INVITATION TO BID

Ketchikan Pioneer Home Revised Walkway Renovations JNU 16-22C

Bidders are invited to submit sealed bids, in single copy, to: Contractor to submit a bid to provide all labor, supervision, permits, equipment and materials to remove the existing (field verify) 280'+ plus lineal feet of handrails, sidewalks and ramps in varying widths from 4' to 6'+. All work is to be done in accordance with the plans and specifications associated with this document.

A Pre-Bid walk through is scheduled for <u>May 10th at 2:00 pm</u> at the Facility – Bidders are strongly encouraged to attend due to the complexity of the project

Project related questions or clarifications: Keith Stephens, Project Manager at (907) 465-1872 or keith.stephens@alaska.gov

Bids will be opened publicly at <u>2:00 pm</u> local time <u>May 24, 2016</u> at 240 Main Street-Suite 502 Juneau Alaska 99801

Bids, modifications or withdrawals transmitted by mail must be received no later than 30 minutes prior to the scheduled time of bid opening.

James Woods at 240 Main St., Suite 502 Juneau Alaska 99801 must receive hand-delivered bids, modifications or withdrawals prior to the scheduled time of bid opening.

Faxed bid modifications must be addressed to: DHSS/FMS/Facilities - ATTN: James Woods - Fax number: (907) 465-2607

The Engineer's Estimate: less than \$250,000

The Project completion date: September 30, 2016

Plans and Specifications may be printed by the Bidder from:

 the State of Alaska website (<u>www.state.ak.us</u>) Public Notices Online button, click on the More Public Notices button, Browse Active Public Notice button, then Health & Social Services, and Procurement

OR

• the Bidder may forward the project website location/address information to the print shop of their choice for printing – all associated printing costs are payable by the Bidder

Bidders are responsible for checking this website for addenda. Not acknowledging addenda at the time of bid will deem the Bidder non-responsive.

Issued: April 28, 2016

Ketchikan Pioneer Home Revised Walkway Renovations JNU 16-22C

TABLE OF CONTENTS

BIDDING AND CONTRACT REQUIREMENTS - STATE FUNDED PROJECTS

BIDDING REQUIREMENTS

- 00020 Invitation for Bids Form 06D-7 (7/03)
- 00100 Information to Bidders 06D-3
- 00101 Supplementary Information to Bidders
- 00120 Required Documents, 06D-4 (8/01)
- 00120a Alaska Veterans Preference Affidavit Form 06D-17
- 00310 Proposal and Non-Collusion Affidavit Form 06D-9 (7/03)
- 00311 Alaska Products Preference Worksheet
- 00312 Bid Schedule
- 00410 Bid Security Form 06D-14 (8/01)
- 00420 Bid Modification Form 06D-16 (8/01)
- 00430 Subcontractor List Form 06D-5 (8/01)

CONTRACT FORMS

- 00510 Construction Contract Form 06D-10a (8/01)
- 00610 Performance Bond Form 06D-13 (8/01)
- 00620 Payment Bond Form 06D-12 (8/01)
- 00670 Contractor's Questionnaire Form 06D-8 (8/01)

PROVISIONS OF THE CONTRACT

- 00700 General Conditions of the Construction Contract for Buildings
- 00800 Supplementary General Conditions
- 00830 Laborers' and Mechanics' Minimum Rates of Pay Pamphlet 600, Issue 32 dated 4/1/16
- 00850 Drawing Index

TECHNICAL SPECIFICATIONS

DIVISION 1 - GENERAL REQUIREMENTS

- 01005 Administrative Provisions
- 01010 Summary of Work
- 01020 Intent of Documents
- 01027 Applications for Payment
- 01028 Change Order Procedures
- 01040 Coordination
- 01045 Cutting and Patching
- 01050 Field Engineering
- 01073 Explanations of Drawings & Specifications
- 01090 Referenced Standards
- 01120 Alteration Project Procedures
- 01126 Contractor's Certification of Subcontractors Subcontractor Certification Forms
- 01200 Project Meetings
- 01230 Alternates
- 01300 Submittals
- 01340 Project Data Submittals
- 01400 Quality Control
- 01410 Testing Laboratory Services
- 01500 Construction Facilities and Temporary Controls
- 01541 Facility Keys
- 01600 Material and Equipment
- 01700 Contract Closeout

Ketchikan Pioneer Home Revised Walkway Renovations JNU 16-22C

TABLE OF CONTENTS CONTINUED

DIVISION 2 – SITEWORK 02050 Demolition (Site Preparation) 02200 Earthwork 02221 Trenching, Backfilling & Compacting 02720 Storm Drainage System

DIVISION 3 - CONCRETE 03100 Concrete Form Work 03200 Concrete Reinforcement 03300 Cast in Place Concrete 03313 Portland Cement Concrete Curbs & Sidewalks

DIVISION 4 – MASONRY Not used

DIVISION 5 – METALS 05521 Pipe & Tube Railing

DIVISION 6 - WOOD AND PLASTICS Not used

DIVISION 7 - THERMAL AND MOISTURE CONTROL Not used

DIVISION 8 - DOORS AND WINDOWS Not used

DIVISION 9 - FINISHES Not used

DIVISION 10 - SPECIALTIES Not used

DIVISION 11 - EQUIPMENT Not used

DIVISION 12 - FURNISHINGS Not used

DIVISION 13 - SPECIAL CONSTRUCTION Not used

DIVISION 14 - CONVEYING SYSTEMS Not used

DIVISION 15 - MECHANICAL Not used

DIVISION 16 - ELECTRICAL Not used

DRAWINGS (Bound Separately)

End of Table of Contents



INVITATION TO BID

for Construction Contract

Date April 28, 2016

Ketchikan Pioneer Home Revised Walkway Renovations – JNU 16-22C					
	141 Devont Streat	Project Name	and Number		
Location of Project:	141 Bryant Street K	Xetchikan, AK			
Contracting Officer:	Mike Frawley		a fithe Commission	Einen P. N.	Anna anna an t-Camilana
Issuing Office:	Dept. of Health & So	unded [X]	Federal		lanagement Services
	State Fi		rederal	Ald	
Description of Work: Contractor to submit a bid to provide all labor, supervision, permits, equipment and materials to remove the existing (field verify) 280'+ plus lineal feet of handrails, sidewalks and ramps in varying widths from 4' to 6'+. All work is to be done in accordance with the plans and specifications associated with this document.					
A Pre-Bid walk througl attend due to the compl	n is scheduled for <u>May 1(</u> exity of the project.	<u>0, 2016 at 2:00 pm</u> at	the Facility main	entry. Bidders are s	strongly encouraged to
The Engineer's E	stimate is: Less	than \$250,00	0		
Interim Completion da Bidders are invited performing all work		be shown in the Spe s, in single copy, fo cribed above. Bio	or furnishing al ls will be open		nt, and materials and for <u>00 PM</u> local time, at <u>540</u>
		SUBMISSIO	N OF BIDS		
	G ANY AMENDMENTS (HE FORMS FURNISHEE				D OPENING. BIDS SHALL S FOLLOWS:
Bid for Project: JNU 16-22C KPH Revised W	alkway Renovations	State of Departm Finance	nent of Health a	nd Social Services Services, Facilitie 02 Juneau, AK	
Bids, amendments or withdrawals transmitted by mail must be received in the above specified post office box no later than Seven (7) hours prior to the scheduled time of <u>bid opening</u> . <u>Hand-delivered bids</u> , <u>amendments or withdrawals must be received</u> <u>at 240 Main Street</u> , <u>Suite 502 Juneau</u> , AK 99801 prior to the scheduled time of bid opening. Faxed bid amendments must be addressed to <u>James Woods</u> . Fax number: (907) 465-2607.					
	n the bid schedule shal				ms as well as supplemental ermining the amount of bid

The Department hereby notifies all bidders that it will affirmatively insure that in any contract entered into pursuant to this Invitation, Disadvantaged Business Enterprises (DBEs) will be afforded full opportunity to submit bids and will not be discriminated against on the grounds of race, color, national origin, or sex in consideration for an award.

NOTICE TO BIDDERS

Bidders are hereby notified that data to assist in preparing bids is available as follows: Not applicable

Plans and Specifications may be printed by the Bidder from:

• the State of Alaska website under Public Notices On-line button, click on the More Public Notices button, Browse Active Public Notice button, then Health & Social Services, and Procurement, then click on the project number for documents

OR

• the Bidder may forward the project website location/address information to the print shop of their choice for printing – all associated printing costs are payable by the Bidder

All questions relating to <u>technical aspects</u> of the project should be directed to the following. Bidders requesting assistance in viewing the project must make arrangements at least 48 hours in advance with:

Keith Stephens, Project Manager

Fax: (907) 465-2607 Phone: (907) 465-1872 Email: keith.stephens@alaska.gov

All questions concerning **bidding procedures** should be directed to:

ATTN: James Woods DHSS/Division of Finance & Management Services, Facilities 240 Main Street-Suite 502 Juneau, AK 99801 Phone: (907) 465-1871 james.woods@alaska.gov

Other Information:

<u>Alaska Veterans Preference</u>

- To qualify for the Veterans Preference (per AS 36.30.175), the bidder must:
 - 1. Qualify for the Alaska Bidder's Preference
 - 2. Add value by actually performing the services or have prior experience in selling the supplies
 - 3. Qualify as an Alaska Veteran & Complete/sign Alaska Veterans Affidavit (06D-17, dated 4/12)
 - 4. The value of the preference cannot exceed \$5,000.

Bidders are responsible for checking the State of Alaska Online Public Notices website for addenda. Not acknowledging addenda at the time of bid will deem the Bidder non-responsive.

We do not maintain a Bidders list; however, we do notify The Plans Room and the AGC Plans Room when a formal bid is advertised. You may contact them for any bidder or subcontractor lists they may have

- The Plans Room in Anchorage (907) 563-2029
- The Plans Room in Fairbanks (907) 452-1809
- AGC of Alaska Plans Room (907) 561-5354)

INFORMATION TO BIDDERS

The Department is concerned over the manner in which bids are submitted. Bidders are requested to study and follow the bid assembly instructions as to the method and form for submitting bids so there will be no reason to reject a bid.

EXAMINATION OF CONTRACT REQUIREMENTS

Bidders are expected to examine carefully the plans, specifications and all other documents incorporated in the contract to determine the requirements thereof before preparing bids.

Any explanation desired by bidders regarding the meaning or interpretation of drawings and specifications must be requested in writing and with sufficient time allowed for a reply to reach them before the submission of their bids. Oral explanations or instructions given before the award of the contract will not be binding. Any interpretation made will be in the form of an addendum to the specifications or drawings and will be furnished to all bidders and its receipt by the bidder shall be acknowledged.

CONDITIONS AT SITE OF WORK

Bidders are expected to visit the site to ascertain pertinent local conditions such as the location, accessibility and character of the site, labor conditions, the character and extent of the existing work within or adjacent thereto, and any other work being performed thereon.

PREPARATION OF BIDS

- (a) Bids shall be submitted on the forms furnished, and must be manually signed in ink. If erasures or other changes appear on the forms, each such erasure or change must be initialed by the person signing the proposal.
- (b) The bid schedule will provide for quotation of a price or prices for one or more pay items which may include unit price or lump sum items and alternative, optional or supplemental price schedules or a combination thereof which will result in a total bid amount for the proposed construction.

Where required on the bid form, bidders must quote on all items and THEY ARE WARNED that failure to do so will disqualify them. When quotations on all items are not required, bidders should insert the words "no bid" in the space provided for any item not requiring a quotation and for which no quotation is made.

(c) The bidder shall specify the price or prices bid in figures. On unit price contracts the bidder shall also show the products of the respective unit prices and quantities written in figures in the column provided for the purpose and the total amount of the proposal obtained by adding the amounts of the several items. All the figures shall be in ink or typed.

- (d) Neither conditional nor alternative bids will be considered unless called for.
- (e) Unless specifically called for, telegraphic or telefacsimile bids will not be considered.
 - (f) Bid Schedule form should be enclosed in a separate sealed envelope and enclosed with all other bidding forms required at the opening.

BID SECURITY

All bids shall be accompanied by a bid security in the form of an acceptable Bid Bond (Form 06D-14), or a certified check, cashier's check or money order made payable to the State of Alaska. The amount of the bid security is specified on the Invitation to Bid.

Bid Bonds must be accompanied by a legible Power of Attorney.

If the bidder fails to furnish an acceptable bid security with the bid, the bid shall be rejected as nonresponsive. Telegraphic notification of execution of Bid Bond does not meet the requirement of bid security accompanying the bid. An individual surety will not be accepted as a bid security.

The bid securities of the two lowest bidders will be held by the Department until the Contract has been executed, after which such bid securities will be returned. All other bid securities will be returned as soon as practicable. If all bids are rejected, all bid securities will be returned as soon as practicable.

BIDDERS QUALIFICATIONS

Before a bid is considered for award, the bidder may be requested by the Department to submit a statement of facts, in detail, as to his previous experience in performing comparable work, his business and technical organization, financial resources, and plant available to be used in performing the contemplated work.

SUBMISSION OF BIDS

Bids must be submitted as directed on the Invitation for Bids. Do not include in the envelope any bids for other work.

ADDENDA REQUIREMENTS

The bid documents provide for acknowledgement individually of all addenda to the drawings and/or specifications on the signature page of the Proposal. All addenda shall be acknowledged on the Proposal or by telegram prior to the scheduled time of bid opening. If no addenda are received by the bidder, the word "None" should be shown as specified.

Every effort will be made by the Department to insure that Contractors receive all addenda when issued. Addenda will be issued to the individual or company to whom bidding documents were issued. Addenda may be issued by any reasonable method such as hand delivery, mail, telefacsimile, telegraph, email, internet download, courier and in special circumstances by phone. Addenda will be issued to the address, telefacsimile number or phone number as stated on the planholder's list unless picked up in person or included with the bid documents. It is the bidder's responsibility to insure that he has received all addenda affecting the Invitation for Bids. No claim or protest will be allowed based on the bidder's allegation that he did not receive all of the addenda

for an Invitation for Bids. The Department is not responsible for issuing addenda to non-registered bidders.

WITHDRAWAL OR REVISION OF BIDS

A bidder may withdraw or revise a bid after it has been deposited with the Department, provided that the request for such withdrawal or revision is received by the designated office, in writing, by telegram, or by telefacsimile, before the time set for opening of bids.

Telegraphic or telefacsimile modifications shall include both the modification of the unit bid price and the total modification of each item modified, but shall not reveal the amount of the total original or revised bids. Form 06D-16 shall be used to submit such modifications.

RECEIPT AND OPENING OF BIDS

- (a) All bids, including any amendment or withdrawal must be received by the Department prior to the scheduled time of bid opening. Any bid, amendment, or withdrawal that has not been actually received by the Department prior to the time of the scheduled bid opening will not be considered.
- (b) No responsibility will be attached to any officer or employee of the Department for the premature opening of, or failure to open, a bid improperly addressed or identified.
- (c) The Department reserves the right to waive any technicality in bids received when such waiver is in the interest of the State.

BIDDERS PRESENT

At the time fixed for bid opening, bids will be publicly opened and read for the information of bidders and others properly interested, who may be present either in person or by representative. The amount of the bid and the name of the bidder shall be compiled and distributed as soon as possible after bid opening. Bids are not open for public inspection until after the Notice of Intent to Award is issued.

BIDDERS INTERESTED IN MORE THAN ONE BID

If more than one bid is offered by any one party, by or in the name of his or their clerk or partner, all such bids will be rejected. A party who has quoted prices to a bidder is not thereby disqualified from quoting prices to other bidders or from submitting a bid directly for the work.

REJECTION OF BIDS

The Department reserves the right to reject any and all bids when such rejection is in the best interest of the State; to reject the bid of a bidder who has previously failed to perform properly, or complete on time, contracts of a similar nature; to reject the bid of a bidder who is not, in the opinion of the Contracting Officer, in a position to perform the contract; and to reject a bid as non-responsive where the bidder fails to furnish the required documents, fails to complete required documents in the manner directed, or makes unauthorized alterations to the bid documents.

AWARD OF CONTRACT

- (a) The letter of award, if the contract is to be awarded, will be issued to the lowest responsible and responsive bidder as soon as practical and usually within 40 calendar days after opening of proposals.
- (b) The successful bidder will be notified of the Department's intent to award the contract and requested to execute certain documents, including the contract form and bonds.
- (c) The contract will be awarded to the successful bidder following receipt by the Department of all required documents, properly executed, within the time specified in the intent to award. Failure to enter into a contract within the specified time shall be grounds for forfeiture of the bid security and consideration of the second low bidder for award.

END OF SECTION

SUPPLEMENTARY INFORMATION TO BIDDERS

This document modifies or adds to the provisions of Department of Health & Social Services form 06D-3, INFORMATION TO BIDDERS.

Following subparagraph (c) under subject area "PREPARATION OF BIDS", add the following subparagraph:

"(C-1) When provided within the supplements to the bid schedule the Bidder shall specify those Alaska bidder and product preferences applicable to their bid. All entries made by the Bidder and designating applicable preferences must conform to the requirements of AS 36.30 and the instructions on the forms to warrant consideration."

Following subject area "REJECTION OF BIDS", add the following subject area:

"CONSIDERATION OF PROPOSALS

After the Proposals are opened and read, they will be compared on the basis identified on the bid schedule and the apparent low Bidder announced. The apparent low Bidder shall, within 5 working days following identification as the apparent low Bidder, submit a list of all firms with which the prime CONTRACTOR intends to execute subcontracts for the performance of the Contract. The list shall include the name, business address, Alaska business license number and contractor's registration number of each proposed Subcontractor.

Upon confirmation of the contents of the proposal the low Bidder will be identified by the DEPARTMENT by telephone and in writing. If the low Bidder differs from the apparent low Bidder then the requirements for Subcontractor listing, as noted above, shall become effective upon the low Bidder at the time of identification.

