or expand substation facilities.

Foundations for above-ground utility lines: This NWP authorizes the construction or maintenance of foundations for above-ground utility lines in all waters of the United States, provided the foundations are the minimum size necessary.

Access roads: This NWP authorizes the construction of access roads for the construction and maintenance of utility lines, including utility line substations, in non-tidal waters of the United States, provided the activity, in combination with all other activities included in one single and complete project, does not cause the loss of greater than 1/2-acre of non-tidal waters of the United States. This NWP does not authorize discharges of dredged or fill material into non-tidal wetlands adjacent to tidal waters for access roads. Access roads must be the minimum width necessary (see Note 2, below). Access roads must be constructed so that the length of the road minimizes any adverse effects on waters of the United States and must be as near as possible to pre-construction contours and elevations (e.g., at grade corduroy roads or geotextile/gravel roads). Access roads constructed above pre-construction contours and elevations in waters of the United States must be properly bridged or culverted to maintain surface flows.

This NWP may authorize utility lines in or affecting navigable waters of the United States even if there is no associated discharge of dredged or fill material (see 33 CFR part 322). Overhead utility lines constructed over section 10 waters and utility lines that are routed in or under section 10 waters without a discharge of dredged or fill material require a section 10 permit.

This NWP authorizes, to the extent that Department of the Army authorization is required, temporary structures, fills, and work necessary for the remediation of inadvertent returns of drilling fluids to waters of the United States through sub-soil fissures or fractures that might occur during horizontal directional drilling activities conducted for the purpose of installing or replacing utility lines. These remediation activities must be done as soon as practicable, to restore the affected waterbody. District engineers may add special conditions to this NWP to require a remediation plan for addressing inadvertent returns of drilling fluids to waters of the United States during horizontal directional drilling activities conducted for the purpose of installing or replacing utility lines.

This NWP also authorizes temporary structures, fills, and work, including the use of temporary mats, necessary to conduct the utility line activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges of dredged or fill material, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. After construction, temporary fills must be removed in their entirety and the affected areas returned to preconstruction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if:

- (1) A section 10 permit is required; or
- (2) the discharge will result in the loss of greater than 1/10-acre of waters of the United States. (See general condition 32.) (Authorities: Sections 10 and 404)

Note 1: Where the utility line is constructed, installed, or maintained in navigable waters of the United States (*i.e.*, section 10 waters) within the coastal United States, the Great Lakes, and United States territories, a copy of the NWP verification will be sent by the Corps to the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), for charting the utility line to protect navigation.

Note 2: For utility line activities crossing a single waterbody more than one time at separate and distant locations, or multiple waterbodies at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. Utility line activities must comply with 33 CFR 330.6(d).

Note 3: Access roads used for both construction and maintenance may be authorized, provided they meet the terms and conditions of this NWP. Access roads used solely for construction of the utility line must be removed upon completion of the work, in accordance with the requirements for temporary fills.

Note 4: Pipes or pipelines used to transport gaseous, liquid, liquescent, or slurry substances over navigable waters of the United States are considered to be bridges, not utility lines, and may require a permit from the U.S. Coast Guard pursuant to the General Bridge Act of 1946. However, any discharges of dredged or fill material into waters of the United States associated with such pipelines will require a section 404 permit (see NWP 15).

Note 5: This NWP authorizes utility line maintenance and repair activities that do not qualify for the Clean Water Act section 404(f) exemption for maintenance of currently serviceable fills or fill structures.

Note 6: For activities that require preconstruction notification, the PCN must include any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings that require Department of the Army authorization but do not require preconstruction notification (see paragraph (b)(4) of general condition 32). The district engineer will evaluate the PCN in accordance with Section D, "District Engineer's Decision." The district engineer may require mitigation to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see general condition 23).

Nationwide Permit General Conditions

- 1. Navigation
- 2. Aquatic Life Movements
- 3. Spawning Areas
- 4. Migratory Bird Breeding Areas
- 5. Shellfish Beds
- 6. Suitable Material
- 7. Water Supply Intakes
- 8. Adverse Effects from Impoundments
- 9. Management of Water Flows
- 10. Fills Within 100-Year Floodplains
- 11. Equipment
- 12. Soil Erosion and Sediment Controls
- 13. Removal of Temporary Fills
- 14. Proper Maintenance
- 15. Single and Complete Project
- 16. Wild and Scenic Rivers
- 17. Tribal Rights
- 18. Endangered Species
- 19. Migratory Birds and Bald and Golden Eagles
- 20. Historic Properties
- 21. Discovery of Previously Unknown Remains and Artifacts
- 22. Designated Critical Resource Waters
- 23. Mitigation
- 24. Safety of Impoundment Structures
- 25. Water Quality
- 26. Coastal Zone Management
- 27. Regional Case-By-Case Conditions
- 28. Use of Multiple Nationwide Permits
- 29. Transfer of Nationwide Permit Verifications
- 30. Compliance Certification
- 31. Activities Affecting Structures or Works Built by the United States
- 32. Pre-Construction Notification

Note: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as applicable, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/ or Coastal Zone Management Act consistency for an NWP. Every person who may wish to obtain permit authorization under one or more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has

been and is on notice that all of the provisions of 33 CFR 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

1. Navigation

- a) No activity may cause more than a minimal adverse effect on navigation.
- b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.
- c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. Aquatic Life Movements

No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species. If a bottomless culvert cannot be used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements.

3. Spawning Areas

Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. Migratory Bird Breeding Areas

Activities in waters of the United States that serve as breeding areas for

migratory birds must be avoided to the maximum extent practicable.

5. Shellfish Beds

No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.

6. Suitable Material

No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see section 307 of the Clean Water Act).

7. Water Supply Intakes

No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects from Impoundments

If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. Management of Water Flows

To the maximum extent practicable, the pre- construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre- construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains

The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. Equipment

Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls

Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.

13. Removal of Temporary Fills

Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. Proper Maintenance

Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

15. Single and Complete Project

The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. Wild and Scenic Rivers

- a) No NWP activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status.
- b) If a proposed NWP activity will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the permittee must submit a pre-construction

notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency with direct management responsibility for that river. The permittee shall not begin the NWP activity until notified by the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status.

c) Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or Study River (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: http://www.rivers.gov/.

17. Tribal Rights

No NWP activity may cause more than minimal adverse effects on tribal rights (including treaty rights), protected tribal resources, or tribal lands.

18. Endangered Species

- a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless ESA section 7 consultation addressing the effects of the proposed activity has been completed. Direct effects are the immediate effects on listed species and critical habitat caused by the NWP activity. Indirect effects are those effects on listed species and critical habitat that are caused by the NWP activity and are later in time, but still are reasonably certain to occur.
- b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. If pre- construction notification is required for the proposed activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the ESA.