If a Bidder fails to list a Subcontractor or lists more than one Subcontractor for the same portion of Work and the value of that Work is in excess of one-half of one percent of the total bid, the Bidder agrees that it shall be considered to have agreed to perform that portion of Work without the use of a Subcontractor and to have represented that the Bidder is qualified to perform the Work.

A Bidder who attempts to circumvent the requirements of this section by listing as a Subcontractor another contractor who, in turn, sublets the majority of the Work required under the Contract, violates this section.

If a Contract is awarded to a Bidder who violates this section, the Bidder agrees that the Contracting Officer may:

- (1) cancel the Contract without any damages accruing to the State; or
- (2) after notice and a hearing, assess a penalty on the Bidder in an amount that does not exceed 10 percent of the value of the Subcontract at issue.

A Bidder may replace a listed Subcontractor who:

- (1) fails to comply with AS 08.18;
- (2) files for bankruptcy or becomes insolvent;
- (3) fails to execute a contract with the Bidder involving performance of the Work for which the Subcontractor was listed and the Bidder acted in good faith;
- (4) fails to obtain bonding;
- (5) fails to obtain insurance acceptable to the State;
- (6) fails to perform the Contract with the Bidder involving Work for which the Subcontractor was listed;
- (7) must be substituted in order for the prime CONTRACTOR to satisfy required State and Federal affirmative action requirements;
- (8) refuses to agree or abide with the bidder's labor agreement; or
- (9) is determined by the Contracting Officer to be non-responsive."

Modify subject area "AWARD OF CONTRACT" as follows:

Subparagraph (a) substitute the word "generally" for the phrase "as soon as practical and"

Subparagraph (b) delete and substitute the following:

"All Bidders will be notified of the DEPARTMENT's intent to Award the Contract and the successful Bidder will be requested to execute certain documents, including the Contract form and bonds."



REQUIRED DOCUMENTS

State Funded Contracts

KETCHIKAN PIONEER HOME REVISED WALKWAY RENOVATIONS - JNU 16-22C

REQUIRED FOR BID. Bids will not be considered if the following documents are not completely filled out and submitted at the time of bidding:

- **1. Bid Form (Form 06D-9)**
- 2. Bid Schedule
- 3. Bid Bond (Form 06D-14)
- 4. Any bid revisions must be submitted by the bidder prior to bid opening on the following form:

Bid Modification (Form 06D-16)

REQUIRED AFTER NOTICE OF APPARENT LOW BIDDER. The apparent low bidder is required to complete and submit the following document within 5 working days after receipt of written notification:

1. Subcontractor List (Form 06D-5)

REQUIRED FOR AWARD. In order to be awarded the contract, the successful bidder must completely fill out and submit the following documents within the time specified in the intent to award letter:

- 1. Contract (Form 06D-10A)
- 2. DD Form 214 or NGB Form 22 (if claiming Alaska Veterans Preference under AS 36.30.175(d))
- 3. Payment Bond (Form 06D-12)
- 4. Performance Bond (Form 06D-13)
- 5. Contractor's Questionnaire (Form 06D-8)
- 6. Contractor's Certification of Subcontractors (Form 05)
- 7. **Certificate of Insurance** (from carrier)
- Dept. of Labor Notice of Work Form HSS/FMS Facilities will file the project with Labor first. Labor will then assign their file number for the project and email the information to both HSS FMS/Facilities and Contractor. Contractor will then file their information with Labor shortly thereafter.



ALASKA VETERAN'S PREFERENCE AFFIDAVIT

In response to the Invitation to Bid for:

Ketchikan Pioneer Home Revised Walkway Renovations – JNU 16-22C

- (a) If a bidder qualifies under AS 36.30.170(b) as an Alaska bidder and is a qualifying entity, a five percent bid preference shall be applied to the bid price (preference may not exceed \$5,000). In this subsection, "qualifying entity" means a:
 - (1) Sole proprietorship owned by an Alaska Veteran;
 - (2) Partnership under AS 32.06 or AS 32.11 if a majority of the members are Alaska Veteran's;
 - (3) Limited Liability Company organized under AS 10.50 if a majority of the individuals are Alaska Veterans.
- (b) To qualify for a preference under this section, a bidder must add value by the bidder itself actually performing, controlling, managing and supervising a significant part of the services provided, or the bidder must have sold supplies of the general nature solicited to other state agencies, governments, or the general public.
- (c) In this section, "Alaska Veteran" means an individual who is a:
 - (1) Resident of this state; and
 - (2) Veteran; means an individual who:

(A) Served in the:

- (i) Armed Forces of the United States, including a reserve unit of the United States armed forces; or
- (ii) Alaska Territorial Guard, the Alaska Army National Guard, the Alaska Air National Guard, or the Alaska Naval Militia; and
- (B) Was separated from the service under a condition that was not dishonorable.

Authorized Signature

Printed Name

Date



BID FORM

For

Ketchikan Pioneer Home Revised Walkway Renovations – JNU 16-22C

Project Name and Number

By

Company Name

Company Address (Street or PO Box, City, State, Zip)

To the CONTRACTING OFFICER, DEPARTMENT OF HEALTH & SOCIAL SERVICES

In compliance with your Invitation for Bids dated______, the Undersigned proposes to furnish and deliver all the materials and do all the work and labor required in the construction of the above-referenced Project, located at or near <u>141 Bryant Street</u> <u>Ketchikan</u>, Alaska, according to the plans and specifications and for the amount and prices named herein as indicated on the Bid Schedule consisting of _____ sheet(s), which is made a part of this Bid.

The Undersigned declares that he has carefully examined the contract requirements and that he has made a personal examination of the site of the work; that he understands that the quantities, where such are specified in the Bid Schedule or on the plans for this project, are approximate only and subject to increase or decrease, and that he is willing to perform increased or decreased quantities of work at unit prices bid under the conditions set forth in the Contract Documents.

The Undersigned hereby agrees to execute the said contract and bonds within fifteen calendar days, or such further time as may be allowed in writing by the Contracting Officer, after receiving notification of the acceptance of this bid, and it is hereby mutually understood and agreed that in case the Undersigned does not, the accompanying bid guarantee shall be forfeited to the State of Alaska, Department of Health & Social Services as liquidated damages, and the said Contracting Officer may proceed to award the contract to others.

The Undersigned agrees to commence the work within 10 calendar days and to complete the work on or by <u>September</u> <u>30, 2016</u>, unless extended in writing by the Contracting Officer.

The Undersigned proposes to furnish Payment Bond in the amount of **50%** and Performance Bond in the amount of **50%** (of the contract), as surety conditioned for the full, complete and faithful performance of this contract.

Image:	
he Undersigned declares, under penalty of perjury under the laws of the United States, that neither horporation of which he is a member, has, either directly or indirectly, entered into any agreement, patherwise taken any action in restraint of free competitive bidding in connection with this bid.	
e Undersigned declares, under penalty of perjury under the laws of the United States, that neither hereoration of which he is a member, has, either directly or indirectly, entered into any agreement, parewise taken any action in restraint of free competitive bidding in connection with this bid.	
e Undersigned declares, under penalty of perjury under the laws of the United States, that neither h poration of which he is a member, has, either directly or indirectly, entered into any agreement, pa erwise taken any action in restraint of free competitive bidding in connection with this bid.	
poration of which he is a member, has, either directly or indirectly, entered into any agreement, perwise taken any action in restraint of free competitive bidding in connection with this bid.	
e Undersigned has read the foregoing proposal and hereby agrees to the conditions sta	articipated in any collusion,
e Undersigned has read the foregoing proposal and hereby agrees to the conditions sta	
	ted therein by affixing
Signature of Authorized Company Representative	
Typed or Printed Name and Title	
Typed of Printed Name and Thie	
Phone Number Fax Number	
Email Address	



ALASKA PRODUCTS PREFERENCE WORKSHEET SMALL PROCUREMENT CONTRACT (CONSTRUCTION RELATED)

(See Instructions on back)

Project Name: KETCHIKAN PIONEER HOME REVISED WALKWAY RENOVATIONS

Project Number: JNU 16-22C

Procurement Agency: <u>FMS Facilities</u> Contractor: _____

Image: section of the section of th	PRODUCT	MANUFACTURER	CLASS & PREFERENCE PERCENTAGE	TOTAL DECLARED VALUE	REDUCTION AMOUNT
Image: set of the					
Image: state in the state in					
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Image: second					

TOTAL

Form SPC-007

INSTRUCTIONS FOR ALASKA PRODUCTS PREFERENCE WORKSHEET

Special Notice: All procurements, except those funded from Federal sources, shall contain Contract provisions for the preference of Alaska products. To be considered for the Alaska Product Preference, each product listed by the Bidder on this worksheet must have current certification from the Alaska Products Preference Program at the time of Bid Opening. A product with expired certification at the bid opening date will not be considered eligible. Products that are not specified for use on the project will not be considered eligible. The Alaska Product Preference Program List of certified products is available online at: http://www.commerce.state.ak.us/ded/dev/prodpref.htm or may be obtained by contacting the local DCED office or writing: Dept. of Commerce & Economic Development, Alaska Products Preference List, P.O. Box 110800, Juneau, Alaska 99811-0800.

BIDDERS INSTRUCTIONS:

- A. General. The contracting Agency may request documentation to support entries made on this form. False presentations may be subject to AS 36.30.687. All Bidder's entries must conform to the requirements covering bid preparations in general. Discrepancies in price extensions shall be resolved by multiplying the declared total value times the preference percentage and adjusting any resulting computation(s) accordingly.
- B. Form Completion BASIC BIDS.
 - (1) Enter project number and name, the words "Basic Bid" and the CONTRACTOR'S name in the heading of each page as provided.
 - (2) The Bidder shall compare those candidate products appearing on the preference listing (see Special Notice comments above) against the requirements of the technical specifications appearing in the contract documents. If the Bidder determines that a candidate product can suitably meet the contract requirements, then that product may be included in the worksheet as follows.
 - (3) For each suitable product submitted under the "Basic Bid" enter:
 - The product name, generic description and its corresponding technical specification section number under the heading "PRODUCT",
 - The company name of the Alaska producer under the heading "Manufacturer", and
 - The product class (I, II, or III) and preference percentage (3, 5, or 7% respectively) under the "CLASS/% heading.
 - (4) For each product appearing on the list and to be utilized by the CONTRACTOR enter:
 - Under the heading "TOTAL DECLARED VALUE" the manufacturer's quoted price of the product, (caution: this value is to be the manufacturer's quoted price at the place of origin and shall not include costs for freight, handling or miscellaneous charges of incorporating the product into the Work,) and
 - The resulting preference i.e. the preference percentage times the total declared value amount under the heading "REDUCTION AMOUNT".
 - (5) Continue for all "suitable" basic bid products. If the listing exceeds one page enter the words "Page # _____ SUB" in front of the word "TOTAL" and on the first line of the following pages enter "SUBTOTAL OF REDUCTION AMOUNT FROM PREVIOUS PAGE".
 - (6) On the final page of the listing enter "BASIC BID PREFERENCE GRAND" immediately before the word "TOTAL".
 - (7) Total the entries in the "REDUCTION AMOUNT" column for each page by commencing at the first entry for that page. If a continuation page exists, ensure that the subtotal from the previous page is computed into the running total. Number pages as appropriate.
 - (8) Compute a Grand Total for the Basic Bid Preference. Enter the amount on the final page of the worksheet. (Note: When solicitations require written bids this amount should also be entered on line "C" of the Basic Bid Schedule.) Submit worksheet(s) with the Bid Schedule.
- C. Form Completion ALTERNATE BIDS.
- (1) Enter project number and name, the words "ALTERNATE BID #___", and CONTRACTOR'S name in the heading of each page as provided.
- (2) On the first entry line enter "ADDITIONAL ALASKA PRODUCTS FOR ALTERNATE BID #___", and repeat procedures 2 through 5 under part B these Bidder's instructions except that references to "Basic Bid" shall be replaced with the words "Alternate Bid #___."
- (3) Following the listing of all additional Alaska products enter the words "ADDITIONAL PRODUCTS PREFERENCE FOR ALTERNATE BID #_____ SUBTOTAL" and enter a subtotal amount for all additional products as listed. Subtotal amount to be determined by adding all additional product entries in the "REDUCTION AMOUNT" column.
- (4) Skip three lines and enter "LESS THE FOLLOWING NON-APPLICABLE ALASKA PRODUCTS:
- (5) Beginning on the next line, enter the product name and manufacturer of each Alaska Product appearing on the "Basic Bid" listing which would be deleted or reduced from the Project should the "Alternate Bid" be selected. Details of entry need only be sufficient to clearly reference the subject product. (i.e. "Pre-hung doors by Alaska Door Co., Anchorage.") Products being reduced shall specify the amount of the reduction. Should no products require deletion enter "None". When a product is listed as a "NON-APPLICABLE ALASKA PRODUCT" for this alternate bid and if under the basic bid the Bidder received a preference on his basic bid as a result of that product, then the applicable entries under the headings "TOTAL DECLARED VALUE" and "REDUCTION AMOUNT" (for each product and from the basic bid listing) shall also be entered into the corresponding headings of this form. Where only a portion of the products has been deleted, the entry (which will differ from those on the basic bid listing) may be "pro-rated" or as otherwise substantiated.
- (6) Following the listing of all non-applicable Alaska products enter the words "NON-APPLICABLE PRODUCTS PREFERENCE FROM BASIC BID _____ SUBTOTAL" and enter a subtotal amount for all non-applicable products listed. Subtotal amount to be determined by adding all non-applicable entries in the "REDUCTION AMOUNT" column.
- (7) At the bottom of the final page enter the words "ALTERNATE BID #____ PREFERENCE GRAND" immediately before the word "TOTAL".
- (8) Compute a Grand Total for the Alternate Bid Preference (for Alternate #___) by subtracting the non-applicable product preference subtotal from the additional product preference subtotal. Enter on the final page. (Note: When solicitations require written bids this amount should also be entered on line "C" of the Alternate Bid Schedule.) Submit separate worksheet(s) with each Alternate Bid.

BID SCHEDULE

Project: Ketchikan Pioneer Home Revised Walkway Renovations – JNU 16-22C

Bidders Please Note: Before preparing this bid schedule, read carefully, "Information to Bidders", 'Supplementary Information to Bidders", and the following:

The Bidder shall insert a fixed price in figures opposite each pay item that appears in the bid schedule to furnish all labor, material, equipment, supervision, and provide all work for each item listed. No price is to be entered or tendered for any item not appearing in the bid schedule. Conditioned bids will be considered non-responsive.

PAY ITEN	A DESCRIPTION OF PAY ITEM	TOTAL BID PRICE, IN FIGURES
1. BASIC B	ID All work described in the Specifications and Construction Documents for the Project # JNU 16-22C	
a.	Lump Sum Total Basic Bid	\$
b.	Alaska Bidder's Preference - (5% of Basic Bid)	\$
с.	Alaska Veterans Preference - 5% of Basic Bid (May not exceed \$5,000)	\$
d.	Alaska Products Preference - (Attach worksheet(s))	\$
e.	Adjusted Basic Bid: $(a - b - c - d)$	\$

Contractor's Name (Printed)

Alaska Contractor's Registration #

Expires

Alaska Business License #

Expires



BID BOND

For

KETCHIKAN PIONEER HOME REVISED WALKWAY RENOVATIONS – JNU 16-22C

Project Name and Number

DATE BOND EXECUTED:

TYPE OF ORGANIZATION:

STATE OF INCORPORATION:

[] Partnership

[] Corporation

[] Individual

[] Joint Venture

PRINCIPAL (Legal name and business address):

CUDETV(IES) (Nome and business address);

SURETY(IES) (Name and business address):				
Α.	В.	С.		
PENAL SUM OF BOND:		DATE OF BID:		

We, the PRINCIPAL and SURETY above named, are held and firmly bound to the State (State of Alaska), in the penal sum of the amount stated above, for the payment of which sum will be made, we bind ourselves and our legal representatives and successors, jointly and severally, by this instrument.

THE CONDITION OF THE FOREGOING OBLIGATION is that the Principal has submitted the accompanying bid in writing, date as shown above, on above-referenced Project in accordance with contract documents filed in the office of the Contracting Officer, and under the Invitation for Bids therefore, and is required to furnish a bond in the amount stated above.

If the Principal's bid is accepted and he is offered the proposed contract for award, and if the Principal fails to enter into the contract, then the obligation to the State created by this bond shall be in full force and effect.

If the Principal enters into the contract, then the foregoing obligation is null and void.

PRINCIPAL

Signature(s)	1.	2.	3.
Name(s) & Title(s) (Typed)	1.	2.	3.
	See Instructions on Re	Corporate Seal	

Surety A	Name of Corporation		State of Incorporation	Liability Limit \$
Signature(s)	1.	2.	I	Corporate
Name(s) & Titles (Typed)	1.	2.		Seal
Surety B	Name of Corporation		State of Incorporation	Liability Limit \$
Signature(s)	1.	2.		Corporate
Name(s) & Titles (Typed)	1.	2.		Seal
Surety C	Name of Corporation		State of Incorporation	Liability Limit \$
Signature(s)	1.	2.		
				Corporate

	which incorporated shall be inserted in the space provided.
3.	Insert the full legal name and business address of the Surety in the space designated. The Surety on the bond may be any corporation or partnership authorized to do business in Alaska as an insurer under AS 21.09. Individual sureties
	will not be accepted.

2.

INSTRUCTIONS

Insert the full legal name and business address of the Principal in the space designated. If the Principal is a partnership or joint venture, the names of all principal parties must be included (e.g., "Smith Construction, Inc. and Jones Contracting, Inc. DBA Smith/Jones Builders, a joint venture"). If the Principal is a corporation, the name of the state in

- 4. The penal amount of the bond may be shown either as an amount (in words and figures) or as a percent of the contract bid price (a not-to-exceed amount may be included).
- 5. The scheduled bid opening date shall be entered in the space marked Date of Bid.

This form shall be used whenever a bid bond is submitted.