- c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that might be affected by the proposed activity or that utilize the designated critical habitat that might be affected by the proposed activity. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete pre-construction notification. In cases where the non- Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification that the proposed activity will have "no effect" on listed species or critical habitat, or until ESA section 7 consultation has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.
- d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species- specific permit conditions to the NWPs.
- e) Authorization of an activity by an NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the FWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.
- f) If the non-federal permittee has a valid ESA section 10(a) (1) (B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA section 10(a) (1) (B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will coordinate with the agency that issued the ESA

section 10(a)(1)(B) permit to determine whether the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation conducted for the ESA section 10(a)(1)(B) permit. If that coordination results in concurrence from the agency that the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation for the ESA section 10(a) (1) (B) permit, the district engineer does not need to conduct a separate ESA section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete pre-construction notification whether the ESA section 10(a) (1) (B) permit covers the proposed NWP activity or whether additional ESA section 7 consultation is required.

g) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the FWS and NMFS or their world wide Web pages at http://www.fws.gov/ or http:// www.fws.gov/ipac and http:// www.nmfs.noaa.gov/pr/species/esa/respectively.

19. Migratory Birds and Bald and Golden Eagles

The permittee is responsible for ensuring their action complies with the Migratory Bird Treaty

Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting appropriate local office of the U.S. Fish and Wildlife Service to determine applicable measures to reduce impacts to migratory birds or eagles, including whether "incidental take" permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

20. Historic Properties

- a) In cases where the district engineer determines that the activity may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.
- b) Federal permittees should follow their own procedures for complying with the requirements of section 106 of the National Historic Preservation Act. If pre-construction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be

- necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106.
- c) Non-federal permittees must submit a pre-construction notification to the district engineer if the NWP activity might have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties might have the potential to be affected by the proposed NWP activity or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of, or potential for, the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal representative, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause effects on the historic properties. Section 106 consultation is not required when the district engineer determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 consultation is required when the district engineer determines that the activity has the potential to cause effects on historic properties. The district engineer will conduct consultation with consulting parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect determinations for the purposes of section 106 of the NHPA: no historic properties affected, no adverse effect, or adverse effect. Where the non-Federal applicant has identified historic properties on which the activity might have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects to historic properties or that NHPA section 106 consultation has been completed.
- d) For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required, the district engineer will notify the non-Federal applicant that he or she cannot begin the activity until

- section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.
- e) Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/ THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

21. Discovery of Previously Unknown Remains and Artifacts

If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal, and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. Designated Critical Resource Waters

Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43,

- 44, 49, 50, 51, and 52 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.
- b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

23. Mitigation

The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal:

- a)The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).
- b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal.
- c)Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre- construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre- construction notification, the district engineer may determine on a case-by- case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects.
- d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation to ensure that the activity results in no more than minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult- to-replace resources (see 33 CFR 332.3(e) (3)).
- e) Compensatory mitigation plans for NWP activities in or near streams or other open waters will normally include a requirement for the restoration or

enhancement, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation required. Restored riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of minimization or compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

- f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.
 - 1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWPs, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b) (2) and (3)). However, if an appropriate number and type of mitigation bank or inlieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation.
 - 2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f)).
 - 3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation.
 - 4) If permittee-responsible mitigation is the proposed option, the

prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)).

- 5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the impact site and the number of credits to be provided.
- 6) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan (see 33 CFR 332.4(c)(1)(ii)).
- g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of ½-acre, it cannot be used to authorize any NWP activity resulting in the loss of greater than ½- acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that an NWP activity already meeting the established acreage limits also satisfies the no more than minimal impact requirement for the NWPs.
- h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee- responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.
- i) Where certain functions and services of waters of the United States are

permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.

24. Safety of Impoundment Structures

To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. Water Quality

Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

26. Coastal Zone Management

In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. Regional and Case-By-Case Conditions

The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. Use of Multiple Nationwide Permits

The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the

NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed ½-acre.

29. Transfer of Nationwide Permit Verifications

If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

(Transferee)	
(Date)	

30. Compliance Certification

Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

- a) A statement that the authorized activity was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions:
- b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(I)(3) to confirm that the permittee

secured the appropriate number and resource type of credits; and

c) The signature of the permittee certifying the completion of the activity and mitigation. The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later.

31. Activities Affecting Structures or Works Built by the United States

If an NWP activity also requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally authorized Civil Works project (a "USACE project"), the prospective permittee must submit a pre-construction notification. See paragraph (b) (10) of general condition 32. An activity that requires section 408 permission is not authorized by NWP until the appropriate Corps office issues the section 408 permission to alter, occupy, or use the USACE project, and the district engineer issues a written NWP verification.

32. Pre-Construction Notification

- a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:
 - He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or
 - 2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general

condition 18 that listed species or critical habitat might be affected or are in the vicinity of the activity, or to notify the Corps pursuant to general condition 20 that the activity might have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) has been completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

- b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information:
 - 1) Name, address and telephone numbers of the prospective permittee;
 - 2) Location of the proposed activity;
 - 3) Identify the specific NWP or NWP(s) the prospective permittee wants to use to authorize the proposed activity;
 - 4) A description of the proposed activity; the activity's purpose; direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed activity; and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings for linear projects that require Department of the Army authorization but do not require pre-construction notification. The description of the proposed activity and any proposed mitigation measures should be sufficiently detailed to allow the district

engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or other mitigation measures. For single and complete linear projects, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic sites, and other waters for each single and complete crossing of those wetlands, other special aquatic sites, and other waters. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the activity and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);

- 5) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;
- 6) If the proposed activity will result in the loss of greater than \(^{1}\)/10-acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.
- 7) For non-Federal permittees, if any listed species or designated critical habitat might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat, the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed activity or utilize the designated critical habitat that might be affected by the proposed activity. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with the Endangered Species Act;
- 8) For non-Federal permittees, if the NWP activity might have the potential to cause effects to a historic property listed on, determined

to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic property might have the potential to be affected by the proposed activity or include a vicinity map indicating the location of the historic property. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with section 106 of the National Historic Preservation Act;

- 9) For an activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the PCN must identify the Wild and Scenic River or the "study river" (see general condition 16); and
- 10)For an activity that requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, the pre-construction notification must include a statement confirming that the project proponent has submitted a written request for section 408 permission from the Corps office having jurisdiction over that USACE project.
- c) Form of Pre-Construction Notification: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is an NWP PCN and must include all of the applicable information required in paragraphs (b) (1) through (10) of this general condition. A letter containing the required information may also be used. Applicants may provide electronic files of PCNs and supporting materials if the district engineer has established tools and procedures for electronic submittals.

d) Agency Coordination:

- 1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the activity's adverse environmental effects so that they are no more than minimal.
- 2) Agency coordination is required for: (i) All NWP activities that require pre-construction notification and result in the loss of greater than 1/2 acre of waters of the United States; (ii) NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require pre-construction notification and will result in the loss of greater than 300 linear feet of stream bed;

- (iii) NWP 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic sites; and (iv) NWP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low water line in tidal waters or the ordinary high water mark in the Great Lakes.
- 3) When agency coordination is required, the district engineer will immediately provide (e.g., via email, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural resource or water quality agency, EPA, and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to notify the district engineer via telephone, facsimile transmission, or email that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse environmental effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure the net adverse environmental effects of the proposed activity are no more than minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.
- 4) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.
- Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre- construction notifications to expedite agency coordination.

ALASKA DISTRICT REGIONAL CONDITIONS for the

2021 NATIONWIDE PERMITS (NWP)

(12, 21, 29, 39, 40, 42, 43, 44, 48, 50, 51, 52, 55, 56, 57, 58)

The Alaska District Regulatory Office has issued the following Regional Conditions to ensure that activities authorized by NWPs in the Alaska District cause no more than minimal adverse environmental effects, individually and cumulatively. Before the Alaska District will verify an activity under one or more NWPs, the proposed activity must comply with the NWP terms and all applicable General and Regional Conditions.

APPLICABILITY: The following would apply throughout the state of Alaska.

RESTRICTIONS:

Regional Condition A – RESERVED

Regional Condition B – Additional Pre-Construction Notification (PCN) Requirements 1. RESERVED

- 2. A PCN is required for projects that qualify for NWPs 12, 57 (C), and 58 (D) within the Municipality of Anchorage.
- 3. NWP 48: A PCN is required for impacts to greater than 1/2 acre of special aquatic sites (wetlands, mudflats, vegetated shallows, coral reefs, etc.).
- 4. NWP 12, 57 (C), 58 (D). In addition to other triggers for the PCN, a PCN is required for projects located within permafrost soils identified using the appropriate soil survey or other appropriate data.

REGIONAL CONDITION C - Activities Involving Trenching

Trenches may not be constructed or backfilled in such a manner as to drain waters of the U.S. (e.g., backfilling with extensive gravel layers, creating a French drain effect). Ditch plugs or other methods shall be used to prevent this situation.

Except for material placed as minor trench over-fill or surcharge necessary to offset subsidence or compaction, all excess materials shall be removed to a non waters of the U.S. location. The backfilled trench shall achieve the pre-construction elevation, within a year of disturbance unless climatic conditions warrant additional time. The additional time must be approved by the Corps.

Excavated material temporarily sidecast into wetlands shall be underlain with geotextile, ice pads, or similar material, to allow for removal of the temporary material to the maximum extent practicable.

REGIONAL CONDITION D - Site Revegetation for Projects with Ground Disturbing Activities Re-vegetation of all disturbed areas within the project site shall begin as soon as site conditions allow and in the same growing season as the disturbance, unless climatic conditions warrant additional time. Topsoil (the outermost layer of soil, usually the top 2 – 8 inches) removed from the construction area shall be separated and used for site rehabilitation. When backfilling, topsoil shall be placed as the top layer to provide a seed bed for regrowth. If topsoil is not available from the

project site, local native soil material obtained from an approved site may be used. Species used for seeding and planting shall be certified seed sources free of invasive species and follow this order of preference: 1) species native to the site; 2) species native to the region; 3) species native to the state.

REGIONAL CONDITION E - Delineation of Project Footprint

Prior to commencement of construction activities within waters of the U.S., the permittee shall clearly identify the permitted limits of disturbance at the project site with highly visible markers (e.g. construction fencing, flagging, silt barriers, etc.). The permittee shall properly maintain such identification until construction is complete and the soils have been stabilized. The permittee is prohibited from conducting any unauthorized Corps-regulated activity outside of the permitted limits of disturbance (as shown on the permit drawings).

REGIONAL CONDITION F - Maintenance of Hydrology Patterns

Natural drainage patterns shall be maintained using appropriate methods. Excessive ponding or drying adjacent to fill areas shall indicate non-compliance with this condition.

REGIONAL CONDITIONS G, H, I AND J APPLY TO SPECIFIC NWPs

REGIONAL CONDITION G - NWP 40 Agricultural Activities

The following activities are not authorized by NWP 40: a. Installation, placement, or construction of drain tiles, ditches, or levees; and b. Mechanized land clearing or land leveling in wetlands within 300 feet of an anadromous water (anadromous water is defined by the state of AK see https://www.adfg.alaska.gov/sf/SARR/AWC/index.cfm?ADFG=main.interactive).

REGIONAL CONDITION H - NWP 44 Mining Activities

Placer mining activities are excluded from coverage by NWP 44 (Mining Activities). Placer mining may be authorized by Regional General Permit POA-2014-00055-M1. In Alaska, NWP 44 may only authorize the following activities:

- 1. Hard rock mining within waters jurisdictional under only Section 404 of the Clean Water Act, not including trenching, drilling, or access road construction.
- 2. Temporary stockpiling of sand and gravel in waters of the U.S., limited to seasonally dewatered unvegetated sand/gravel bars. Stockpiles shall be completely removed and the area restored to pre-project contours within one year, in advance of seasonal ordinary high water events, or prior to equipment being removed from site, whichever occurs first.

REGIONAL CONDITION I - NWP 48, 55 (A), and 56 (B):

When an Aquatic Farm Lease is required from the Alaska Department of Natural Resources (ADNR) for a new or modified aquatic farm, the applicant must obtain and submit a copy of the ADNR preliminary decision with a Preconstruction Notification to the USACE.

REGIONAL CONDITION J -- NWPs 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52:

The proposed NWP activity must not cause:

- 1) the loss of anadromous streambed, and/or
- 2) the discharge of dredged or fill material into waterbodies, including wetlands, adjacent to and/ or upstream of an anadromous waterbody:

unless the district engineer issues a waiver by making a written determination concluding that these discharges will result in no more than minimal individual and cumulative adverse environmental effects.

-2-

APPENDIX C

Agency Scoping

Table of Contents

Government-to-Government Consultation	
FAA to Kenaitze Tribe (March 29, 2021)	C-1
FAA to Salamatof Tribe (March 29, 2021)	C-7

 From:
 Gilbertsen, Jack (FAA)

 To:
 wwilson@kenaitze.org

 Cc:
 Brooke A. Therrien

Subject: Kenai Airport Improvements, Government to Government Consultation Initiation

Date: Monday, March 29, 2021 3:14:41 PM
Attachments: Kenai Gov-to-Gov Kenaitze.doc

Figures.pdf

To: Wayne Wilson, Chairperson, Kenaitze Indian Tribe

Subject: Kenai Airport Improvements, Government to Government Consultation Initiation The FAA, in cooperation with ADOT & PF is initiating an airport improvement project at the Kenai Airport, and we would like to extend the offer for government to government consultation to address any concerns your tribe may have regarding this project.

The attached documents are intended to introduce the project to you and inform you of its intentions to rehabilitate the Kenai Airport's drainage so it can better serve its local community and visitors.

Because of current COVID precautions, we are limited to conducting consultations by means of email, phone, and video teleconferencing.

Please, contact me if there are any concerns you would like to discuss this project.