- 6. The bond shall be executed by authorized representatives of the Principal and Surety. Corporations executing the bond shall also affix their corporate seal.
- 7. Any person signing in a representative capacity (e.g., an attorney-in-fact) must furnish evidence of authority if that representative is not a member of the firm, partnership, or joint venture, or an officer of the corporation involved.
- 8. The states of incorporation and the limits of liability of each surety shall be indicated in the spaces provided.
- 9. The date that bond is executed must not be later than the bid opening date.

Name(s)

& Titles (Typed)

1.

2.

1.

Seal



BID MODIFICATION

KETCHIKAN PIONEER HOME REVISED WALKWAY RENOVATIONS – JNU 16-22C

Project Name and Number

Modification Number:

Note: All revisions shall be made to the unadjusted bid amount(s).

Changes to the adjusted bid amounts will be computed by the Department.

PAY ITEM NO.	PAY ITEM DESCRIPTION	REVISION TO UNIT BID PRICE +/-	REVISION TO BID AMOUNT +/-
		N/A	

TOTAL REVISION: \$_____

Name of Bidding Firm

Responsible Party Signature

Date

This form may be duplicated if additional pages are needed.



SUBCONTRACTOR LIST

Ketchikan Pioneer Home Revised Walkway Renovations – JNU 16-22C **Project Name and Number**

The apparent low bidder shall complete this form and submit it so as to be received by the Contracting Officer prior to the close of business on the fifth working day after receipt of written notice from the Department.

Failure to submit this form with all required information by the due date will result in the bidder being declared nonresponsive and may result in the forfeiture of the Bid Security.

Scope of work must be clearly defined. If an item of work is to be performed by more than one firm, indicate the portion or percent of work to be done by each.

Check as applicable: All work on the below-referenced project will be accomplished without subcontracts greater than $\frac{1}{2}$ of 1% of the contract amount.

OR

Subcontractor List is as follows:

LIST FIRST TIER SUBCONTRACTORS ONLY

FIRM NAME, ADDRESS, & PHONE No.	AK BUSINESS LICENSE No. & CONTRACTOR'S REGISTRATION No.	SCOPE OF WORK TO BE PERFORMED
CONTINUE SUB	CONTRACTOR INFORMATION	N ON REVERSE

CONTRACTOR INFORMATION ON REVE

For projects with federal-aid funding, I hereby certify Alaska Business Licenses and Contractor's registrations will be valid for all subcontractors prior to award of the subcontract. For projects without federal-aid funding (State funding only), I hereby certify the listed Alaska Business Licenses and Contractor's Registration were valid at the time bids were opened for this project.

Signature of Authorized Company Representative

Title

Company Name

Company Address (Street or PO Box, City, State, Zip)

Date

Phone Number

	AK BUSINESS LICENSE	
FIRM NAME, ADDRESS, & PHONE No.	No. & CONTRACTOR'S REGISTRATION No.	SCOPE OF WORK TO BE PERFORMED



CONSTRUCTION CONTRACT

Ketchikan Pioneer Home Revised Walkway Renovations – JNU 16-22C Project Name and Number

This CONTRACT, between the STATE OF ALASKA, DEPARTMENT OF HEALTH & SOCIAL SERVICES, herein called the Department, acting by and through its Contracting Officer, and

Company Name

Company Address (Street or PO Box, City, State, Zip)

a/an [] Individual [] Partnership [] Joint Venture [] Sole Proprietorship [] Corporation incorporated under the laws of the State of _______, its successors and assigns, herein called the Contractor, is effective the date of the signature of the Contracting Officer on this document.

WITNESSETH: That the Contractor, for and in consideration of the payment or payments herein specified and agreed to by the Department, hereby covenants and agrees to furnish and deliver all the materials and to do and perform all the work and labor required in the construction of the above-referenced project at the prices bid by the Contractor for the respective estimated quantities aggregating approximately the sum of

Dollars

(\$ ______), and such other items as are mentioned in the original Bid, which Bid and prices named, together with the Contract Documents are made a part of this Contract and accepted as such.

It is distinctly understood and agreed that no claim for additional work or materials, done or furnished by the Contractor and not specifically herein provided for, will be allowed by the Department, nor shall the Contractor do any work or furnish any material not covered by this Contract, unless such work is ordered in writing by the Department. In no event shall the Department be liable for any materials furnished or used, or for any work or labor done, unless the materials, work, or labor are required by the Contract or on written order furnished by the Department. Any such work or materials which may be done or furnished by the Contractor without written order first being given shall be at the Contractor's own risk, cost, and expense and the Contractor hereby covenants and agrees to make no claim for compensation for work or materials done or furnished without such written order.

The Contractor further covenants and agrees that all materials shall be furnished and delivered and all labor shall be done and performed, in every respect, to the satisfaction of the Department, <u>on or before September 30, 2016</u>. It is expressly understood and agreed that in case of the failure on the part of the Contractor, for any reason, except with the written consent of the Department, to complete the furnishing and delivery of materials and the doing and performance of the work before the aforesaid date, the Department shall have the right to deduct from any money due or which may become due the Contractor, or if no money shall be due, the Department shall have the right to recover

Four Twenty-two Dollars (**\$422.00**) per day for each calendar day elapsing between the time stipulated for the completion and the actual date of completion in accordance with the terms hereof; such deduction to be made, or sum to be recovered, not as a penalty but as liquidated damages.

The bonds given by the Contractor in the sum of \$ Payment Bond, an Performance Bond, to secure the proper compliance with the terms and provisions of this Contract made a part hereof.	d \$ et, are submitted herewith and
IN WITNESS WHEREOF, the parties hereto have executed this Contract and hereby agree to its terr	ns and conditions.
CONTRACTOR	
Company Name	
Signature of Authorized Company Representative	
Typed or Printed Name and Title	
Date	
	(Corporate Seal)
STATE OF ALASKA DEPARTMENT OF HEALTH & SOCIAL SERVICES	
Signature of Contracting Officer	
Mike Frawley	
Typed or Printed Name	
Date	

. DEPARTMENT O	STATE OF ALASKA OF HEALTH & SOCIAL SERVICES FMS FACILITIES		
SMALL PR	PERFORMANCE BOND SMALL PROCUREMENT CONTRACT (CONSTRUCTION RELATED)		
KNOW ALL MEN BY TH	ESE PRESENTS:		
That of	and lawful money of the United States of America for Alaska, we bind ourselves, our heirs, successors,		
WHEREAS, the said Principal has entered into a written contract with said State of Alaska, on theof A.D., 20, for the construction of KETCHIKAN PIONEER HOME REVISED WALKWAY RENOVATIONS JNU 16-22C , said work to be done according to the terms of said contract.			
Now, THEREFORE, the conditions of the foregoing obligation is such that if the said Principal shall well and truly perform and complete all obligations and work under said contract and if the Principal shall reimburse upon demand of the Department of Transportation and Public Facilities any sums paid him which exceed the final payment determined to be due upon completion of the project, then these presents shall become null and void; otherwise they shall remain in full force and effect.			
IN WITNESS WHEREOF, we have hereunto set our hands and seals at,,,,			
Principal:			
Address:			
	Phone:		
	Contact Name:		
	Ву:		
	By:		
Surety:			
Address:			
	Phone:		
	Contact Name:		
	Ву:		
	Ву:		
The offered bond has been checked for adequacy under the applicable statutes and regulations:			
Procurement Agency Authorized Representative	Date		

INSTRUCTIONS

- 1. This form shall be used whenever a performance bond is required. There shall be no deviation from this form without approval from the Department of Health & Social Services, FMS Facilities (DHSS/FMS Facilities), Facilities Chief Contracts Officer.
- 2. The full legal name, business address, phone number, and point of contact of the Principal and Surety shall be inserted on the face of the form. Where more than a single surety is involved, a separate form shall be executed for each surety.
- 3. The penal amount of the bond, or in the case of more than one surety the amount of obligation, shall be entered in words and in figures.
- 4. Where individual sureties are involved, a completed Affidavit of Individual Surety shall accompany the bond. Such forms are available upon request from the procurement Agency Representative.
- 5. The bond shall be signed by authorized persons. Where such person is signing in a representative capacity (e.g., an attorney-in-fact), but is not a member of the firm, partnership, or joint venture, or an officer of the corporation involved, evidence of authority must be furnished.

se of Ar					
DEP.	STATE OF ALASKA DEPARTMENT OF HEALTH & SOCIAL SERVICES FMS FACILITIES				
Personal and Social Soc	PAYMENT BOND SMALL PROCUREMENT CONTRACT (CONSTRUCTION RELATED)				
KNOW A	LL MEN BY THESE PRESENTS:				
That	of, as Principa, as Surety,, as Surety,, sha in the penal sum of, as Surety,, as Surety,				
Dollars (\$ for the payment whereof, well and truly to be successors, executors, administrators, and a), good and lawful money of the United States of America e paid to the State of Alaska, we bind ourselves, our heirs, assigns, jointly and severally, firmly by these presents.				
WHEREAS, the said Principal has entered into a written contract with said State of Alaska, on the of A.D., 20, for the construction of KETCHIKAN PIONEER HOME REVISED WALKWAY RENOVATIONS, JNU 16-22C said work to be done according to the terms of said contract.					
supplies furnished upon or for the work und and supplies be furnished under the original modifications thereto, then these presents sh and effect.	ome due, all just claims for labor performed and materials and der said contract, whether said labor be performed and said material l contract, any subcontract, or any and all duly authorized nall become null and void; otherwise they shall remain in full force set our hands and seals at A.D., 20				
Principal:					
Address:					
	Phone:				
	Contact Name:				
	By:				
	By:				
Surety:					
Address:					
	Phone:				
	Contact Name:				
	By:				
	By:				
The offered bond has been checked for ade	1 .1 1 11 1 1				
	equacy under the applicable statutes and regulations:				

INSTRUCTIONS

- 1. This form, for the protection of persons supplying labor and material, shall be used whenever a payment bond is required. There shall be no deviation from this form without approval from the Department of Health & Social Services, FMS Facilities (DHSS/FMS Facilities), Facilities Chief Contracts Officer.
- 2. The full legal name, business address, phone number, and point of contact of the Principal and Surety shall be inserted on the face of the form. Where more than a single surety is involved, a separate form shall be executed for each surety.
- 3. The penal amount of the bond, or in the case of more than one surety, the amount of the obligation shall be entered in words and in figures.
- 4. Where individual sureties are involved, a completed Affidavit of Individual Surety shall accompany the bond. Such forms are available upon request from the procurement Agency Representative.
- 5. The bond shall be signed by authorized persons. Where such person is signing in a representative capacity (e.g., an attorney-in-fact), but is not a member of the firm, partnership, or joint venture, or an officer of the corporation involved, evidence of authority must be furnished.



CONTRACTOR'S QUESTIONNAIRE

Ketchikan Pioneer Home Revised Walkway Renovations – JNU 16-22C

Project Name and Number

A. FINANCIAL

Have you ever failed to complete a contract due to insufficient resources?
 No [] Yes If YES, explain:

2. Describe any arrangements you have made to finance this work: _____

B. EQUIPMENT

1. Describe below the equipment you have available and intend to use for this project.

ITEM	QUAN.	MAKE	MODEL	SIZE/ CAPACITY	PRESENT MARKET VALUE
			l	1	

2.	What percent of the total value of this contract do you intend to subcontract?%					
3.	Do you propose to purchase any equipment for use on this project? [] No [] Yes If YES, describe type, quantity, and approximate cost:					
4.	Do you propose to rent any equipment for this work? [] No [] Yes If YES, describe type and quantity:					
5.	Is your bid based on firm offers for all materials necessary for this project? []Yes []No If NO, please explain:					
C. 1.	 EXPERIENCE Have you had previous construction contracts or subcontracts with the State of Alaska? []Yes []No Describe the most recent or current contract, its completion date, and scope of work: 					
- - - 2.		construction projects you have completed, the dates of				
	completion, scope of work, and total contract amount for each project completed in the past 12 months. I hereby certify that the above statements are true and complete.					
Name of Contractor		Name and Title of Person Signing				
Signature		Date				

STATE OF ALASKA DEPARTMENT OF HEALTH & SOCIAL SERVICES DOCUMENT 00700 - ISSUED DECEMBER 2011

GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT FOR BUILDINGS

ARTICLE 1- DEFINITIONS

ARTICLE 2 - AUTHORITIES AND LIMITATIONS

- 2.1 Authorities and Limitations
- 2.2 Evaluations by Contracting Officer
- 2.3 Means and Methods
- 2.4 Visits to Site

ARTICLE 3- CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

- 3.1 Incomplete Contract Documents
- 3.2 Copies of Contract Documents
- 3.3 Scope of Work
- 3.4 Intent of Contract Documents
- 3.5 Discrepancy in Contract Documents
- 3.6 Clarifications and Interpretations
- 3.7 Reuse of Documents

ARTICLE 4 - LANDS AND PHYSICAL CONDITIONS

- 4.1 Availability of Lands
- 4.2 Visit to Site/Place of Business
- 4.3 Explorations and Reports
- 4.4 Utilities
- 4.5 Damaged Utilities
- 4.6 Utilities Not Shown or Indicated
- 4.7 Survey Control

ARTICLE 5 - BONDS AND INSURANCE

- 5.1 Delivery of Bonds
- 5.2 Bonds
- 5.3 Replacement of Bond and Surety
- 5.4 Insurance Requirements
- 5.5 Indemnification

ARTICLE 6- CONTRACTOR'S RESPONSIBILITIES

- 6.1 Supervision of Work
- 6.2 Superintendence by CONTRACTOR
- 6.3 Character of Workers
- 6.4 CONTRACTOR to Furnish
- 6.5 Materials and Equipment
- 6.6 Anticipated Schedules
- 6.7 Finalizing Schedulesi
- 6.8 Adjusting Schedules
- 6.9 Substitutes or "Or-Equal" Items
- 6.10 Substitute Means and Methods
- 6.11 Evaluation of Substitution
- 6.12 Dividing the Work
- 6.13 Subcontractors
- 6.14 Use of Premises
- 6.15 Structural Loading
- 6.16 Record Documents

- 6.17 Safety and Protection
- 6.18 Safety Representative
- 6.19 Emergencies
- 6.20 Shop Drawings and Samples
- 6.21 Shop Drawing and Sample Review
- '6.22 Maintenance During Construction
- 6.23 Continuing the Work
- 6.24 Consent to Assignment
- 6.25 Use of Explosives
- 6.26 CONTRACTOR's Records
- 6.27 Load Restrictions

ARTICLE 7 - LAWS AND REGULATIONS

- 7.1 Laws to be Observed
- 7.2 Permits, Licenses, and Taxes
- 7.3 Patented Devices, Materials and Processes
- 7.4 Compliance of Specifications and Drawings
- 7.5 Accident Prevention
- 7.6 Sanitary Provisions
- 7.7 Business Registration
- 7.8 Professional Registration and Certification
- 7.9 Local Building Codes
- 7.10 Air Quality Control
- 7.11 Archaeological or Paleontological Discoveries
- 7.12 Applicable Alaska Preferences
- 7.13 Wages and Hours of Labor
- 7.14 Overtime Work Hours and Compensation

ARTICLE 8- OTHER WORK

- 8.1 Related Work at Site
- 8.2 Access, Cutting, and Patching
- 8.3 Defective Work by Others
- 8.4 Coordination

ARTICLE 9- CHANGES

- 9.1 DEPARTMENT's Right to Change
- 9.2 Authorization of Changes within the General Scope
- 9.3 Directive
- 9.4 Change Order
- 9.5 Shop Drawing Variations
- 9.6 Changes Outside the General Scope; Supplemental Agreement
- 9.7 Unauthorized Work
- 9.8 Notification of Surety
- 9.9 Differing Site Conditions
- 9.10 Interim Work Authorization

ARTICLE 10- CONTRACT PRICE; COMPUTATION AND CHANGE

- 10.1 Contract Price
- 10.2 Claim for Price Change
- 10.3 Change Order Price Determination
- 10.4 Cost of the Work
- 10.5 Excluded Costs
- 10.6 CONTRACTOR's Fee
- 10.7 Cost Breakdown
- 10.8 Cash Allowances

- 10.9 Unit Price Work
- 10.10 Determinations for Unit Prices

ARTICLE 11- CONTRACT TIME, COMPUTATION AND CHANGE

- 11.1 Commencement of Contract Time; Notice to Proceed
- 11.2 Starting the Work
- 11.3 Computation of Contract Time
- 11.4 Time Change
- 11.5 Extension Due to Delays
- 11.6 Essence of Contract
- 11.7 Reasonable Completion Time
- 11.8 Delay Damages

ARTICLE 12 - QUALITY ASSURANCE

- 12.1 Warranty and Guaranty
- 12.2 Access to Work
- 12.3 Tests and Inspections
- 12.4 Uncovering Work
- 12.5 DEPARTMENT May Stop the Work
- 12.6 Correction or Removal of Defective Work
- 12.7 One Year Correction Period
- 12.8 Acceptance of Defective Work
- 12.9 DEPARTMENT may Correct Defective Work

ARTICLE 13- PAYMENTS TO CONTRACTOR AND COMPLETION

- 13.1 Schedule of Values
- 13.2 Preliminary Payments
- 13.3 Application for Progress Payment
- 13.4 Review of Applications for Progress Payments
- 13.5 Stored Materials and Equipment
- 13.6 CONTRACTOR's Warranty of Title
- 13.7 Withholding of Payments
- 13.8 Retainage
- 13.9 Request for Release of funds
- 13.10 Substantial Completion
- 13.11 Access Following Substantial Completion
- 13.12 Final Inspection
- 13.13 Final Completion and Application for Payment
- 13.14 Final Payment
- 13.15 Final Acceptance
- 13.16 CONTRACTOR's Continuing Obligation
- 13.17 Waiver of Claims by CONTRACTOR
- 13.18 No Waiver of Legal Rights

ARTICLE 14- SUSPENSION OF WORK AND TERMINATION

- 14.1 DEPARTMENT May Suspend Work
- 14.2 Default of Contract
- 14.3 Rights or Remedies
- 14.4 Convenience Termination

ARTICLE 15- CLAIMS AND DISPUTES

- 15.1 Notification
- 15.2 Presenting the Claim
- 15.3 Claim Validity, Additional Information & DEPARTMENT's Action
- 15.4 Contracting Officer's Decision
- 15.5 Fraud and Misrepresentation in Making Claims

ACKNOWLEDGMENT

"The State of Alaska, General Conditions of the Construction Contract for Buildings" is based on the "Standard General Conditions of the Construction Contract" as published by the National Society of Professional Engineers (document number 1910-8, 1983 edition) on behalf of the Engineers Joint Construction Documents Committee. Portions of the NSPE General Conditions are reprinted herein by the express permission of NSPE. Modifications to the NSPE text are made to provide for State laws, regulations, and established procedures.