Thanks,

Jack Gilbertsen

Jack L. Gilbertsen, REM Lead Environmental Protection Specialist Alaska Regional Office Federal Aviation Administration (907) 271-5453



U.S. Department of Transportation

AIRPORTS DIVISION

222 W. 7th Avenue, Box 14 Anchorage, Alaska 99513-7587

Federal Aviation Administration

March 29, 2021

Wayne Wilson Chairperson Kenaitze Indian Tribe P.O. Box 988 Kenai AK 99611-0988

Dear Mr. Wilson,

Kenai Municipal Airport 2021 Improved Airfield Drainage (AIP # 3-02-0142-068-2021), Kenai Alaska, Government-to-Government Consultation Initiation

The Federal Aviation Administration (FAA), in cooperation with the City of Kenai, owner and operator of the Kenai Municipal Airport (ENA), is proposing reconstruct a section of storm drain piping along the north end of Runway 02L/20R, in Kenai, Alaska. The project is located on United States Geological Survey Quadrangle Kenai C-4; Section 29 of Township 6N, Range 11W, Seward Meridian; Latitude 60.579776°N, Longitude 151.238948°W (Figure 1).

Purpose of Government-to-Government Consultation

The primary purpose of government-to-government consultation as described in Federal Executive Order 13175 "Consultation and Coordination with Indian Tribal Governments" and FAA's Order 1210.20 "American Indian and Alaska Native Tribal Consultation Policy and Procedures" is to ensure that Federally Recognized Tribes are given the opportunity to provide meaningful and timely input regarding proposed FAA actions that uniquely or significantly affect Tribes.

Consultation Initiation

With this letter, the FAA is offering to consult on concerns that uniquely or significantly affect your Tribe related to the potential action described below. Early identification of Tribal concerns will allow the FAA and the airport owner and operator to consider ways to avoid and minimize potential impacts to Tribal resources and/or cultural practices as project planning and alternatives are developed and refined. We would be pleased to discuss details of the proposed project and its potential impacts with you.

Project Information

The purpose of the proposed project is to maintain and improve existing storm drain facilities. The project will replace the existing storm drainpipe between Manhole (MH) 02 and MH 05 (Figure 2). The existing storm drainpipe is experiencing joint separation, which allows storm water to outflow and groundwater to infiltrate the system resulting in pipe settlement and development of sinkholes. Sinkholes at the ground surface have developed in the immediate vicinity of the underground storm drainpipe. Proposed improvements include the following (Figure 2):

Updated August 4, 2016

- Excavate approximately 3,000 cubic yards (cy) of existing material (in-situ) to expose the existing storm drainpipe. Exposure of the storm drainpipe will require a trench approximately 20 feet wide by 500 feet long. The total area of ground disturbance is approximately 0.25 acres.
- Remove existing storm drainpipe and place approximately 300 cy of pipe bedding material (sand) around the new pipe.
- Replace 326 linear feet of pipe with 18-inch diameter polyethylene (PE) pipe between MH 2 and MH 4
- Replace 162 linear feet of pipe with 20-inch PE pipe between MH 4 and MH 5.
- Backfill using previously excavated material.
- Reseed disturbed area.

Construction is anticipated to begin and be completed during summer/fall 2021. All proposed work will occur on previously disturbed ground near the end of the runway. The proposed staging area is currently located on a developed lot with access to and from the proposed project area via existing roads. Temporary impacts to existing vegetation within the project area will occur due to the operation of heavy machinery as it travels over existing vegetated area.

Confidentiality

We understand that you may have concerns regarding the confidentiality of information on areas or resources of religious, traditional and cultural importance to the Tribe. We would be happy to discuss these concerns and develop procedures to ensure the confidentiality of such information is maintained.

FAA Contact Information

If you wish to provide comments related to this proposed project, please contact Jack Gilbertsen, Lead Environmental Program Manager, at the address above, at 907-271-5453, or by e-mail at jack.gilbertsen@faa.gov.

Project Consultation Options Form

Your timely response will assist us in incorporating your concerns into project planning. For that purpose, we respectfully request that you complete the enclosed Project Consultation Options form and forward it to the FAA within thirty (30) days of your receipt of this correspondence.

Sincerely,

Jack Gilbertsen

Lead Environmental Program Manager

Enclosures:

Tribal Consultation Options form

Figure 1 – Location and Environmental Resource Map

Figure 2 – Area of Potential Effect & Proposed Project Layout

Cc:

Scott Curtain, City of Kenai, Director of Public Works Mary Bondurant, City of Kenai, Airport Manager Adam Bruscher, HDL Engineering Consultants LLC, Project Engineer Brooke Therrien, HDL Engineering Consultants LLC, Environmental Specialist

Tribal Government to Government Consultation Response Form

Kenaitze Indian Tribe P.O. Box 988 Kenai Alaska, 99611

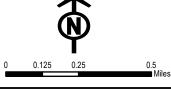
Project Name: Kenai Municipal Airport 2021 Improved Airfield Drainage, AIP # 3-02-0142 068-

Please check a response, provide contact information, sign and mail, email or fax this form to FAA.

The Kenaitze Indian Tribe, a federally recognize government-to-government relationship for this	zed tribe, would like to consult with the FAA in a s proposed project.
The Kenaitze Indian Tribe has no interest associonsultation is not required.	ciated with this proposed project and further
_	
Tribal Leader (Please print)	Telephone
Tribal Leader (Signature)	Date
If you have decided to consult, please ident consultation. Name of Formal Tribal Representative (Please print)	ify a Tribal Representative for the Telephone
Name of Pormar Trioar Representative (Flease print)	Тејерноне
Name of Formal Tribal Representative (Signature)	Date
Tribal Contact Information: Phone:	Please mail, email, or fax Response Form
Fax:	FAA Airports Division, ATTN: Jack Gilbertsen
e-mail:	222 W. 7 th Avenue, Box 14, Anchorage, AK 99513-7587 FAX: 907-271-2851
Other: (please describe)	EMAIL: AKAirportEnv@faa.gov







Kenai Municipal Airport 2021 Improved Airfield Drainage Kenai, Alaska March 2021

Figure 1 - Project Location and Vicinity Map



Figure 2 - Area of Potential Effect & Proposed Project Area

Existing Access

Manhole

Existing Storm Drain Pipe

Proposed Drain Pipe Repair

ZZ
Staging Area

From: Gilbertsen, Jack (FAA)
To: cmonfor@salamatof.com
Cc: Brooke A. Therrien

Subject: Kenai Airport Improvements, Government to Government Consultation Initiation

Date: Monday, March 29, 2021 3:23:32 PM
Attachments: Kenai Gov-to-Gov Salamatof.pdf

Figures.pdf

To: Chris Monfor, President, Salamatof Indian Tribe

Subject: Kenai Airport Improvements, Government to Government Consultation Initiation
The FAA, in cooperation with ADOT & PF is initiating an airport improvement project at the Kenai
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Jack Gilbertsen

Jack L. Gilbertsen, REM Lead Environmental Protection Specialist Alaska Regional Office Federal Aviation Administration (907) 271-5453



AIRPORTS DIVISION

222 W. 7th Avenue, Box 14 Anchorage, Alaska 99513-7587

Federal Aviation Administration

March 29, 2021

Chris Monfor President Salamatof Tribe P.O. Box 1425 Kenai AK 99611

Dear Mr. Monfor,

Kenai Municipal Airport 2021 Improved Airfield Drainage (AIP # 3-02-0142-068-2021), Kenai Alaska, Government-to-Government Consultation

The Federal Aviation Administration (FAA), in cooperation with the City of Kenai, owner and operator of the Kenai Municipal Airport (ENA), is proposing reconstruct a section of storm drain piping along the north end of Runway 02L/20R, in Kenai, Alaska. The project is located on United States Geological Survey Quadrangle Kenai C-4; Section 29 of Township 6N, Range 11W, Seward Meridian; Latitude 60.579776°N, Longitude 151.238948°W (Figure 1).