The granting of permission by NSPE to allow the State of Alaska to preprint portions of the NSPE document 1910-8, 1983 edition does not constitute approval of the State of Alaska General Conditions of the Construction Contract for Buildings.
ARTICLE 1 - DEFINITIONS

Wherever used in the Contract Documents the following terms, or pronouns in place of them, are used, the intent and meaning, unless a different intent or meaning is clearly indicated, shall be interpreted as set forth below.

The titles and headings of the articles, sections, and subsections herein are intended for convenience of reference.

Terms not defined below shall have their ordinary accepted meanings within the context which they are used. Words which have a well-known technical or trade meaning when used to describe work, materials or equipment shall be interpreted in accordance with such meaning. Words defined in Article 1 are to be interpreted as defined.

Addenda - All clarifications, corrections, or changes issued graphically or in writing by the DEPARTMENT after the Advertisement but prior to the opening of Proposals.

Advertisement - The public announcement, as required by law, inviting bids for Work to be performed or materials to be furnished.

Application for Payment - The form provided by the DEPARTMENT which is to be used by the CONTRACTOR in requesting progress or final payments and which is to include such supporting documentation as is required by the Contract Documents.

Approved or Approval - 'Approved' or 'Approval' as used in this contract document shall mean that the Department has received a document, form or submittal from the contractor and that the Department has taken "No exceptions" to the item submitted. Unless the context clearly indicates otherwise, approved or approval shall not mean that the Department approves of the methods or means, or that the item or form submitted meets the requirements of the contract or constitutes acceptance of the Contractor's work. Where approved or approval means acceptance, then such approval must be set forth in writing and signed by the contracting officer or his designee.

Architect - Where used in the contract documents, "ARCHITECT" shall mean the DEPARTMENT'S ENGINEER.

Architect/Engineer - Where used in the contract documents, "ARCHITECT/ENGINEER" shall mean the DEPARTMENT'S ENGINEER.

A.S - Initials which stand for Alaska Statute.

Award - The acceptance, by the DEPARTMENT, of the successful bid.

Bid Bond - A type of Proposal Guaranty.

Bidder - Any individual, firm, corporation or any acceptable combination thereof, or joint venture submitting a bid for the advertised Work.

Calendar Day - Every day shown on the calendar, beginning and ending at midnight.

Change Order - A written order by the DEPARTMENT directing changes to the Contract Documents, within their general scope.

Consultant - The person, firm, or corporation retained directly by the DEPARTMENT to prepare Contract Documents, perform construction administration services, or other Project related services.

Contingent Sum Work Item - When the bid schedule contains a Contingent Sum Work Item, the Work covered shall be performed only upon the written Directive of the Project Manager. Payment shall be made as provided in the Directive.

Contract - The written agreement between the DEPARTMENT and the CONTRACTOR setting forth the obligations of the parties and covering the Work to be performed, all as required by the Contract Documents.

Contract Documents - The Contract form, Addenda, the bidding requirements and CONTRACTOR's bid (including all appropriate bid tender forms), the bonds, the Conditions of the Contract and all other Contract requirements, the Specifications, and the Drawings furnished by the DEPARTMENT to the CONTRACTOR, together with all Change Orders and documents approved by the Contracting Officer, for inclusion, modifications and supplements issued on or after the Effective Date of the Contract.

Contracting Officer - The person authorized by the Commissioner to enter into and administer the Contract on behalf of the DEPARTMENT. He has authority to make findings, determinations and decisions with respect to the Contract and, when necessary, to modify or terminate the Contract. The Contracting Officer is identified on the construction Contract.

CONTRACTOR - The individual, firm, corporation or any acceptable combination thereof, contracting with the DEPARTMENT for performance of the Work.

Contract Price - The total moneys payable by the DEPARTMENT to the CONTRACTOR under the terms of the Contract Documents.

Contract Time - The number of Calendar Days following issuance of Notice-to-Proceed in which the project shall be rendered Substantially Complete, or if specified as a calendar date, the Substantial Completion date specified in the Contract Documents

Controlling Item - Any feature of the Work on the critical path of a network schedule.

Defective - Work that is unsatisfactory, faulty or deficient, or does not conform to the Contract Documents.

DEPARTMENT - The Alaska Department of Transportation and Public Facilities. References to "Owner", "State", "Contracting Agency", mean the DEPARTMENT.

Directive - A written communication to the CONTRACTOR from the Contracting Officer interpreting or enforcing a Contract requirement or ordering commencement of an item of Work.

Drawings - The Drawings which show the character and scope of the Work to be performed and which have been furnished by the DEPARTMENT or the DEPARTMENT's Consultant and are by reference made a part of the Contract Documents.

ENGINEER - The DEPARTMENT'S authorized representative of the Contracting Officer, as defined in the DEPARTMENT'S *delegation of authority letter* to be issued after notice-to-proceed, who is responsible for administration of the contract.

Equipment - All machinery together with the necessary supplies for upkeep and maintenance, and also tools and apparatus necessary for the proper construction and acceptable completion of the work.

Final Acceptance - The DEPARTMENT's written acceptance of the Work following Final Completion and the performance of all Contract requirements by the CONTRACTOR.

Final Completion - The Project (or specified part thereof) has progressed to the point that all required Work is complete as determined by the Contracting Officer.

Furnish - To procure, transport, and deliver to the project site materials, labor, or equipment, for installation or use on the project.

General Requirements - Sections of Division 1 of the Specifications which contain administrative and procedural requirements as well as requirements for temporary facilities which apply to Specification Divisions 2 through 16.

Holidays - In the State of Alaska, Legal Holidays occur on:

- i. New Years Day January l
- 2. Martin Luther King's Birthday Third Monday in January
- 3. President's Day Third Monday in February
- 4. Seward's Day Last Monday in March
- 5. Memorial Day Last Monday in May
- 6. Independence Day July 4
- 7. Labor Day First Monday in September
- 8. Alaska Day October 18
- 9. Veteran's Day November II
- 10. Thanksgiving Day Fourth Thursday in November
- II. Christmas Day December 25
- 12. Every Sunday

13. Every day designated by public proclamation by the President of the United States or the Governor of the State as a legal Holiday.

If any Holiday listed above falls on a Saturday, Saturday and the preceding Friday are both legal Holidays. If the Holiday should fall on a Sunday, except (12) above, Sunday and the following Monday are both legal Holidays. See Title 44, Alaska Statutes.

Inspector - The Engineer's authorized representative assigned to make detailed observations relating to contract performance.

Install - Means to build into the Work, ready to be used in complete and operable condition and in compliance with Contract Documents.

Interim Work Authorization - A written order by the Engineer initiating changes to the Contract, within its general scope, until a subsequent Change Order is executed.

Invitation for Bids - A portion of the bidding documents soliciting bids for the Work to be performed.

Laboratory - The official testing laboratories of the DEPARTMENT or such other laboratories as may be designated by the Engineer or identified in the contract documents.

Materials - Any substances specified for use in the construction of the project.

Notice of Intent to Award - The written notice by the DEPARTMENT to all Bidders identifying the apparent successful Bidder and establishing the DEPARTMENT's intent to execute the Contract when all conditions required for execution of the Contract are net.

Notice to Proceed - A written notice to the CONTRACTOR to begin the Work and establishing the date on which the Contract Time begins.

Payment Bond - The security furnished by the CONTRACTOR and his Surety to guarantee payment of the debts covered by the bond.

Performance Bond - The security furnished by the CONTRACTOR and his Surety to guarantee performance and completion of the Work in accordance with the Contract.

Preconstruction Conference - A meeting between the CONTRACTOR and the Engineer, and other parties affected by the construction, to discuss the project before the CONTRACTOR begins work.

Project - The total construction, of which the Work performed under the Contract Documents is the whole or a part, where such total construction may be performed by more than one CONTRACTOR.

Project Manager - The authorized representative of the Contracting Officer who is responsible for administration of the Contract.

Proposal - The offer of a Bidder, on the prescribed forms, to perform the Work at the prices quoted.

Proposal Guaranty - The security furnished with a Proposal to guarantee that the bidder will enter into a Contract if his Proposal is accepted by the DEPARTMENT.

Quality Assurance (QA) - Where referred to in the technical specifications (Divisions 2 through 16), Quality Assurance refers to measures to be provided by the CONTRACTOR as specified.

Quality Coutrol (QC) - Tests and inspections by the CONTRACTOR to insure the acceptability of materials incorporated into the work. QC test reports are used as a basis upon which to determine whether the Work conforms to the requirements of the Contract Documents and to determine its acceptability for payment.

Regulatory Requirements - Laws, rules, regulations, ordinances, codes and/or orders.

Schedule of Values - The DEPARTMENT's document, submitted by the CONTRACTOR and reviewed by the Contracting Officer, which shall serve as the basis for computing payment and for establishing the value of separate items of Work which comprise the Contract Price.

Shop Drawings - All drawings, diagrams, illustrations, schedules and other data which are specifically prepared by or for the CONTRACTOR to illustrate some portion of the Work and all illustrations, brochures, standard schedules, performance charts, instructions, diagrams and other information prepared by a Supplier and submitted by the CONTRACTOR to illustrate material, equipment, fabrication, or erection for some portion of the Work. Where used in the Contract Documents, "Shop Drawings" shall also mean "Submittals".

Specifications - Those portions of the Contract Documents consisting of written technical descriptions of materials, equipment, construction systems, standards and workmanship as applied to the Work and certain administrative and procedural details applicable thereto.

Subcontractor - An individual, firm, or corporation to whom the CONTRACTOR or any other Subcontractor sublets part of the Contract.

Substantial Completion - Although not fully completed, the Work (or a specified part thereof) has progressed to the point where, in the opinion of the Contracting Officer, as evidence by the DEPARTMENT's written notice, it is sufficiently complete, in accordance with the Contract Documents, so that the Work (or specified part) can be utilized for the purposes for which it is intended. The terms "Substantially Complete" and "Substantially Completed" as applied to any Work refer to Substantial Completion thereof.

Supplemental Agreement - A written agreement between the CONTRACTOR and the DEPARTMENT covering work that is not within the general scope of the Contract.

Supplementary Conditions - The part of the Contract Documents which amends or supplements these General Conditions.

Supplier - A manufacturer, fabricator, distributor, materialman or vendor of materials or equipment.

Surety - The corporation, partnership, or individual, other than the CONTRACTOR, executing a bond furnished by the CONTRACTOR.

Traffic Control Plan (TCP) - A drawing of one or more specific plans that detail the routing of pedestriau, and/or vehicular traffic through or around a construction area.

Unit Price Work - Work to be paid for on the basis of unit prices.

Using Agency - The entitiv who will occupy or use the completed Project.

Utility - The privately, publicly or cooperatively owned lines, facilities and systems for producing, transmitting or distributing communications, power, electricity, light, heat, gas, oil, crude products, water, steam, waste, storm water not connected with highway or street drainage, and other similar commodities, including publicly owned fire and police signal systems, street lighting systems, and railroads which directly or indirectly serve the public or any part thereof. The term "utility" shall also mean the utility company, inclusive of any wholly owned or controlled subsidiary."

Work - Work is the act of, and the result of, performing services, furnishing labor, furnishing and incorporating materials and equipment into the Project and performing other duties and obligations, all as required by the Contract Documents. Such Work, however incremental, will culminate in the entire completed Project, or the various separately identifiable parts thereof.

ARTICLE 2 - AUTHORIZATION AND LIMITATIONS

2.1 Authorities and Limitations

- 2.1.1 The Contracting Officer alone, shall have the power to bind the DEPARTMENT and to exercise the rights, responsibilities, authorities and functions vested in the Contracting Officer by the Contract Documents. The Contracting Officer shall have the right to designate in writing authorized representatives to act for him. Wherever any provision of the Contract Documents specifies an individual or organization, whether governmental or private, to perform any act on behalf of or in the interest of the DEPARTMENT that individual or organization shall be deemed to be the Contracting Officer's authorized representative under this Contract but only to the extent so specified.
- 2.1.2 The CONTRACTOR shall perform the Work in accordance with any written order (including but not limited to instruction, direction, interpretation or determination) issued by an authorized representative in accordance with the authorized representative's authority to act for the Contracting Officer. The CONTRACTOR assumes all the risk and consequences of performing the Work in accordance with any order (including but not limited to instruction, direction, interpretation or determination) of anyone not authorized to issue such order, and of any order not in writing.
- 2.1.3 Should the Contracting Officer or his authorized representative designate Consultant(s) to act for the DEPARTMENT as provided for in Paragraph 2.1.1, the performance or nonperformance of the Consultant under such authority to act, shall not give rise to any contractual obligation or duty of the Consultant to the CONTRACTOR, any Subcontractor, any Supplier, or any other organization performing any of the Work or any Surety representing them.

2.2 Evaluations by Contracting Officer:

- 2.2.1 The Contracting Officer will decide all questions which may arise as to:
 - a. Quality and acceptability of materials furnished;
 - h. Quality and acceptability of Work performed;
 - c. Compliance with the schedule of progress;
 - d. Interpretation of Contract Documents;
 - e. Acceptable fulfillment of the Contract on the part of the CONTRACTOR.
- 2.2.2 In order to avoid cumbersome terms and confusing repetition of expressions in the Contract Documents the terms "as ordered", "as directed", "as required", "as approved" or terms of like effect or import are used, or the adjectives "reasonable", "suitable", "acceptable", "proper" or "satisfactory" or adjectives of like effect or import are used it shall be understood as if the expression were followed by the words "the Contracting Officer".

When such terms are used to describe a requirement, direction, review or judgment of the Contracting Officer as to the Work, it is intended that such requirement, direction, review or judgment will be solely to evaluate the Work for compliance with the Contract Documents (unless there is a specific statement indicating otherwise).

2.2.3 The use of any such term or adjective shall not be effective to assign to the DEPARTMENT any duty of authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of paragraphs 2.3 or 2.4.

2.3 Means & Methods:

The means, methods, techniques, sequences or procedures of construction, or safety precautions and the program incident thereto, and the failure to perform or furnish the Work in accordance with the Contract Documents are the sole responsibility of the CONTRACTOR.

2.4 Visits to Site/Place of Business:

The Contracting Officer will make visits to the site and approved remote storage sites at intervals appropriate to the various stages of construction to observe the progress and quality of the executed Work and to determine, in general, if the Work is proceeding in accordance with the Contract Documents. The Contracting Officer may, at reasonable times, inspect that part of the plant or place of business of the CONTRACTOR or Subcontractor that is related to the performance of the Contract. Such observations or the lack of such observations shall in no way relieve the CONTRACTOR from his duty to perform the Work in accordance with the Contract Documents.

ARTICLE 3 - CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

3.1 Incomplete Contract Documents:

The submission of a bid by the Bidder is considered a representation that the Bidder examined the Contract Documents to make certain that all sheets and pages were provided and that the Bidder is satisfied as to the conditions to be encountered in performing the Work. The DEPARTMENT expressly denies any responsibility or liability for a bid submitted on the basis of an incomplete set of Contract Documents.

3.2 Copies of Contract Documents:

The DEPARTMENT shall furnish to the CONTRACTOR up to ten copies of the Contract Documents. Additional copies will be furnished, upon request, at the cost of reproduction.

3.3 Scope of Work:

The Contract Documents comprise the entire Contract between the DEPARTMENT and the CONTRACTOR concerning the Work. The Contract Documents are complementary; what is called for by one is as binding as if called for by all. The Contract Documents will be construed in accordance with the Regulatory Requirements of the place of the Project.

It is specifically agreed between the parties executing this Contract that it is not intended by any of the provisions of the Contract to create in the public or any member thereof a third party benefit, or to authorize anyone not a party to this Contract to maintain a suit pursuant to the terms or provisions of the Contract.

3.4 Intent of Contract Documents:

- 3.4.1 It is the intent of the Contract Documents to describe a functionally complete Project to be constructed in accordance with the Contract Documents. Any Work, materials or equipment that may reasonably be inferred from the Contract Documents as being required to produce the intended result will be supplied, without any adjustment in Contract Price or Contract Time, whether or not specifically called for.
- 3.4.2 Reference to standard specifications, manuals or codes of any technical society, organization or association, or to the Regulatory Requirements of any governmental authority, whether such reference be specific or by implication, shall mean the edition stated in the Contract Documents or if not stated the latest standard specification, manual, code or Regulatory Requirements in effect at the time of Advertisement for the Project (or, on the Effective Date of the Contract if there was no Advertisement). However, no provision of any referenced standard specification, manual or code (whether or not specifically incorporated by reference in the Contract Documents) shall be effective to change the duties and responsibilities of the DEPARTMENT and the CONTRACTOR, or any of their consultants, agents or employees from those set forth in the Contract Documents, nor shall it be effective to assign to the DEPARTMENT or any of the DEPARTMENT's Consultants, agents or employees, any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of paragraphs 2.3 or 2.4.

3.5 Discrepancy in Contract Documents:

3.5.1 Before undertaking the Work, the CONTRACTOR shall carefully study and compare the Contract Documents and check and verify pertinent figures, and dimensions shown thereon and all applicable field measurements. Work in the area by the CONTRACTOR shall imply verification of figures, dimensions and field measurements. If, during the above study or during the performance of the Work, the CONTRACTOR finds a conflict, error, discrepancy or omission in the Contract Documents, or a discrepancy between the Contract Documents and any standard specification, manual, code, or Regulatory Requirement which affects the Work, the CONTRACTOR shall promptly report such discrepancy in writing to the Contracting Officer. The CONTRACTOR shall obtain a written interpretation or clarification from the Contracting Officer before proceeding with any Work affected thereby. Any adjustment made by the CONTRACTOR without this determination shall be at his own risk and expense. However, the CONTRACTOR shall not be liable to the DEPARTMENT for failure to report any conflict, error or discrepancy in the Contract Documents unless the CONTRACTOR had actual knowledge thereof or should reasonably have known thereof.