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Updated August 4, 2016

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Sincerely,

Jack Gilbertsen

Lead Environmental Program Manager

Enclosures:

Tribal Consultation Options form

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Cc:

Scott Curtain, City of Kenai, Director of Public Works Mary Bondurant, City of Kenai, Airport Manager Adam Bruscher, HDL Engineering Consultants LLC, Project Engineer Brooke Therrien, HDL Engineering Consultants LLC, Environmental Specialist

Tribal Government to Government Consultation Response Form

Salamatof Tribe P.O. Box 1425 Kenai Alaska, 99611

Project Name: Kenai Municipal Airport 2021 Improved Airfield Drainage, AIP # 3-02-0142 068-

2021

Please check a response,	provide contac	t information,	sign	and	mail,	email	or	fax
this form to FAA.	_		_					

The Salamatof Tribe, a federally recognized tri government-to-government relationship for thi	
The Salamatof Tribe has no interest associated is not required.	with this proposed project and further consultation
_	
Tribal Leader (Please print)	Telephone
Tribal Leader (Signature)	Date
If you have decided to consult, please ident consultation.	ify a Tribal Representative for the
Name of Formal Tribal Representative (Please print)	Telephone
Name of Formal Tribal Representative (Signature)	Date
Tribal Contact Information: Phone:	Please mail, email, or fax Response Form
Fax:	FAA Airports Division, ATTN: Jack Gilbertsen
e-mail:	222 W. 7 th Avenue, Box 14, Anchorage, AK 99513-7587 FAX: 907-271-2851
Other: (please describe)	EMAIL: AKAirportEnv@faa.gov







Kenai Municipal Airport 2021 Improved Airfield Drainage Kenai, Alaska March 2021

Figure 1 - Project Location and Vicinity Map

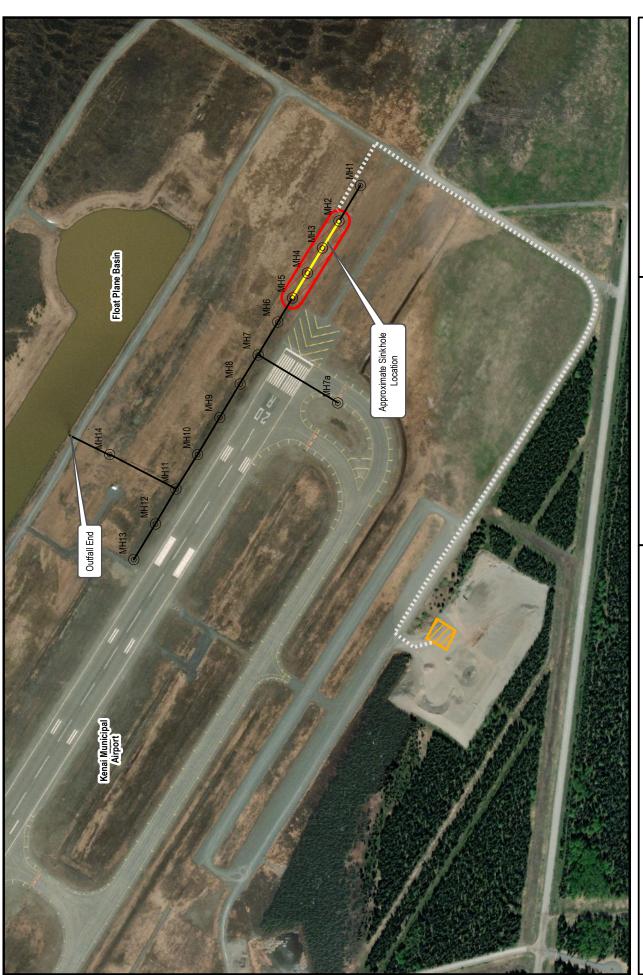


Figure 2 - Area of Potential Effect & Proposed Project Area

Existing Storm Drain Pipe

Area of Potential Effect

Existing Access

Manhole

Proposed Drain Pipe Repair

ZZ
Staging Area

Kenai Municipal Airport 2021 Improved Airfield Drainage Kenai, Alaska March 2021

Appendix B – Construction Surveying Requirements



Alaska Department of Transportation and Public Facilities

Alaska Construction Surveying Requirements (US Customary Units)

Alaska Construction Surveying Requirements (US Customary Units)

Table of Contents

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1. Survey accuracy requirements

Third order survey

- ✓ Use a 1/5000 horizontal closure.
- ✓ Use an angle closure of $30\sqrt{N}$ seconds, where N equals the number of angles in the traverse.
- ✓ An Alaska-registered professional land surveyor must perform or supervise replacement of survey monuments (property, USGS, USC&GS, BLM, etc.) or establishment of monuments (including centerline).
- ✓ All monument work must comply with AS 34.65.040 and meet standards in the latest version of the Alaska Society of Professional Land Surveyors' *Standards of Practice Manual*.
- ✓ The allowable vertical error for misclosure is $e = 0.05 \sqrt{M}$ e = maximum misclosure in feet, M = length of the level circuit in miles.

Table 1—Survey accuracy requirements (in feet)

	Stationing	HI	Closure	Horizontal Angle	Distance To center line	Grade
Additional cross sections	1.0	0.01	0.04	**	0.1	0.1
Benches		0.01	0.02			
Blue tops***	1.0	0.01	0.04		0.1	0.02
Bridges	*	0.01	0.02			0.01
Centerline	*			*		
Clearing & Grubbing	1.0				1.0	
Culverts	1.0	0.01	0.04	**	0.1	0.1
Curb & gutter	1.0	0.01	0.02		0.1	0.02
Grade stakes	1.0				0.1	0.1
Guardrail	1.0				0.1	
Manholes, catch basins & inlets	1.0	0.01	0.02		0.1	0.02
Monuments	*			*		
Red tops***	1.0	0.01	0.02		0.1	0.05
Riprap	1.0	0.1	0.04		1.0	0.1
Signs	1.0				0.1	
Slope stakes & RP's	1.0	0.01	0.04	**	0.1	0.1
Under drains & sewer	1.0	0.01	0.02		0.1	0.02

^{*} Third order survey

^{**}Right angle prism or transit angles from center line

^{***} Use blue tops for top of base course and red tops for the bottom of base course.