3.5.2 Discrepancy - Order of Precedence:

When conflicts errors, or discrepancies within the Contract Documents exist, the order of precedence from most governing to least governing will be as follows:

Contents of Addenda Supplementary Conditions General Conditions General Requirements Technical Specifications Drawings Recorded dimensions will govern over scaled dimensions Large scale details over small scale details Schedules over plans Architectural drawings over structural drawings Structural drawings over mechanical and electrical drawings

3.6 Clarifications and Interpretations:

The Contracting Officer will issue with reasonable promptness such written clarifications or interpretations of the requirements of the Contract Documents as the Contracting Officer may determine necessary, which shall be consistent with or reasonably inferable from the overall intent of the Contract Documents.

3.7 Reuse of Documents:

Neither the CONTRACTOR nor any Subcontractor, or Supplier or other person or organization performing or furnishing any of the Work under a direct or indirect contract with the DEPARTMENT shall have or acquire any title to or ownership rights in any of the Contract Documents (or copies thereof) prepared by or for the DEPARTMENT and they shall not reuse any of the Contract Documents on extensions of the Project or any other project without written consent of the Contracting Officer.

Contract Documents prepared by the CONTRACTOR in connection with the Work shall become the property of the DEPARTMENT.

ARTICLE 4 - LANDS AND PHYSICAL CONDITIONS

4.1 Availability of Lands:

The DEPARTMENT shall furnish as indicated in the Contract Documents, the lands upon which the Work is to be performed, rights-of-way and easements for access thereto, and such other lands which are designated for use of the CONTRACTOR in connection with the Work. Easements for permanent structures or permanent changes in existing facilities will be obtained and paid for by the DEPARTMENT, unless otherwise provided in the Contract Documents. The CONTRACTOR shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment. The CONTRACTOR shall provide all waste and disposal areas, including disposal areas for hazardous or contaminated materials, at no additional cost to the DEPARTMENT.

4.2 Visit to Site:

The submission of a bid by the CONTRACTOR is considered a representation that the CONTRACTOR has visited and carefully examined the site and is satisfied as to the conditions to be encountered in performing the Work and as to the requirements of the Contract Documents.

4.3 Explorations and Reports:

Reference is made to the Supplementary Conditions for identification of those reports of explorations and tests of subsurface conditions at the site that have been utilized by the DEPARTMENT in preparation of the Contract Documents. The CONTRACTOR may for his purposes rely upon the accuracy of the factual data contained in such reports, but not upon interpretations or opinions drawn from such factual data contained therein or for the completeness or sufficiency thereof. Except as indicated in the immediately preceding sentence and in paragraphs 4.4 and 9.9, CONTRACTOR shall have full responsibility with respect to surface and subsurface conditions at the site.

4.4 Utilities:

The horizontal and vertical locations of known underground utilities as shown or indicated by the Contract Documents are approximate and are based on information and data furnished to the DEPARTMENT by the owners of such underground utilities.

- 4.4.2 The CONTRACTOR shall have full responsibility for:
 - a. Reviewing and checking all information and data concerning utilities.
 - b. Locating all underground utilities shown or indicated in the Contract Documents which are affected by the Work.
 - c. Coordination of the Work with the owners of all utilities during construction.
 - d. Safety and protection of all utilities as provided in paragraph 6.17.
 - e. Repair of any damage to utilities resulting from the Work in accordance with 4.4.4 and 4.5.
- 4.4.3 If Work is to be performed by any utility owner, the CONTRACTOR shall cooperate with such owners to facilitate the Work.
- 4.4.4 In the event of interruption to any utility service as a result of accidental breakage or as result of being exposed or unsupported, the CONTRACTOR shall promptly notify the utility owner and the Contracting Officer. If service is interrupted, repair work shall be continuous until the service is restored. No Work shall be undertaken around fire hydrants until provisions for continued service has been approved by the local fire

authority.

4.5 Damaged Utilities:

When utilities are damaged by the CONTRACTOR, the utility owner shall have the choice of repairing the utility or having the CONTRACTOR repair the utility. In the following circumstances, the CONTRACTOR shall reimburse the utility owner for repair costs or provide at no cost to the utility owner or the DEPARTMENT, all materials, equipment and labor necessary to complete repair of the damage:

- a. When the utility is shown or indicated in the Contract Documents.
- b. When the utility has been located by the utility owner.
- c. When no locate was requested by the CONTRACTOR for utilities shown or indicated in the Contract Documents.
- d. All visible utilities.
- e. When the CONTRACTOR could have, otherwise, reasonably been expected to be aware of such utility.

4.6 Utilities Not Shown or Indicated:

If, while directly performing the Work, an underground utility is uncovered or revealed at the site which was not shown or indicated in the Contract Documents and which the CONTRACTOR could not reasonably have been expected to be aware of, the CONTRACTOR shall, promptly after becoming aware thereof and before performing any Work affected thereby (except in an emergency as permitted by paragraph 6.19) identify the owner of such underground utility and give written notice thereof to that owner and to the Contracting Officer. The Contracting Officer will promptly review the underground utility to determine the extent to which the Contract Documents and the Work should be modified to reflect the impacts of the discovered utility. The Contract Documents will be amended or supplemented in accordance with paragraph 9.2 and to the extent necessary through the issuance of a change document by the Contracting Officer. During such time, the CONTRACTOR shall be responsible for the safety and protection of such underground utility as provided in paragraph 6.17. The CONTRACTOR may be allowed an increase in the Contract Price or an extension of the Contract Time, or both, to the extent that they are directly attributable to the existence of any underground utility that was not shown or indicated in the Contract Documents and which the CONTRACTOR could not reasonably have been expected to be aware of.

4.7 Survey Control:

The DEPARTMENT will identify sufficient horizontal and vertical control data to enable the CONTRACTOR to survey and layout the Work. All survey work shall be performed under the direct supervision of a registered land surveyor when required by paragraph 7.8. Copies of all survey notes shall be provided to the DEPARTMENT at an interval determined by the Project Manager. The Project Manager may request submission on a weekly or longer period at his discretion. Any variations between the Contract Documents and actual field conditions shall be identified in the survey notes.

ARTICLE 5 - BONDS, INSURANCE, AND INDEMNIFICATION

5.1 Delivery of Bonds:

When the CONTRACTOR delivers the executed Contract to the Contracting Officer, the CONTRACTOR shall also deliver to the Contracting Officer such bonds as the CONTRACTOR may be required to furnish in accordance with paragraph 5.2.

5.2 Bonds:

The CONTRACTOR shall furnish Performance and Payment Bonds, each in an amount as shown on the Contract as security for the faithful performance and payment of all CONTRACTOR's obligations under the Contract Documents. These bonds shall remain in effect for one year after the date of Final Acceptance and until all obligations under this Contract, except special guarantees as per 12.7, have been met. All bonds shall be furnished on forms provided by the DEPARTMENT (or copies thereof) and shall be executed by such Sureties as are authorized to do business in the State of Alaska. The Contracting Officer may at his option copy the Surety with notice of any potential default or liability.

5.3 Replacement of Bond and Surety:

If the Surety on any bond furnished in connection with this Contract is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements of paragraph 5.2, or otherwise becomes unacceptable to the DEPARTMENT, or if any such Surety fails to furnish reports as to his financial condition as requested by the DEPARTMENT, the CONTRACTOR shall within five days thereafter substitute another bond and Surety, both of which must be acceptable to DEPARTMENT.

An individual Surety may be replaced by a corporate Surety during the course of the Contract period. If the Surety desires to dispose of the collateral posted, the DEPARTMENT may, at its option, accept substitute collateral.

5.4 Insurance Requirements:

- 5.4.1 The CONTRACTOR shall provide evidence of insurance with a carrier or carriers satisfactory to the DEPARTMENT covering injury to persons and/or property suffered by the State of Alaska or a third party, as a result of operations which arise both out of and during the course of this Contract by the CONTRACTOR or by any Subcontractor. This coverage will also provide protection against injuries to all employees of the CONTRACTOR and the employees of any Subcontractor engaged in Work under this Contract. The delivery to the DEPARTMENT of a written 30 day notice is required before cancellation of any coverage or reduction in any limits of liability. Insurance carriers shall have an acceptable financial rating.
- 5.4.2 The CONTRACTOR shall maintain in force at all times during the performance of the work under this agreement the following policies and minimum limits of liability. Failure to maintain insurance may, at the option of the Contracting Officer, he deemed Defective Work and remedied in accordance with the Contract. Where specific limits and coverages are shown, it is understood that they shall be the minimum acceptable. The requirements of this paragraph shall not limit the CONTRACTOR's responsibility to indemnify under paragraph 5.5. Additional insurance requirements specific to this Contract are contained in the Supplementary Conditions, when applicable.
 - a. <u>Workers' Compensation Insurance</u>: The Contractor shall provide and maintain, for all employees of the Contractor engaged in work under this contract, Workers' Compensation Insurance as required by AS 23.30.045. The Contractor shall be responsible for Workers' Compensation Insurance for any subcontractor who provides services under this contract, to include:
 - 1. Waiver of subrogation against the State and Employer's Liability Protection in the amount of \$500,000 each accident/\$500,000 each disease.

- 2. If the Contractor directly utilizes labor outside of the State of Alaska in the prosecution of the work, "Other States" endorsement shall be required as a condition of the contract.
- 3. Whenever the work involves activity on or about navigable waters, the Workers' Compensation policy shall contain a United States Longshoreman's and Harbor Worker's Act endorsement, and when appropriate, a Maritime Employer's Liability (Jones Act) endorsement with a minimum limit of \$1,000,000.
- <u>Comprehensive or Commercial General Liability Insurance</u>: Such insurance shall cover all operations by or on behalf of the CONTRACTOR and provide insurance for bodily injury and property damage liability including <u>eoverage</u> for:

premises and operations; products and completed operations; contractual liability insuring obligations assumed under paragraph 5.5, Indemnification; broad form property damage; and personal injury liability.

The minimum limits of liability shall be:

1. If the CONTRACTOR carries a *Comprehensive General Liability* policy, the limits of liability shall not be less than a Combined Single Limit for bodily injury, property damage and Personal Injury Liability of:

\$1,000,000 each occurrence \$2,000,00 aggregate

2. If the CONTRATOR carries a *Commercial General Liability* policy, the limits of liability shall not be less than:

\$1,000,000 each occurrence (Combined Single Limit for bodily injury and property damage) \$1,000,000 for Personal Injury Liability

\$2,000,000 aggregate for Products-Completed Operations \$2,000,000 general aggregate

The State of Alaska, DEPARTMENT of Transportation and Public Facilities shall be named as an "Additional Insured" under all liability coverages listed above.

c. <u>Automobile Liability Insurance</u>:

Such insurance shall cover all owned, hired and non-owned vehicles and provide coverage not less than that of the Business Automobile Policy in limits not less than the following:

\$1,000,000 each occurrence (Combined Single Limit for bodily injury and property damage.)

d. Builder's Risk Insurance:

Coverage shall be on an "All Risk" completed value basis including "quake and flood" and protect the interests of the DEPARTMENT, the CONTRACTOR and his Subcontractors. Coverage shall include all materials, supplies and equipment that are intended for specific installation in the Project while such materials, supplies and equipment are located at the Project site, in transit from port of arrival to job site and while temporarily located away from the Project site.

In addition to providing the above coverages the CONTRACTOR shall ensure that Subcontractors provide insurance coverages as noted in clauses a., b., and c. of this subparagraph. Builders Risk Insurance will only be required of subcontractors if so stated in the Supplementary Conditions.

e. <u>Other Coverages</u>:

As specified in the Supplementary Conditions.

5.4.3 In addition to providing the above coverages the Contractor shall, in any contract or agreement with subcontractors performing work, require that all indemnities and waivers of subrogation it obtains, and that any stipulation to be named as an additional insured it obtains, also be extended to waive rights of subrogation against the State of Alaska and to add the State of Alaska as additional named indemnitee and as additional insured.

Evidence of insurance shall be furnished to the Department prior to the award of the contract. Such evidence, executed by the carrier's representative and issued to the Department, shall consist of a certificate of insurance or the policy declaration page with required endorsements attached thereto which denote the type, amount, class of operations covered, effective (and retroactive) dates, and dates of expiration. Acceptance by the Department of deficient evidence does not constitute a waiver of contract requirements.

When a certificate of insurance is furnished, it shall contain the following statement:

"This is to certify that the policies described herein comply with all aspects of the insurance requirements of (Project Name and Number)"

5.5 Indemnification:

The CONTRACTOR shall indemuify, save harmless, and defend the DEPARTMENT, its agents and its employees from auy and all claims, actions, or liabilities for injuries or damages sustained by any person or property arising directly or indirectly from the construction or the CONTRACTOR's performance of this Contract; however, this provision has no effect if, but only if, the sole proximate cause of the injury or damage is the DEPARTMENT's negligence.

ARTICLE 6 - CONTRACTOR'S RESPONSIBILITIES

6.1 Supervision of Work:

The CONTRACTOR shall supervise and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. All Work under this Contract shall be performed in a skillful and workmanlike manner. The CONTRACTOR shall be solely responsible for the means, methods, techniques, sequences and procedures of construction.

6.2 Superintendence by CONTRACTOR:

The CONTRACTOR shall keep on the Work at all times during its progress a competent resident superintendent. The Contracting Officer shall be advised in writing of the superintendent's name, local address, and telephone number. This written advice is to be kept current until Final Acceptance by the DEPARTMENT. The superintendent will be the CONTRACTOR's representative at the site and shall have full authority to act and sign documents on behalf of the CONTRACTOR.

All communications given to the superintendent shall be as binding as if given to the CONTRACTOR. The CONTRACTOR shall cooperate with the Contracting Officer in every way possible.

6.3 Character of Workers:

The CONTRACTOR shall provide a sufficient number of competent, suitably qualified personnel to survey aud lay out the Work and perform construction as required by the Contract Documents. The CONTRACTOR shall at all times maintain good discipline and order at the site. The Contracting Officer may, in writing, require the CONTRACTOR to remove from the Work any employee the Contracting Officer deems incompetent, careless, or otherwise detrimental to the progress of the Work, but the Contracting Officer shall have no duty to exercise this right.

6.4 CONTRACTOR to Furnish:

Unless otherwise specified in the General Requirements, the CONTRACTOR shall furnish and assume full responsibility for all materials, equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities and all other facilities and incidentals necessary for the furnishing, performance testing, start-up and completion of the Work.

6.5 Materials and Equipment:

All materials and equipment shall be of specified quality and new, except as otherwise provided in the Contract Documents. If required by the Contracting Officer, the CONTRACTOR shall furnish satisfactory evidence (including reports of required tests) as to the kind and quality of materials and equipment. All materials and equipment shall be applied, installed, connected, erected, used, cleaned, and conditioned in accordance with the instructions of the applicable Supplier except as otherwise provided in the Contract Documents; but no provision of any such instructions will be effective to assign to the DEPARTMENT or any of the DEPARTMENT's Consultants, agents or employees, any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of paragraphs 2.3 or 2.4.

6.6 Anticipated Schedules:

6.6.1 Within fourteen (14) calendar days after the date of the Notice to Proceed, the CONTRACTOR shall submit to the Contracting Officer for review an anticipated progress schedule indicating the starting and completion dates of the various stages of the Work. No individual stage of work shall exceed fourteen (14) calendar days.

- 6.6.2 Within twenty one (21) days after the date of the Notice to Proceed, the CONTRACTOR shall submit to the Contracting Officer for review an anticipated schedule of Shop Drawing submissions
- 6.6.3 Prior to submitting the CONTRACTOR's first Application for Payment, the CONTRACTOR shall submit for review and approval:

Anticipated Schedule of Values for all of the Work which will include quantities and prices of items aggregating the Contract Price and will subdivide the Work into component parts in sufficient detail to serve as the basis for progress payments during construction. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work which will be confirmed in writing by the CONTRACTOR at the time of submission.

6.7 Finalizing Schedules:

Prior to processing the first Application for Payment the Contracting Officer and the CONTRACTOR will finalize schedules required by paragraph 6.6. The finalized progress schedule will be acceptable to the DEPARTMENT as providing information related to the orderly progression of the Work to completion within the Contract Time; but such acceptance will neither impose on the DEPARTMENT nor relieve the CONTRACTOR from full responsibility for the progress or scheduling of the Work. If accepted, the finalized schedule of Shop Drawing and other required submissions will be acknowledgment by the DEPARTMENT as providing a workable arrangement for processing the submissions. If accepted, the finalized Schedule of Values will be acknowledgment by the DEPARTMENT as an approximation of anticipated value of Work accomplished over the anticipated Contract Time. Receipt and acceptance or contingencies to the DEPARTMENT or relieve the CONTRACTOR of his responsibility to adjust his forces, equipment, and work schedules as may be necessary to insure completion of the Work within prescribed Contract Time. Should the prosecution of the Work be discontinued for any reason, the CONTRACTOR shall notify the ContractIOR shall notify the ContractIOR shall notify the ContractIOR shall notify the ContractIOR of the Work within prescribed Contract Time.

6.8 Adjusting Schedules:

Upon substantial changes to the schedule or upon request the CONTRACTOR shall submit to the Contracting Officer for acceptance (to the extent indicated in paragraph 6.7 and the General Requirements) adjustments in the schedules to reflect the actual present and anticipated progress of the Work.

6.9 Substitutes or "Or-Equal" Items:

- 6.9.1 Whenever materials or equipment are specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier the naming of the item is intended to establish the type, function and quality required. Unless the name is followed by words indicating that substitution is limited or not permitted, materials or equipment of other Suppliers may be accepted by the Contracting Officer only if sufficient information is submitted by the CONTRACTOR which clearly demonstrates to the Contracting Officer that the material or equipment proposed is equivalent or equal in all aspects to that named. The procedure for review by the Contracting Officer will include the following as supplemented in the General Requirements.
- 6.9.2 Requests for review of substitute items of material and equipment will not be accepted by the Contracting Officer from anyone other than the CONTRACTOR.

- 6.9.3 If the CONTRACTOR wishes to furnish or use a substitute item of material or equipment, the CONTRACTOR shall make written application to the Contracting Officer for Approval thereof, certifying that the proposed substitute will perform adequately the functions and achieve the results called for by the general design, be similar and of equal substance to that specified and be suited to the same use as the specified. The application will state that the evaluation and Approval of the proposed substitute will not delay the CONTRACTOR's timely achievement of Substantial or Final Completion, whether or not acceptance of the substitute for use in the Work will require a change in any of the Contract Documents (or in the proposed substitute and whether or not incorporation or use of the substitute in connection with the Work is subject to payment of any license fee or royalty.
- 6.9.4 All variations of the proposed substitute from that specified will be identified in the application and available maintenance, repair and replacement service will be indicated. The application will also contain an itemized estimate of all costs that will result directly or indirectly from acceptance of such substitute, including costs of redesign and claims of other contractors affected by the resulting change, all of which shall be considered by the DEPARTMENT in evaluating the proposed substitute. The DEPARTMENT may require the CONTRACTOR to furnish at the CONTRACTOR's expense additional data about the proposed substitute. The Contracting Officer may reject any substitution request which the Contracting Officer determines is not in the best interest of the DEPARTMENT.
- 6.9.5 Substitutions shall be permitted during or after the bid period as allowed and in accordance with Document 00020 Invitation for Bids, Document 00700 General Conditions, and Document 01630 Product Options and Substitutions.

6.10 Substitute Means and Methods:

If a specific means, method, technique, sequence or procedure of construction is indicated in or required by the Contract Documents, the CONTRACTOR may furnish or utilize a substitute means, method, sequence, technique or procedure of construction acceptable to the Contracting Officer, if the CONTRACTOR submits sufficient information to allow the Contracting Officer to determine that the substitute proposed is equivalent to that indicated or required by the Contract Documents. The procedure for review by the Contracting Officer will be similar to that provided in paragraph 6.9 as applied by the Contracting Officer and as may be supplemented in the General Requirements.

6.11 Evaluation of Substitution:

The Contracting Officer will be allowed a reasonable time within which to evaluate each proposed substitute. The Contracting Officer will be the sole judge of acceptability, and no substitute will be ordered, installed or utilized without the Contracting Officer's prior written Approval which will be evidenced by either a Change Order or a Shop Drawing Approved in accordance with Sections 6.20 and 6.21. The Contracting Officer may require the CONTRACTOR to furnish at the CONTRACTOR's expense a special performance guarantee or other Surety with respect to any substitute.

6.12 Dividing the Work:

The divisions and sections of the Specifications and the identifications of any Drawings shall not control the CONTRACTOR in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.

6.13 Subcontractors:

The CONTRACTOR may utilize the services of appropriately licensed Subcontractors on those parts of the Work which, under normal contracting practices, are performed by Subcontractors, in accordance with the following conditions:

- 6.13.1 The CONTRACTOR shall not award any Work to any Subcontractor without prior written Approval of the Contracting Officer. This Approval will not be given until the CONTRACTOR submits to the Contracting Officer a written statement concerning the proposed award to the Subcontractor which shall contain required Equal Employment Opportunity documents, evidence of insurance whose limits are acceptable to the CONTRACTOR, and an executed copy of the subcontract. All subcontracts shall contain provisions for prompt payment, release of retainage, and interest on late payment amounts and retainage as specified in A.S. 36.90.210. Contracts between subcontractors, regardless of tier, must also contain these provisions. No acceptance by the Contracting Officer of any such Subcontractor shall constitute a waiver of any right of the DEPARTMENT to reject Defective Work.
- 6.13.2 The CONTRACTOR shall be fully responsible to the DEPARTMENT for all acts and omisions of the Subcontractors, Suppliers and other persons and organizations performing or furnishing any of the Work under a direct or indirect contract with CONTRACTOR just as CONTRACTOR is responsible for CONTRACTOR's own acts and omissions.
- 6.13.3 All Work performed for CONTRACTOR by a Subcontractor will be pursuant to an appropriate written agreement between CONTRACTOR and the Subcontractor which specifically binds the Subcontractor to the applicable terms and conditions of the Contract Documents for the benefit of the DEPARTMENT and contains waiver provisions as required by paragraph 13.17 and termination provisions as required by Article 14.
- 6.13.4 Nothing in the Contract Documents shall create any contractual relationship between the DEPARTMENT and any such Subcontractor, Supplier or other person or organization, nor shall it create any obligatiou on the part of the DEPARTMENT to pay or to see to the payment of any moneys due any such Subcontractor, Supplier or other person or organization except as may otherwise be required by Regulatory Requirements. The DEPARTMENT will not undertake to settle any differences between or among the CONTRACTOR, Subcontractors, or Suppliers.
- 6.13.5 The CONTRACTOR and Subcontractors shall coordinate their work and cooperate with other trades so to facilitate general progress of Work. Each trade shall afford other trades every reasonable opportunity for installation of their work and storage of materials. If cooperative work of one trade must be altered due to lack of proper supervision, or failure to make proper provisions in time by another trade, such conditions shall be remedied by the CONTRACTOR with no change in Contract Price or Contract Time.
- 6.13.6 The CONTRACTOR shall include on his own payrolls any person or persons working on this Contract who are not covered by written subcontract, and shall ensure that all Subcontractors include on their payrolis all persons performing Work under the direction of the Subcontractor.

6.14 Use of Premises:

The CONTRACTOR shall confine construction equipment, the storage of materials and equipment and the operations of workers to the Project limits and approved remote storage sites and lands and areas identified in and permitted by Regulatory Requirements, rights-of-way, permits and easements, and shall not unreasonably encumber the premises with construction equipment or other materials or equipment. The CONTRACTOR shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof or of any land or areas contiguous thereto, resulting from the performance of the Work. Should any claim be made against the DEPARTMENT by any such owner or occupant because of the performance of the Work, the CONTRACTOR shall hold the DEPARTMENT harmless.

6.15 Structural Loading:

The CONTRACTOR shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall the CONTRACTOR subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

6.16 Record Documents:

The CONTRACTOR shall maintain in a safe place at the site one record copy of all Drawings, Specifications, Addenda, Directives, Change Orders, Supplemental Agreements, and written interpretations and clarifications (issued pursuant to paragraph 3.6) in good order and annotated to show all changes made during construction. These record documents together with all Approved samples and a counterpart of all Approved Shop Drawings will be available to the Contracting Officer for reference and copying. Upon completion of the Work, the annotated record documents, samples and Shop Drawings will be delivered to the Contracting Officer. Record documents shall accurately record variations in the Work which vary from requirements shown or indicated in the Contract Documents.

6.17 Safety and Protection:

The CONTRACTOR alone shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. The CONTRACTOR shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:

- 6.17.1 All employees on the Work and other persons and organizations who may be affected thereby;
- 6.17.2 All the Work and materials and equipment to be incorporated therein, whether in storage on or off the site; and
- 6.17.3 Other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation or replacement in the course of construction.

The CONTRACTOR shall comply with all applicable Regulatory Requirements of any public body having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss; and shall erect and maintain all necessary safeguards for such safety and protection. The CONTRACTOR shall notify owners of adjacent property and utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation and replacement of their property. All damage, injury or loss to any property caused, directly or indirectly, in whole or in part, by the CONTRACTOR, any Subcontractor, Supplier or any other person or organization directly or indirectly employed by any of them to perform or furnish any of the Work or anyone for whose acts any of them may be liable, shall be remedied by the CONTRACTOR with no change in Contract Price or Contract Time except as stated in 4.6, except damage or loss attributable to unforeseeable causes beyond the control of and without the fault or negligence of the CONTRACTOR, including but not restricted to acts of God, of the public enemy or governmental authorities. The CONTRACTOR's duties and responsibilities for the safety and protection of the Work shall continue until Final Acceptance (except as otherwise expressly provided in connection with Substantial Completion).

6.18 Safety Representative:

The CONTRACTOR shall designate a responsible safety representative at the site. This person shall be the CONTRACTOR's superintendent unless otherwise designated in writing by the CONTRACTOR to the Contracting Officer.

6.19 Emergencies:

In emergencies affecting the safety or protection of persons or the Work or property at the site or adjacent thereto, the CONTRACTOR, without special instruction or authorization from the DEPARTMENT, is obligated to act to prevent threatened damage, injury or loss. The CONTRACTOR shall give the Contracting Officer prompt written notice if the CONTRACTOR believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby. If the DEPARTMENT determines that a change in the Contract Documents is required because of the action taken in response to an emergency, a change will be authorized by one of the methods indicated in Paragraph 9.2, as determined appropriate by the Contracting Officer.

6.20 Shop Drawings and Samples:

- 6.20.1 After checking and verifying all field measurements and after complying with applicable procedures specified in the General Requirements, the CONTRACTOR shall submit to the Contracting Officer for review and Approval in accordance with the accepted schedule of Shop Drawing submissions the required number of all Shop Drawings, which will bear a stamp or specific written indication that the CONTRACTOR has satisfied CONTRACTOR's responsibilities under the Contract Documents with respect to the review of the submission. All submissions will be identified as the Contracting Officer may require. The data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials and similar data to enable the Contracting Officer to review the information as required.
- 6.20.2 The CONTRACTOR shall also submit to the Contracting Officer for review and Approval with such promptness as to cause no delay in Work, all samples required by the Contract Documents. All samples will have been checked by and accompanied by a specific written indication that the CONTRACTOR has satisfied CONTRACTOR's responsibilities under the Contract Documents with respect to the review of the submission and will be identified clearly as to material, Supplier, pertinent data such as catalog numbers and the use for which intended.
- 6.20.3 Before submission of each Shop Drawing or sample the CONTRACTOR shall have determined and verified all quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers and similar data with respect thereto and reviewed or coordinated each Shop Drawing or sample with other Shop Drawings and samples and with the requirements of the Work and the Contract Documents.
- 6.20.4 At the time of each submission the CONTRACTOR shall give the Contracting Officer specific written notice of each variation that the Shop Drawings or samples may have from the requirements of the Contract Documents, and, in addition, shall cause a specific notation to be made on each Shop Drawing submitted to the Contracting Officer for review and Approval of each such variation. All variations of the proposed Shop Drawing from that specified will be identified in the submission and available maintenance, repair and replacement service will be indicated. The submittal will also contain an itemized estimate of all costs that will result directly or indirectly from aeceptanee of such variation, including costs of redesign and claims of other Contractors affected by the resulting change, all of which shall be considered by the DEPARTMENT in evaluating the proposed variation. If the variation may result in a change of Contract Time or Price, or Contract responsibility, and is not minor in nature; the CONTRACTOR must submit a written request for Change Order with the variation to notify the DEPARTMENT of his intent. The DEPARTMENT may require the CONTRACTOR to furnish at the CONTRACTOR's expense additional data about the proposed variation. The Contracting Officer may reject any variation request which the Contracting Officer determines is not in the best interest of the DEPARTMENT.

6.21 Shop Drawing and Sample Review:

- 6.21.1 The Contracting Officer will review with reasonable promptness Shop Drawings and samples, but the Contracting Officer's review will be only for conformance with the design concept of the Project and for compliance with the information given in the Contract Documents and shall not extend to means, methods, techniques, sequences or procedures of construction (except where a specific means, method, technique, sequence or procedure of construction is indicated in or required by the Contract Documents) or to safety precautions or programs incident thereto. The review of a separate item as such will not indicate acceptance of the assembly in which the item functions. The CONTRACTOR shall make corrections required by the Contracting Officer and shall return the required number of corrected copies of Shop Drawings and submit as required new samples for review. The CONTRACTOR shall direct specific attention in writing to revisions other than the corrections called for by the Contracting Officer on previous submittals.
- 6.21.2 The Contracting Officer's review of Shop Drawings or samples shall not relieve CONTRACTOR from responsibility for any variation from the requirements of the Contract Documents unless the CONTRACTOR has in writing advised the Contracting Officer of each such variation at the time of submission as required by paragraph 6.20.4. The Contracting Officer if he so determines, may give written Approval of each such variation by Change Order, except that, if the variation is minor and no Change Order has been requested a

specific written notation thereof incorporated in or accompanying the Shop Drawing or sample review comments shall suffice as a modification. Approval by the Contracting Officer will not relieve the CONTRACTOR from responsibility for errors or omissions in the Shop Drawings or from responsibility for having complied with the provisions of paragraph 6.20.3.

- 6.21.3 The DEPARTMENT shall be responsible for all DEPARTMENT review costs resulting from the initial submission and the fors resubmittal. The CONTRACTOR shall, at the discretion of the Contracting Agency, pay all review costs incurred by the DEPARTMENT as a result of any additional re-submittals.
- 6.21.4 Where a Shop Drawing or sample is required by the Specifications, any related Work performed prior to the Contracting Officer's review and Approval of the pertinent submission will be the sole expense and responsibility of the CONTRACTOR.

6.22 Maintenance During Construction:

The CONTRACTOR shall maintain the Work during construction and until Substantial Completion, at which tune the responsibility for maintenance shall be established in accordance with paragraph 13.10.

6.23 Continuing the Work:

The CONTRACTOR shall carry on the Work and adhere to the progress schedule during all disputes or disagreements with the DEPARTMENT. No Work shall be delayed or postponed pending resolution of any disputes, disagreements, or claims except as the CONTRACTOR and the Contracting Officer may otherwise agree in writing.

6.24 Consent to Assignment:

The CONTRACTOR shall obtain the prior written consent of the Contracting Officer to any proposed assignment of any interest in, or part of this Contract. The consent to any assignment or transfer shall not operate to relieve the CONTRACTOR or his Sureties of any of his or its obligations under this Contract or the Performance Bonds. Nothing herein contained shall be construed to hinder, prevent, or affect an assignment of monies due, or to become due hereunder, made for the benefit of the CONTRACTOR's creditors pursuant to law.

6.25 Use of Explosives:

- 6.25.1 When the use of explosives is necessary for the prosecution of the Work, the CONTRACTOR shall exercise the utmost care not to endanger life or property, including new Work and shall follow all Regulatory Requirements applicable to the use of explosives. The CONTRACTOR shall be responsible for all damage resulting from the use of explosives.
- 6.25.2 All explosives shall be stored in a secure manner in compliance with all Regulatory Requirements, and all such storage places shall be clearly marked. Where no Regulatory Requirements apply, safe storage shall be provided not closer than 1,000 feet from any building, camping area, or place of human occupancy.
- 6.25.3 The CONTRACTOR shall notify each public utility owner having structures in proximity to the site of his intentiou to use explosives. Such notice shall be given sufficiently in advance to enable utility owners to take such steps as they may deem necessary to protect their property from injury. However, the CONTRACTOR shall be responsible for all damage resulting from the use of the explosives, whether or not, utility owners act to protect their property.

6.26 CONTRACTOR's Records:

6.26.1 Records of the CONTRACTOR and Subcontractors relating to personnel, payrolls, invoices of materials, and any and all other data relevant to the performance of this Contract, must be kept on a generally recognized accounting system. Such records must be available during normal work hours to the Contracting Officer for purposes of investigation to ascertain compliance with Regulatory Requirements and provisions of the Contract

Documents.

- 6.26.2 Payroll records must contain the name and address of each employee, his correct classification, rate of pay, daily and weekly number of hours of work, deductions made, and actual wages paid. The CONTRACTOR and Subcontractors shall make employment records available for inspection by the Contracting Officer and representatives of the U.S. and/or State Department of Labor and will permit such representatives to interview employees during working hours on the Project.
- 6.26.3 Records of all communications between the DEPARTMENT and the CONTRACTOR and other parties, where such communications affected performance of this Contract, must be kept by the CONTRACTOR and maintained for a period of three years from Final Acceptance. The DEPARTMENT or its assigned representative may perform an audit of these records during normal work hours after written notice to the CONTRACTOR.

6.27 Load Restrictions

The CONTRACTOR shall comply with all load restrictions as set forth in the "Administrative Permit Manual", and Title 17, Chapter 25, of the Alaska Administrative Code in the hauling of materials on public roads, beyond the limits of the project, and on all public roads within the project limits that are scheduled to remain in use upon completion of the project.

Overload permits may, at the discretion of the State, be issued for travel beyond the project limits for purposes of mobilization and/or demobilization. Issuance of such a permit will not relieve the CONTRACTOR of liability for damage which may result from the moving of equipment.

The operation of equipment of such weight or so loaded as to cause damage to any type of construction will not be permitted. No overloads will be permitted on the base course or surface course under construction. No loads will be permitted on a concrete pavement, base or structure before the expiration of the curing period. The CONTRACTOR shall be responsible for all damage done by his equipment.

ARTICLE 7 - LAWS AND REGULATIONS

7.1 Laws to be Observed

The CONTRACTOR shall keep fully informed of all federal and state Regulatory Requirements and all orders and decrees of bodies or tribunals having any jurisdiction or authority, which in any manner affect those engaged or employed on the Work, or which in any way affect the conduct of the Work. The CONTRACTOR shall at all times observe and comply with all such Regulatory Requirements, orders and decrees; and shall protect and indemnify the DEPARTMENT and its representatives against claim or liability arising from or based on the violation of any such Regulatory Requirement, order, or decree whether by the CONTRACTOR, Subcontractor, or any employee of either. Except where otherwise expressly required by applicable Regulatory Requirements, the DEPARTMENT shall not be responsible for monitoring CONTRACTOR's compliance with any Regulatory Requirements.