1. Survey frequency requirements

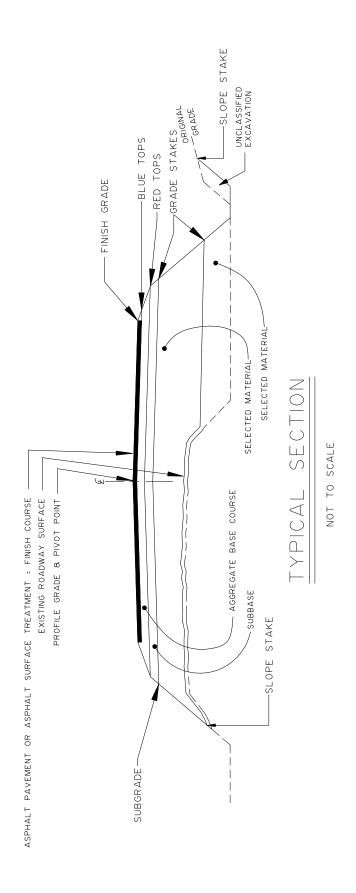
Table 2—Survey frequency requirements (in feet)

	Tangents	Curves	Interchange ramps	Stake each per plan	See special instructions on sample notes
Additional cross sections	*	*	*		
Bench marks					X
Blue tops	100	100**	25		X
Blue tops within 100 feet both sides of railroad track crossings and bridge approaches	25	25	25		X
Bridges				X	X
Center line	100	100**	25		
Clearing	100	100**	25		X
Culverts				X	X
Curb and gutter	25	25	25		
Grade stakes	100	100**	50		
Guardrail	25	25	25		
Manholes, catch basins & inlets				X	
Monuments				X	
Red tops	100	100**	25		X
Riprap	50	50	50		
Signs				X	
Slope stake / cross sections	100	100**	25		X
Under drains and sewers	50	25	25		

^{*} Establish additional cross sections and slope stakes at all breaks in topography and where structures begin and end.

^{**}Curves shall be staked on 50-foot stations if the curve is greater than six degrees.

2. Typical Section Drawing



3. Survey point materials requirements

- ✓ These are minimum requirements; larger sizes may be necessary.
- ✓ Use only stakes with planed sides.

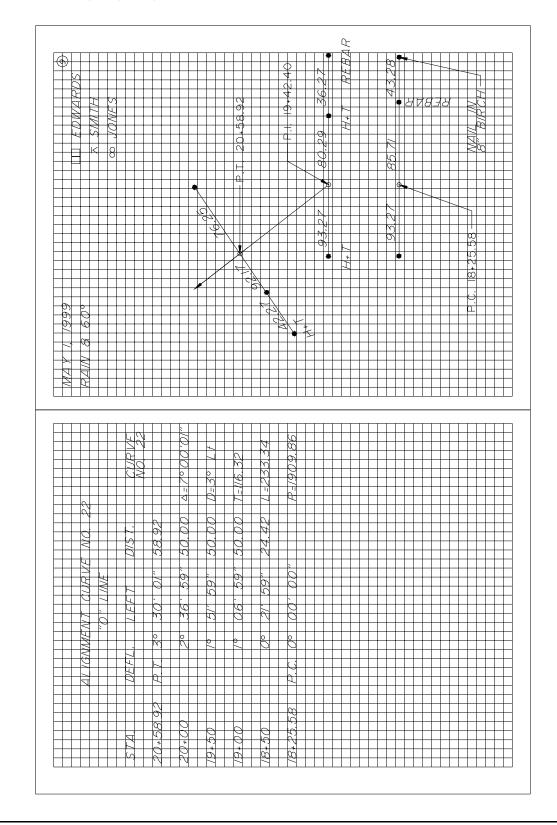
Table 3—Survey point materials requirements

	24" lath or whiskers	2" x 2" x 8" hub	2" x 2" x 12" hub	1" x 2" x 18" stake	1" x 2" x 24" stake	48" lath	Hub and tack	40d nail	60d nail	½" x 24" rebar
Benchmarks									X	
Blue tops	X	X								
Centerline P.C., P.T., P.O.T.			X	X			X *			X*
Centerline reference points			X	X			X *			X *
Centerline station				X				X		
Clearing						X				
Culvert stake			X		X	X				
Culvert stake references			X		X	X				
Curb and gutter			X		X		X			
Guardrail								X		
Major structures			X	X *	X *	X	X *			X *
Red tops	X	X								
Signs						X				
Slope stake					X	X				
Slope stake references			X		X	X				

^{*} Optional depending on conditions, and to be determined by the Project Engineer.

4. Typical alignment notes

- ✓ The Chief of Parties must prepare the alignment book before actual staking.
- ✓ Don't use swing ties for reference points.
- ✓ Use three point right angle ties, two to the right and one left, or vice versa.
- ✓ Reference P.C., P.I., P.T., and P.O.T.



5. Typical clearing notes

- ✓ Exclude areas not needing clearing.✓ Draw a diagram as required to show unusual or confusing areas.

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				CL.RT.	215'	200,	216'	192,	200,				
1999		EAR			+12,								
406. 6, 1999		80°± CLEAR	CALM	CA TCH	203'	188,	204'	180,	188,				
S GRUBBING -				CATCH	137'	152'	147,	155'	167'				
CLEARING &					+12,								
+ CLEA				CL.LT.	149,	164,	159'	167'	179,				
				S7A.	5+50	00+9	05+9	7+00	7+50				

6. Typical level notes

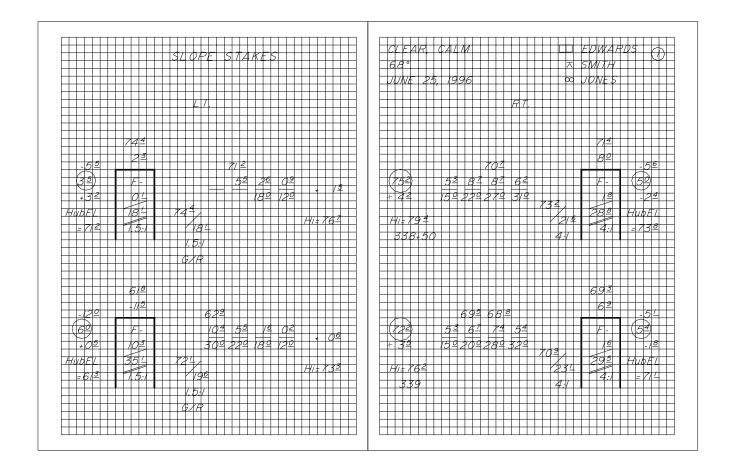
- ✓ Balance back sights and foresights.
- ✓ Establish all benchmarks and take the centerline profile before doing any staking involving elevations.
- ✓ Don't set benchmarks in utility poles.
- ✓ Don't use side shots on benchmarks.
- ✓ Use the turn through method when establishing benchmarks.
- ✓ Re-check benchmarks after each major freeze/thaw cycle and/or any environmental event that may change the benchmark elevation.
- ✓ Do not use double rodding.
- ✓ Run separate level loops between all benchmarks
- ✓ Set benchmarks in trees of at least six-inch diameter, unless approved by the Project Engineer.