7.2 Permits, Licenses, and Taxes

- 7.2.1 The CONTRACTOR shall procure all permits and licenses, pay all charges, fees and taxes, and give all notices necessary and incidental to the due and lawful prosecution of the Work. As a condition of performance of this Contract, the CONTRACTOR shall pay all federal, state and local taxes incurred by the CONTRACTOR, in the performance of this Contract. Proof of payment of these taxes is a condition precedent to final payment by the DEPARTMENT under this Contract.
- 7.2.2 The CONTRACTOR's certification that taxes have been paid (as contained in the *Release of Contract*) will be verified with the Department of Revenue and Department of Labor, prior to final payment.
- 7.2.3 If any federal, state or local tax is imposed, charged, or repealed after the date of bid opening and is made applicable to and paid by the CONTRACTOR on the articles or supplies herein contracted for, then the Contract shall be increased or decreased accordingly by a Change Order.

7.3 Patented Devices, Materials and Processes

If the CONTRACTOR employs any design, device, material, or process covered by letters of patent, trademark or copyright, the CONTRACTOR shall provide for such use by suitable legal agreement with the patentee or owner. The CONTRACTOR and the Surety shall indemnify and save harmless the DEPARTMENT, any affected third party, or political subdivision from any and all claims for infringement by reason of the use of any such patented design, device, material or process, or any trademark or copyright, and shall indemnify the DEPARTMENT for any costs, expenses, and damages which it may be obliged to pay by reason of any infringement, at any time during the prosecution or after the completion of the Work.

7.4 Compliance of Specifications and Drawings:

If the CONTRACTOR observes that the Specifications and Drawings supplied by the DEPARTMENT are at variance with any Regulatory Requirements, CONTRACTOR shall give the Contracting Officer prompt written notice thereof, and any necessary changes will be authorized by one of the methods indicated in paragraph 9.2. as determined appropriate by the Contracting Officer. If the CONTRACTOR performs any Work knowing or having reason to know that it is contrary to such Regulatory Requirements, and without such notice to the Contracting Officer, the CONTRACTOR shall bear all costs arising therefrom; however, it shall not be the CONTRACTOR's primary responsibility to make certain that the Specifications and Drawings supplied by the DEPARTMENT are in accordance with such Regulatory Requirements.

7.5 Accident Prevention:

The CONTRACTOR shall comply with AS 18.60.075 and all pertinent provisions of the Construction Code Occupational Safety and Health Standards issued by the Alaska Department of Labor.

7.6 Sanitary Provisions:

The CONTRACTOR shall provide and maintain in a neat and sanitary condition such accommodations for the use of his employees and DEPARTMENT representatives as may be necessary to comply with the requirements of the State and local Boards of Health, or of other bodies or tribunals having jurisdiction.

7.7 Business Registration:

Comply with AS 08.18.011, as follows: "it is unlawful for a person to submit a bid or work as a contractor until he has been issued a certificate of registration by the Department of Commerce. A partnership or joint venture shall be considered registered if one of the general partners or venturers whose name appears in the name under which the partnership or venture does business is registered."

7.8 Professional Registration and Certification:

All craft trades, architects, engineers and land surveyors, electrical administrators, and explosive handlers employed under the Contract shall specifically comply with applicable provisions of AS 08.18, 08.48, 08.40, and 08.52. Provide copies of individual licenses within seven days following a request from the Contracting Officer.

7.9 Local Building Codes:

The CONTRACTOR shall comply with AS 35.10.025 which requires construction in accordance with applicable local building codes to include the obtaining of required permits.

7.10 Air Quality Control:

The CONTRACTOR shall comply with all applicable provisions of AS 46.03.04 as pertains to Air Pollution Control.

7.11 Archaeological or Paleontological Discoveries:

When the CONTRACTOR's operation encounters prehistoric artifacts, burials, remains of dwelling sites, or paleontological remains, such as shell heaps, land or sea mammal bones or tusks, the CONTRACTOR shall cease operations immediately and notify the Contracting Officer. No artifacts or specimens shall be further disturbed or removed from the ground and no further operations shall be performed at the site until so directed. Should the Contracting Officer order suspension of the CONTRACTOR's operations in order to protect an archaeological or historical finding, or order the CONTRACTOR to perform extra Work, such shall be covered by an appropriate Contract change document.

7.12 Applicable Alaska Preferences:

7.12.1 In determining the low bidder for State funded projects, a 5% bid preference has been given to "Alaska bidders", as required under AS 36.30.170. "Alaska bidder" means a person who:

(1) holds a current Alaska business license;

(2) submits a bid for goods, services, or construction under the name as appearing on the person's current Alaska business license

(3) has maintained a place of business within the state staffed by the bidder or an employee of the bidder for a period of six months immediately preceding the date of the bid;

(4) is incorporated or qualified to do business under the laws of the state, is a sole proprietorship, and the proprietor is a resident of the state or is a partnership, and all partners are residents of the state; and (5) if a joint venture, is composed entirely of ventures that qualify under (1) through (4), above.

7.12.2 In determining the low bidder for State funded projects, an "Alaska products" preference has been given as required under AS 36.30.326 - 36.30.332, when the bidder designates the use of Alaska products. The Bidder shall complete the Alaska Products Preference Worksheet per its instructions and submit it with the Bid

Proposal. If the successful Bidder/CONTRACTOR proposes to use an Alaska product and does not do so, a penalty will be assessed against the successful Bidder/CONTRACTOR in an amount equal to the product preference percentage granted to the successful Bidder/CONTRACTOR plus one percent multiplied by the total declared value of the Alaska products proposed but not used.

- 7.12.3 Pursuant to AS 36.15.050 and AS 36.30.322, "agricultural/wood" products harvested in Alaska shall be used in State funded projects whenever they are priced no more than seven percent above agricultural/wood products harvested outside the state and are of a like quality as compared with agricultural/wood products harvested outside the state, when such products are not utilized, the CONTRACTOR shall document the efforts he made towards obtaining agricultural/wood products harvested in Alaska and include in this documentation a written statement that he contacted the manufacturers and suppliers identified on the Department of Commerce and Economic Development's list of suppliers of Alaska forest products concerning the availability of agricultural/wood products harvested in Alaska and, if available, the product prices. The CONTRACTOR's use of agricultural/wood products that fail to meet the requirements of this section shall be subject to the provisions of paragraphs 12.6 through 12.9 relating to Defective Work.
- 7.12.4 The CONTRACTOR shall maintain records, in a format acceptable to the Contracting Officer, which establish the type and extent of "agricultural/wood" and "Alaska" products utilized. All record keeping and documentation associated with the requirements 7.12.2 and 7.12.3 of this paragraph, must be provided to the DEPARTMENT upon written request or as otherwise provided within the Contract Documents.

7.13 Wages and Hours of Labor:

- 7.13.1 One certified copy of all payrolls shall be submitted weckly to the State Department of Labor and, upon request, to the Controling Officer to assure to assure compliance with AS 36.05.040, *Filing Schedule of Employees Wages Paid and Other Information*. The CONTRACTOR shall be responsible for the submission of certified copies of payrolls of all Subcontractors. The certification shall affirm that the payrolls are current and complete, that the wage rates contained therein are not less than the applicable rates referenced in these Contract Documents, and that the classification set forth for each laborer or mechanic conforms with the Work he performed. The CONTRACTOR and his Subcontractors shall attend all hearings and conferences and produce such books, papers, and documents all as requested by the Department of Labor. Should federal funds be involved, the appropriate federal agency shall also receive a copy of the CONTRACTOR's certified payrolls. Regardless of project funding source, copies of all certified payrolls supplied to the State Department of Labor by the CONTRACTOR shall be supplied also to the Project Manager upon request, including submittals made by, or on behalf of, subcontractors.
- 7.13.2 The following labor provisions shall also apply to this Contract:
 - a. The CONTRACTOR and his Subcontractors shall pay all employees unconditionally and not less than once a week;
 - b. wages may not be less than those stated under AS 36.05.010, regardless of the contractual relationship between the CONTRACTOR or Subcontractors and laborers, mechanics, or field surveyors;
 - c. the scale of wages to be paid shall be posted by the CONTRACTOR in a prominent and easily accessible place at the site of the Work;
 - d. the DEPARTMENT 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
 - 1. the rates of wages required by the Contract to be paid laborers, mechanics, or field surveyors on the Work, and
 - 2. the rates of wages in fact received by laborers, mechanics or field surveyors.

7.13.3 Within three calendar days of award of a construction contract, the CONTRACTOR shall file a "Notice of Work" with the Department of Labor and shall pay all related fees. The Contracting Officer will not issue Notice to Proceed to the CONTRACTOR until such notice and fees have been paid to the State Department of Labor. Failure of the CONTRACTOR to file the Notice of Work and pay fees within this timeframe shall not constitute grounds for an extension of contract time or adjustment of contract price.

7.14 Overtime Work Hours and Compensation:

Pursuant to 40 U.S.C. 327-330 and AS 23.10.060 -.110, the CONTRACTOR shall not require nor permit any laborer or mechanic in any workweek in which he is employed on any Work under this Contract to work in excess of eight hours in any Calendar Day or in excess of forty hours in such workweek on Work subject to the provisions of the *Contract Work Hours and Safety Standards Act* unless such laborer or mechanic receives compensation at a rate not less than one and one half times his basic rate of pay for all such hours worked in excess of eight hours in any Calendar Day or in excess of forty hours in such workweek whichever is the greater number of overtime hours. In the event of any violation of this provision, the CONTRACTOR shall be hable to any affected employee for any amounts due and penalties and to the DEPARTMENT for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or nechanic employed in violation of this provision in the sum of \$10.00 for each Calendar Day on which such employee was required or permitted to be employed on such Work in excess of eight hours or in excess of the standard workweek of forty hours without payment of the overtime wages required by this paragraph.

ARTICLE 8 - OTHER WORK

8.1 Related Work at Site:

- 8.1.1 The DEPARTMENT reserves the right at any time to contract for and perform other or additional work on or near the Work covered by the Contract.
- 8.1.2 When separate contracts are let within the limits of the Project, the CONTRACTOR shall conduct his Work so as not to interfere with or hinder the work being performed by other contractors. The CONTRACTOR when working on the same Project with other contractors shall cooperate with such other contractors. The CONTRACTOR shall join his Work with that of the others in an acceptable manner and shall perform it in proper sequence to that of others.
- 8.1.3 If the fact that other such work is to be performed is identified or shown in the Contract Documents the CONTRACTOR shall assume all liability, financial or otherwise, in connection with this Contract and indemnify and save harmless the DEPARTMENT from any and all damages or claims that may arise because of inconvenience, delay, or loss experienced by the CONTRACTOR because of the presence and operations of other contractors.
- 8.1.4 If the fact that such other work is to be performed was not identified or shown in the Contract Documents, written notice thereof will be given to the CONTRACTOR prior to starting any such other work. If the CONTRACTOR believes that such performance will require an increase in Contract Price or Contract Time, the CONTRACTOR shall notify the Contracting Officer of such required increase within fifteen (15) calendar days following receipt of the Contracting Officer's notice. Should the Contracting Officer find such increase(s) to be justified, a Change Order will be executed.

8.2 Access, Cutting, and Patching:

The CONTRACTOR shall afford each utility owner and any other contractor who is a party to such a direct contract with the DEPARTMENT (or the DEPARTMENT, if the DEPARTMENT is performing the additional work with the DEPARTMENT's employees) proper and safe access to the site and a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such work, and shall properly connect and coordinate the Work with the work of others. The CONTRACTOR shall do all cutting, fitting and patching of the Work that may be required to make its several parts come together properly and integrate with such other work, the CONTRACTOR shall not endanger any work of others by cutting, excavating or otherwise altering their work and will only cut or alter such other work with the written consent of the Contracting Officer. The duties and responsibilities of the CONTRACTOR under this paragraph are for the benefit of other contractors to the extent that there are comparable provisions for the benefit of the CONTRACTOR in said direct contracts between the DEPARTMENT and other contractors.

8.3 Defective Work by Others:

If any part of the CONTRACTOR's Work depends for proper execution or results upon the work of any such other contractor, utility owner, or the DEPARTMENT, the CONTRACTOR shall inspect and promptly report to the Contracting Officer in writing any delays, defects or deficiencies in such work that render it unavailable or unsuitable for such proper execution and results. The CONTRACTOR's failure to so report will constitute an acceptance of the other work as fit and proper for integration with CONTRACTOR's Work except for latent or nonapparent defects and deficiencies in the other work.

8.4 Coordination:

If the DEPARTMENT contracts with others for the performance of other work at the site, Contracting Officer will have authority and responsibility for coordination of the activities among the various prime contractors.

ARTICLE 9 - CHANGES

9.1 DEPARTMENT's Right to Change:

Without invalidating the Contract and without notice to any Surety, the DEPARTMENT may, at any time or from time to time, order additions, deletions or revisions in the Work within the general scope of the Contract, including hut not limited to changes:

- 9.1.1 In the Contract Documents;
- 9.1.2 In the method or manner of performance of the Work;
- 9.1.3 In State-furnished facilities, equipment, materials, services, or site;
- 9.1.4 Directing acceleration in the performance of the Work.

9.2 Authorization of Changes within the General Scope:

Additions, deletions, or revisions in the Work within the general scope of the Contract as specified in 9.1 shall be authorized by one or more of following ways:

- 9.2.1 Directive (pursuant to paragraph 9.3)
- 9.2.2 A Change Order (pursuant to paragraph 9.4)
- 9.2.3 DEPARTMENT's acceptance of Shop Drawing variations from the Contract Documents as specifically identified by the CONTRACTOR as required by paragraph 6.20.4.

9.3 Directive:

- 9.3.1 The Contracting Officer shall provide written clarification or interpretation of the Contract Documents (pursuant to paragraph 3.6).
- 9.3.2 The Contracting Officer may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Time and are consistent with the overall intent of the Contract Documents.
- 9.3.3 The Contracting Officer may order the Contractor to correct Defective Work or methods which are not in conformance with the Contract Documents.
- 9.3.4 The Contracting Officer may direct the commencement or suspension of Work or emergency related Work (as provided in paragraph 6.19).
- 9.3.5 Upon the issuance of a Directive to the CONTRACTOR by the Contracting Officer, the CONTRACTOR shall proceed with the performance of the Work as prescribed by such Directive.
- 9.3.6 If the CONTRACTOR believes that the changes noted in a Directive may cause an increase in the Contract Price or an extension of Contract Time, the CONTRACTOR shall immediately provide written notice to the Contracting Officer depicting such increases before proceeding with the Directive, except in the case of an emergency. If the Contracting Officer finds the increase in Contract Price or the extension of Contract Time justified, a Change Order will be issued. If however, the Contracting Officer does not find that a Change Order is justified, the Contracting Officer may direct the CONTRACTOR to proceed with the Work. The CONTRACTOR shall cooperate with the Contracting Officer in keeping complete daily records of the cost of such Work. If a Change Order is ultimately determined to be justified, in the absence of agreed prices and unit prices, payment for such Work will be made ou a "cost of the work basis" as provided in 10.4

9.4 Change Order:

A change in Contract Time, Contract Price, or responsibility may be made for changes within the scope of the Work by Change Order. Upon receipt of an executed Change Order, the CONTRACTOR shall promptly proceed with the Work involved which will be performed under the applicable conditions of the Contract Documents except as otherwise specifically provided. Changes in Contract Price and Contract Time shall be made in accordance with Articles 10 and 11. A Change Order shall be considered executed when it is signed by the DEPARTMENT.

9.5 Shop Drawing Variations:

Variations by shop drawings shall only be eligible for consideration under 9.4 when the conditions affecting the price, time, or responsibility are identified by the CONTRACTOR in writing and a request for a Change Order is submitted as per 6.20.4.

9.6 Changes Outside the General Scope; Supplemental Agreement:

Any change which is outside the general scope of the Contract, as determined by the Contracting Officer, must be authorized by a Supplemental Agreement signed by the appropriate representatives of the DEPARTMENT and the CONTRACTOR.

9.7 Unauthorized Work:

The CONTRACTOR shall not be entitled to an increase in the Contract Price or an extension of the Contract Time with respect to any work performed that is not required by the Contract Documents as amended, modified and supplemented as provided in this Article 9, except in the case of an emergency as provided in paragraph 6.19 and except in the case of uncovering Work as provided in paragraph 12.4.2.

9.8 Notification of Surety:

If notice of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Time) is required by the provisions of any bond to be given to a Surety, the giving of any such notice will be the CONTRACTOR's responsibility, and the amount of each applicable bond will be adjusted accordingly.

9.9 Differing Site Conditions:

- 9.9.1 The CONTRACTOR shall promptly, and before such conditions are disturbed (except in an emergency as permitted by paragraph 6.19), notify the Contracting Officer in writing of: (1) subsurface or latent physical conditions at the site differing materially from those indicated in the Contract, and which could not have been discovered by a careful examination of the site, or (2) unknown physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this Contract. The Contracting Officer shall promptly investigate the conditions, and if the Contracting Officer finds that such conditions do materially so differ and cause an increase or decrease in the CONTRACTOR's cost of, or time required for, performance of this Contract, an adjustment shall be made and the Contract modified in writing accordingly. An adjustment in compensation shall be computed under Article 10.
- 9.9.2 Any claim for additional compensation by the CONTRACTOR under this clause shall be made in accordance with Article 15. In the event that the Contracting Officer and the CONTRACTOR are unable to reach an agreement concerning an alleged differing site condition, the CONTRACTOR will be required to keep an accurate and detailed record which will indicate the actual "cost of the work" done under the alleged differing site condition. Failure to keep such a record shall be a bar to any recovery by reason of such alleged differing site conditions. The Contracting Officer shall be given the opportunity to supervise and check the keeping of such records.

9.10 Interim Work Authorization:

An Interim Work Authorization may be used to establish a change within the scope of the Work; however, only a Change Order shall establish associated changes in Contract Time and Price. Work authorized by Interim Work Authorization shall be converted to a Change Order. The basis of payment shall be as stated in the Interim Work Authorization, unless it states that the basis of payment has not been established and is to be negotiated, in which case the Cost of the Work shall be documented pursuant to Article 10.4, to establish a basis for negotiating a lump sum price for the Change Order.