- ✓ Correct errors in benchmark elevations so they will not affect the elevations of succeeding benchmarks.
- ✓ Consult with the Project Engineer before placing benchmarks in areas of permafrost or other unstable ground.
- ✓ Establish benchmarks at intervals and locations consistent with good engineering practice, and generally not more than 1000 feet.
- ✓ Completely describe benchmarks when establishing or re-establishing their elevation. Give centerline stationing, offset, benchmark projection, and observable benchmark characteristics. When checking into or out of benchmarks, note the book and page number that contains the most recent elevation establishment for that benchmark.
- ✓ Write the station on the top twelve inches facing centerline, with numerals a minimum of one inch in height.

					111411 111 1	_				
STA.	BS+	HI	FS-	ELEV.	45°± CLE WARM CA	AR LM			⊼ Ш	Ø EDWARDS
					WILD 413		3-2	3-90		SMITH
TD11 "11										
TBM #1 6+72	97			161.309		Mail in	base o	f 12" C	nruco	
07/2				101.309		17011 111	85' 10	7 12 3 7 1 T	6+72	
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6+00			1.95	163.24						
6+25			2.32	162.87						
6+50			2.96	162.23						
<i>T.P.</i>			3.246	161.940						
	1.103	163.043								
6+75			2.31	160.73						
7+00			2.56	160.48						
T.P.			2.823	160.220						
	2.332	162.552				Nail in	base d	of 18" s	stump	
TBM #1	02		1.143	161.409		60' 4		7+21		161.413

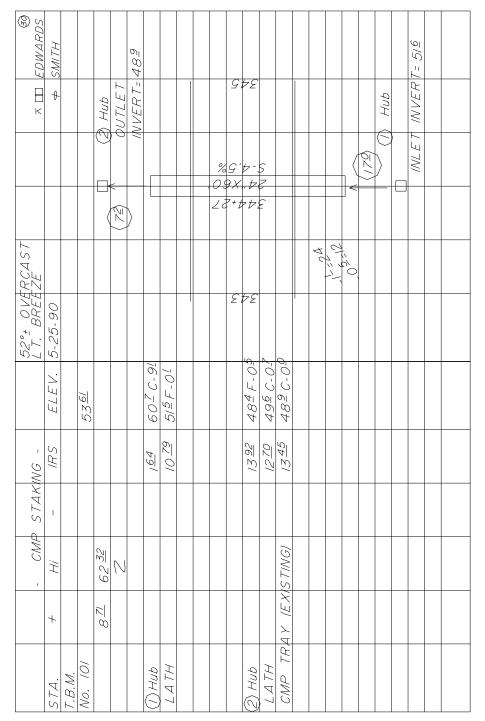
7. Typical slope stake notes

- ✓ Enter the station, elevations, shoulder distance or ditch distances, and slope in the slope stake book before staking begins.
- ✓ In areas where slides or overbreak are anticipated, extend the sections beyond the construction limits.
- ✓ Slope-stake each section that is cross-sectioned.
- ✓ Final re-cross sections are required where there are overbreaks, undercuts, etc. Re-cross section book and page numbers shall be noted on the original cross-section and slope staking page for the relevant stations.
- ✓ Use a hand level only for one turn up or down from the instrument.
- ✓ Clearly note hand level turns.
- ✓ Use a reference point that is 10-20 feet beyond the slope stake.
- ✓ The reference point must show the cut or fill to the slope stake and must include the slope stake information.
- ✓ Slope stake all abrupt changes in typical sections.
- ✓ Position all laths to face centerline.
- ✓ Include at least the following information on the stake: (1) where to begin the cut or fill (2) the slope ratio (3) the depth of cut or height of fill and (4) the station.

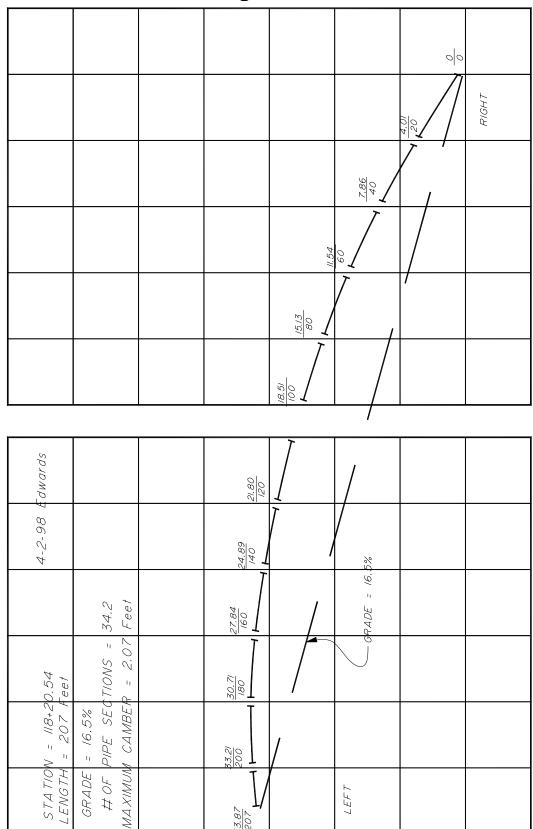


8. Typical culvert notes

- ✓ Show at least the following information on culvert stakes
 - station
 - size
 - length
 - type of pipe (e.g., 24" x 80' CMP)
- cut or fill from top of hub to inlet & outlet
- skew angle
- horizontal distance from hub to end of pipe
- gradient of pipe
- drop of pipe
- ✓ Ensure that all culverts have a minimum camber equal to 1% of the length of the pipe, unless the Project Engineer directs otherwise.
- ✓ Develop a culvert camber diagram showing each section of pipe and its elevation and offset.



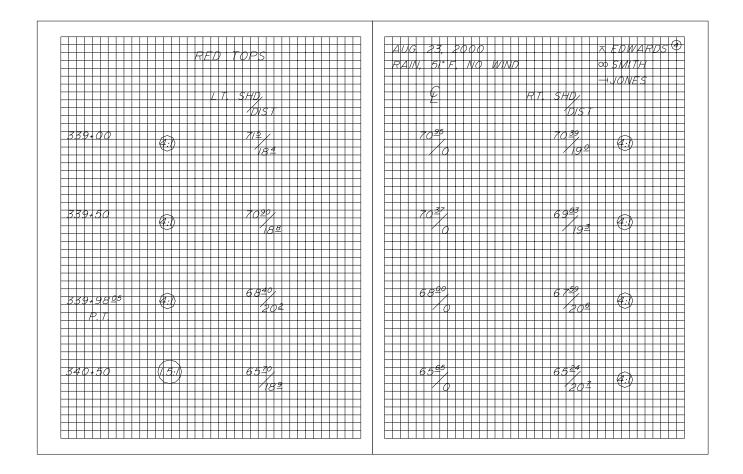
9. Typical culvert camber diagram



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10. Typical blue or red tops and grade stake notes

- ✓ Place blue and red tops at each break in typical section and on centerline.
- ✓ Use blue tops for top of base course.
- ✓ Use red tops for the bottom of the base course.
- ✓ Evenly space red/blue tops at and between crown section break points with a maximum spacing of 25 feet between red/blue tops.
- ✓ Establish horizontal control from centerline references and vertical control from benchmarks.
- ✓ Place blue tops at the same interval as slope stakes.
- ✓ Stake all curve transitions.



MATERIALS SAMPLING AND TESTING FREQUENCY Kenai Municipal Airport 2021 Improved Airfield Drainage

Table 1 – Material Sampling and Testing Frequency

Material	Type of Sample	Performed By	Type of Test	Minimum Frequency
		Contractor	Standard Density	1 per source and as required by changes in material
	Quality Control		Field Density	1 per 200 LF of trench per lift. Minimum of 1 per lift per day (2)
Backfill			Gradation, P.I., Deleterious (visual)	1 per source and as required by changes in material
			Standard Density	1 per source and as required by changes in material
	Acceptance	Owner	Field Density	1 daily
			Gradation, P.I., Deleterious (visual)	1 per source and as required by changes in material
Topsoil	Quality Control	Contractor	Organic Content, Gradation, pH	1 per source prior to use or as required by change in material
·	Acceptance	Owner	Gradation	1 per 15,000 SY
		Contractor	Standard Density	1 per source and as required by changes in material
	Quality Control		Field Density	1 per 100 LF of pipe installed same day. (3)
Bedding for Storm Drain Pipe			Gradation, P.I., Deleterious (Visual)	1 per source and as required by changes in material
		Owner	Standard Density	1 per source and as required by changes in material
			Field Density	1 per 400 LF of pipe.
			Gradation, P.I., Deleterious (Visual)	1 per source and as required by changes in material

Notes:

- Size of sample for gradation determined by nominal maximum particle size. See WAQTC FOP for AASHTO T 27 and T 11 for minimum sample size. Size of samples for Standard Densities should be four times the size required for gradation testing.
- 2. One density per structure (manhole).
- 3. One density per structure (manhole) with a minimum of one density per specified length of pipe installed same day and same manner. Take pipe densities within 18 inches of the outside diameter of the pipe.
- 4. Run Plasticity Index (P.I.) tests on the first 5 samples at the start of production from any source. If these tests indicate the material to be nonplastic, additional tests need only be performed if material changes.
- 5. Sampling frequency may be reduced by the Engineer if results indicate consistency in material properties.
- 6. The in-place field density shall use the Standard Density (Proctor) value as determined by the Owner's quality assurance/acceptance testing.

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APPENDIX D. CONSTRUCTION PROJECT DAILY SAFETY INSPECTION CHECKLIST

The situations identified below are potentially hazardous conditions that may occur during airport construction projects. Safety area encroachments, unauthorized and improper ground vehicle operations, and unmarked or uncovered holes and trenches near aircraft operating surfaces pose the most prevalent threats to airport operational safety during airport construction projects. The list below is one tool that the airport operator or contractor may use to aid in identifying and correcting potentially hazardous conditions. It should be customized as appropriate for each project including information such as the date, time and name of the person conducting the inspection.

Table D-1. Potentially Hazardous Conditions

Item	Action Required (Describe)	No Action Required (Check)
Excavation adjacent to runways, taxiways, and aprons improperly backfilled.		
Mounds of earth, construction materials, temporary structures, and other obstacles near any open runway, taxiway, or taxi lane; in the related Object Free area and aircraft approach or departure areas/zones; or obstructing any sign or marking.		
Runway resurfacing projects resulting in lips exceeding 3 inch (7.6 cm) from pavement edges and ends.		
Heavy equipment (stationary or mobile) operating or idle near AOA, in runway approaches and departures areas, or in OFZ.		
Equipment or material near NAVAIDs that may degrade or impair radiated signals and/or the monitoring of navigation and visual aids. Unauthorized or improper vehicle operations in localizer or glide slope critical areas, resulting in electronic interference and/or facility shutdown.		
Tall and especially relatively low visibility units (that is, equipment with slim profiles) — cranes, drills, and similar objects — located in critical areas, such as OFZ and		

Item	Action Required (Describe)	No Action Required (Check)
approach zones.		
Improperly positioned or malfunctioning lights or unlighted airport hazards, such as holes or excavations, on any apron, open taxiway, or open taxi lane or in a related safety, approach, or departure area.		
Obstacles, loose pavement, trash, and other debris on or near AOA. Construction debris (gravel, sand, mud, paving materials) on airport pavements may result in aircraft propeller, turbine engine, or tire damage. Also, loose materials may blow about, potentially causing personal injury or equipment damage.		
Inappropriate or poorly maintained fencing during construction intended to deter human and animal intrusions into the AOA. Fencing and other markings that are inadequate to separate construction areas from open AOA create aviation hazards.		
Improper or inadequate marking or lighting of runways (especially thresholds that have been displaced or runways that have been closed) and taxiways that could cause pilot confusion and provide a potential for a runway incursion. Inadequate or improper methods of marking, barricading, and lighting of temporarily closed portions of AOA create aviation hazards.		
Wildlife attractants — such as trash (food scraps not collected from construction personnel activity), grass seeds, tall grass, or standing water — on or near airports.		
Obliterated or faded temporary markings on active operational areas.		
Misleading or malfunctioning obstruction lights. Unlighted or unmarked obstructions in the approach to any open runway pose aviation hazards.		

Item	Action Required (Describe)	No Action Required (Check)
Failure to issue, update, or cancel NOTAMs about airport or runway closures or other construction related airport conditions.		
Failure to mark and identify utilities or power cables. Damage to utilities and power cables during construction activity can result in the loss of runway / taxiway lighting; loss of navigation, visual, or approach aids; disruption of weather reporting services; and/or loss of communications.		
Restrictions on ARFF access from fire stations to the runway / taxiway system or airport buildings.		
Lack of radio communications with construction vehicles in airport movement areas.		
Objects, regardless of whether they are marked or flagged, or activities anywhere on or near an airport that could be distracting, confusing, or alarming to pilots during aircraft operations.		
Water, snow, dirt, debris, or other contaminants that temporarily obscure or derogate the visibility of runway/taxiway marking, lighting, and pavement edges. Any condition or factor that obscures or diminishes the visibility of areas under construction.		
Spillage from vehicles (gasoline, diesel fuel, oil) on active pavement areas, such as runways, taxiways, aprons, and airport roadways.		
Failure to maintain drainage system integrity during construction (for example, no temporary drainage provided when working on a drainage system).		

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Item	Action Required (Describe)	No Action Required (Check)
Failure to provide for proper electrical lockout and tagging procedures. At larger airports with multiple maintenance shifts/workers, construction contractors should make provisions for coordinating work on circuits.		
Failure to control dust. Consider limiting the amount of area from which the contractor is allowed to strip turf.		
Exposed wiring that creates an electrocution or fire ignition hazard. Identify and secure wiring, and place it in conduit or bury it.		
Site burning, which can cause possible obscuration.		
Construction work taking place outside of designated work areas and out of phase.		

APPENDIX B

CONSTRUCTION DRAWINGS