ARTICLE 10 - CONTRACT PRICE; COMPUTATION AND CHANGE

10.1 Contract Price:

The Contract Price constitutes the total compensation (subject to authorized adjustments) payable to the CONTRACTOR for performing the Work. All duties, responsibilities and obligations assigned to or undertaken by the CONTRACTOR shall be at his expense without change in the Contract Price. The Contract Price may only be changed by a Change Order or Supplemental Agreement.

10.2 Claim for Price Change:

Any claim for an increase or decrease in the Contract Price shall be submitted in accordance with the terms of Article 15, and shall not be allowed unless notice requirements of this Contract have been met.

10.3 Change Order Price Determination:

The value of any Work covered by a Change Order for an increase or decrease in the Contract Price shall be determined in one of the following ways:

- 10.3.1 Where the Work involved is covered by unit prices contained in the Contract Documents, by application of unit prices to the quantities of the items involved (subject to the provisions of subparagraphs 10.9.1 through 10.9.3, inclusive).
- 10.3.2 By mutual acceptance of a lump sum (fixed price) which includes overhead and profit. The lump sum (fixed price) shall be negotiated on the basis of the estimated "cost of the work" in accordance with Articles 10.4 and 10.5. The following maximum rates of cost markup (to cover both overhead and profit of the CONTRACTOR) shall be used in the negotiation of a Lump Sum Change Order:
 - a. For costs incurred under paragraphs 10.4.1 and 10.4.2, the CONTRACTOR's fee shall be twenty percent;
 - b. For costs incurred under paragraph 10.4.3, the CONTRACTOR's fee shall be ten percent; and if a subcontract is on the basis of "cost of the work" plus a fee, the maximum allowable to CONTRACTOR on account of overhead and profit for itself and all Subcontractors and multiple tiers thereof shall be fifteen percent of the cost incurred by the subcontractor actually performing the work;
 - c. No fee shall be payable on the basis of costs itemized under paragraphs 10.4.4, 10.4.5 and 10.5;
 - d. The amount of credit to be allowed by the CONTRACTOR to the DEPARTMENT for any such change which results in a net decrease in cost will be the amount of the actual net decrease plus a deduction in CONTRACTOR's fee by an amount equal to twenty percent of the net decrease; and
 - e. When both additions and credits are involved in any oue change, the adjustment in CONTRACTOR's fee shall be computed on the basis of the net change in accordance with paragraphs 10.3.2.a through 10.3.2.d, inclusive
- 10.3.3 When 10.3.1 and 10.3.2 are inapplicable, on the basis of the "cost of the work" (determined as provided in paragraphs 10.4 and 10.5) plus a CONTRACTOR's fee for overhead and profit (determined as provided in paragraph 10.6).
- 10.3.4 Before a Change Order or Supplemental Agreement is Approved, the CONTRACTOR shall submit cost or pricing data regarding the changed or extra Work. The CONTRACTOR shall certify that the data submitted is, to his best knowledge and belief, accurate, complete and current as of a mutually determined specified date and that such data will continue to be accurate and complete during the performance of the changed or extra Work.

10.4 Cost of the Work:

The term "cost of the work" means the sum of all costs necessarily incurred and paid by the CONTRACTOR in the proper performance of the Work. Except as otherwise may be agreed to in writing by the DEPARTMENT, such costs shall be in amount no higher than those prevailing in the locality of the Project, shall include only the following items and shall not include any of the costs itemized in subparagraph 10.5:

- 10.4.1 Payroll costs for employees in the direct employ of the CONTRACTOR in the performance of the Work under schedules of job classifications agreed upon by the DEPARTMENT and the CONTRACTOR. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall be limited to, salaries and wages plus the cost of fringe benefits which shall include social security contributions, unemployment, excise and payroll taxes, workers' or workmen's compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. Such employees shall include manual workers up through the level of foreman but shall not include general foremen, superintendents, and non-manual employees. The expenses of performing Work after regular working hours, on Saturday, Sunday or legal holidays, shall be included in the above to the extent authorized by the DEPARTMENT.
- 10.4.2 Cost of all materials and equipment furnished and incorporated or consumed in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to the CONTRACTOR unless the DEPARTMENT deposits funds with the CONTRACTOR with which to make payments, in which case the cash discounts shall accrue to the DEPARTMENT. All trade discounts, rebates and refunds and all returns from sale of surplus materials and equipment shall accrue to the DEPARTMENT, and the CONTRACTOR shall make provisions so that they may be obtained.
- 10.4.3 Payments made by the CONTRACTOR to Subcontractors for Work performed by Subcontractors. If required by the DEPARTMENT, CONTRACTOR shall obtain competitive quotes from Subcontractors or Supplicrs acceptable to the CONTRACTOR and shall deliver such quotes to the DEPARTMENT who will then determine which quotes will be accepted. If a subcontract provides that the Subcontractor is to be paid on the basis of "cost of the work" plus a fee, the Subcontractor' "cost of the work" shall be determined in the same manner as the CONTRACTOR's "cost of work" as described in paragraphs 10.4 through 10.5; and the Subcontractor's fee shall be established as provided for under subparagraph 10.6.2 clause b. All subcontracts shall be subject to the other provisions of the Contract Documents insofar as applicable.
- 10.4.4 Costs of special consultants (including but not limited to engineers, architects, testing laboratories, and surveyors) employed for services necessary for the completion of the Work.
- 10.4.5 Supplemental costs including the following:
 - a. The proportion of necessary transportation, travel and subsistence expenses of the CONTRACTOR's employees incurred in discharge of duties connected with the Work.
 - b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office and temporary facilities at the site and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost less market value of such items used but not consumed which remain the property of the CONTRACTOR.
 - c. Rentals of all construction equipment and machinery and the parts thereof whether rented from the CONTRACTOR or others in accordance with rental agreements Approved by the DEPARTMENT and the costs of transportation, loading, unloading, installation, dismantling and removal thereof all in accordance with terms of said rental agreements. The rental of any such equipment, machinery or parts shall cease when the use thereof is no longer necessary for the Work.

For any machinery or special equipment (other than small tools) which has been authorized by the Project

Manager, the CONTRACTOR shall receive the rental rates in the current edition and appropriate volume of the "Rental Rate Blue Book for Construction Equipment", published by Dataquest, Inc., 1290 Ridder Park Drive, San Jose, CA 95131. Hourly rental rates shall be determined as follows:

The established hourly rental rate shall be equal to the adjusted monthly rate for the basic equipment plus the adjusted monthly rate for applicable attachments, both divided by 176, and multiplied by the area adjustment factor, plus the estimated hourly operating cost.

The adjusted monthly rate is that resulting from application of the rate adjustment formula in order to eliminate replacement cost allowances in machine depreciation and contingency cost allowances.

Attachments shall not be included unless required for the time and materials work.

For equipment not listed in The Blue Book, the CONTRACTOR shall receive a rental rate as agreed upon before such work is begun. If agreement cannot be reached, the DEPARTMENT reserves the right to establish a rate based on similar equipment in the Blue Book or prevailing commercial rates in the area.

These rates shall apply for equipment used during the CONTRACTOR's regular shift of 10 hours per day. Where the equipment is used more than 10 hours per day, either on the CONTRACTOR's normal work or on time and materials, and either on single or multiple shifts, an overtime rate, computed as follows, shall apply:

The hourly overtime rate shall be equal to the adjusted monthly rate for the basic equipment plus the adjusted monthly rate for applicable attachments, both divided by 352, and multiplied by the area adjustment factor, plus the estimated hourly operating cost.

Equipment which must be rented or leased specifically for work required under this section shall be authorized in writing by the Project Manager. The CONTRACTOR shall be paid invoice price plus 15%.

When it is necessary to obtain equipment from sources beyond the project limits exclusively for time and materials, work, the actual cost of transferring the equipment to the site of the work and return will be allowed as an additional item of expense. Where the move is made by common carrier, the move-in allowance will he limited to the amount of the freight bill or invoice. If the CONTRACTOR hauls the equipment with his own forces, the allowance will be limited to the rental rate for the hauling unit plus operator wages. In the event that the equipment is transferred under its own power, the moving allowance will be limited to one-half of the normal hourly rental rate plus operator's wages. In the event that the move-out is to a different location, payment will in no instance exceed the amount of the move-in. Move-in allowance shall not be made for equipment brought to the project for time and materials work which is subsequently retained on the project and utilized for completion of contract items, camp maintenance, or related work.

Equipment ordered to be on a stand-by basis shall be paid for at the stand-by rental rate for the number of hours in the CONTRACTOR'S normal work shift, but not to exceed 8 hours per day. The stand-by rental rate shall be computed as follows:

The hourly stand-by rate shall be equal to the adjusted monthly rate for the basic equipment plus the adjusted monthly rate for applicable attachments, both divided by 352, all multiplied by the area adjustment factor.

Time will be recorded to the nearest one-quarter hour for purposes of computing compensation to the CONTRACTOR for equipment utilized under these rates.

The equipment rates as determined above shall be full compensation, including overhead and profit, for providing the required equipment and no additional compensation will be made for other costs such as, but not limited to, fuels, lubricants, replacement parts or maintenance costs. Cost of repairs, both major and minor, as well as charges for mechanic's time utilized in servicing equipment to ready it for use prior to moving to the project and similar charges will not be allowed.

- d. Sales, consumer, use or similar taxes related to the Work, and for which the CONTRACTOR is liable, imposed by Regulatory Requirements.
- e. Deposits lost for causes other than negligence of the CONTRACTOR, any Subcontractor or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
- f. Losses and damages (and related expenses), not compensated by insurance or otherwise, to the Work or otherwise sustained by the CONTRACTOR in connection with the performance and furnishing of the Work provided they have resulted from causes other than the negligence of the CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and Approval of the DEPARTMENT. No such losses, damages and expenses shall be included in the "cost of the work" for the purpose of determining the CONTRACTOR's fee. If, however, any such loss or damage requires reconstruction and the CONTRACTOR is placed in charge thereof, the CONTRACTOR shall be paid for services a fee proportionate to that stated in paragraphs 10.6.2.a and 10.6.2.b.
- g. The cost of utilities, fuel and sanitary facilities at the site.
- h. Minor expenses such as telegrams, long distance telephone calls, telephone service at the site, expressage and similar petty cash items in connection with the Work.
- E. Cost of premiums for additional bonds and insurance required because of changes in the Work and premiums for property insurance coverage within the limits of the deductible amonnts established by the DEPARTMENT in accordance with Article 5.

10.5 Excluded Costs:

The term "cost of the work" shall not include any of the following:

- 10.5.1 Payroll costs and other compensation of CONTRACTOR's officers, executives, principals (of partnership and sole proprietorships), general managers, engincers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agency, expeditors, timekeepers, clerks and other personnel employed by CONTRACTOR whether at the site or in CONTRACTOR's principal or a branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in paragraph 10.4.1 or specifically covered by paragraph 10.4.4 all of which are to be considered administrative costs covered by the CONTRACTOR's fee.
- 10.5.2 Expenses of CONTRACTOR's principal and branch offices other than CONTRACTOR's office at the site.
- 10.5.3 Any part of CONTRACTOR's capital expenses including interest on CONTRACTOR's capital employed for the Work and charges against CONTRACTOR for delinquent payments.
- 10.5.4 Cost of premiums for all bonds and for all insurance whether or not CONTRACTOR is required by the Contract Documents to purchase and maintain the same (except for the cost of premiums covered by subparagraph 10.4.5.i above).
- 10.5.5 Costs due to the negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of Defective Work, disposal of materials or equipment wrongly supplied and making good any damage to property.
- 10.5.6 Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in paragraph 10.4.

10.6 CONTRACTOR's Fee;

The CONTRACTOR's fee allowed to CONTRACTOR for overhead and profit shall be determined as follows.

- 10.6.1 A mutually acceptable fixed fee; or if none can be agreed upon.
- 10.6.2 A fee based on the following percentages of the various portions of the "cost of the work":
 - a. For costs incurred under paragraphs 10.4.1 and 10.4.2, the CONTRACTOR's fee shall be fifteen percent;
 - b. For costs incurred under paragraph 10.4.3, the CONTRACTOR's fee shall be ten percent; and if a subcontract is on the basis of "cost of the work" plus a fee, the maximum allowable to CONTRACTOR on account of overhead and profit for itself and all Subcontractors and multiple tiers thereof shall be fifteen percent of the cost incurred by the subcontractor actually performing the work;
 - c. No fee shall be payable on the basis of costs itemized under paragraphs 10.4.4, 10.4.5 and 10.5;
 - d. The amount of credit to be allowed by the CONTRACTOR to the DEPARTMENT for any such change which results in a net decrease in cost will be the amount of the actual net decrease plus a deduction in CONTRACTOR's fee by an amount equal to fifteen percent of the net decrease; and
 - e. When both additions and credits are involved in any one change, the adjustment in CONTRACTOR's fee shall be computed on the basis of the net change in accordance with paragraphs 10.6.2.a through 10.6.2.d, inclusive.

10.7 Cost Breakdown:

Whenever the cost of any Work is to be determined pursuant to paragraphs 10.4 and 10.5, the CONTRACTOR will submit in a form acceptable to the DEPARTMENT an itemized cost breakdown together with supporting data.

10.8 Cash Allowances:

It is understood that CONTRACTOR has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be done by such Subcontractors or Suppliers and for such sums within the limit of the allowances as may be acceptable to the Contracting Officer. CONTRACTOR agrees that:

- 10.8.1 The allowances include the cost to CONTRACTOR (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the site, and all applicable taxes; and
- 10.8.2 CONTRACTOR's cost for unloading and handling on the site, labor, installation costs, overhead, profit and other expenses contemplated for the allowances have been included in the Contract Price and not in the allowances. No demand for additional payment on account of any thereof will be valid.

Prior to final payment, an appropriate Change Order will be issued to reflect actual amounts due the CONTRACTOR on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

10.9 Unit Price Work:

10.9.1 Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the established unit prices for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Contract. The estimated quantities of items of Unit Price Work are not guaranteed and arc solely for the purpose of comparison of bids and determining an initial Contract Price. Determinations of the actual quantities and classifications of Unit Price Work performed by the CONTRACTOR will be made by the

DEPARTMENT in accordance with paragraph 10.10.

- 10.9.2 Each unit price will be deemed to include an amount considered by the CONTRACTOR to be adequate to cover the CONTRACTOR's overhead and profit for each separately identified item. If the "Basis of Payment" clause in the Contract Documents relating to any unit price in the bid schedule requires that the said unit price cover and be considered compensation for certain work or material essential to the item, this same work or material will not also be measured or paid for under any other pay item which may appear elsewhere in the Contract Documents.
- 10.9.3 Payment to the CONTRACTOR shall be made only for the actual quantities of Work performed and accepted or materials furnished, in conformance with the Contract Documents. When the accepted quantities of Work or materials vary from the quantities stated in the bid schedule, or change documents, the CONTRACTOR shall accept as payment in full, payment at the stated unit prices for the accepted quantities of Work and materials furnished, completed and accepted; except as provided below:
 - a. When the quantity of Work to be done or material to be furnished under any item, for which the total cost of the item exceeds 10% of the total Contract Price, is increased by more than 25 percent of the quantity stated in the bid schedule, or change documents, either party to the Contract, upon demand, shall be entitled to an equitable unit price adjustment on that portion of the Work above 125 percent of the quantity stated in the bid schedule.
 - b. When the quantity of Work to he done or material to be furnished under any major item, for which the total cost of the item exceeds 10% of the total Contract Price, is decreased by more than 25 percent of the quantity stated in the bid schedule, or change documents either party to the Contract, upon demand, shall be entitled to an equitable price adjustment for the quantity of Work performed or material furnished, limited to a total payment of not more than 75 percent of the amount originally bid for the item.

10.10 Determinations for Unit Prices:

The Contracting Officer will determine the actual quantities and classifications of Unit Price Work performed by the CONTRACTOR. The Contracting Officer will review with the CONTRACTOR preliminary determinations on such matters before finalizing the costs and quantities on the Schedule of Values. The Contracting Officer's acknowledgment thereof will be final and binding on the CONTRACTOR, unless, within 10 days after the date of any such decisions, the CONTRACTOR delivers to the Contracting Officer written notice of intention to appeal from such a decision.
ARTICLE 11 - CONTRACT TIME; COMPUTATION AND CHANGE

11.1 Commencement of Contract Time; Notice to Proceed:

The Contract Time will commence to run on the day indicated in the Notice to Proceed.

11.2 Starting the Work:

No Work on Contract items shall be performed before the effective date of the Notice to Proceed. The CONTRACTOR shall notify the Contracting Officer at least 24 hours in advance of the time actual construction operations will begin. The CONTRACTOR may request a limited Notice to Proceed after Award has been made, to permit him to order long lead materials which could cause delays in Project completion. However, grauting is within the sole discretion of the Contracting Officer, and refusal or failure to grant a limited Notice to Proceed shall not be a basis for claiming for delay, extension of time, or alteration of price.

11.3 Computation of Contract Time:

11.3.1 When the Contract Time is specified on a Calendar Day basis, all Work under the Contract shall be completed within the number of Calendar Days specified. The count of Contract Time begins on the day following receipt of the Notice to Proceed by the CONTRACTOR, if no starting day is stipulated therein.

Calendar Days shall continue to be counted against Contract Time until and including the date of Substantial Completion of the Work.

- 11.3.2 When the Contract completion time is specified as a fixed calendar date, it shall be the date of Substantial Completion.
- 11.3.3 The Contract Time shall be as stated on form 25D-9, Proposal.

11.4 Time Change:

The Contract Time may only be changed by a Change Order or Supplemental Agreement.

11.5 Extension Due to Delays:

The right of the CONTRACTOR to proceed shall not be terminated nor the CONTRACTOR charged with liquidated or actual damages because of delays to the completion of the Work due to unforeseeable causes beyond the control and without the fault or negligence of the CONTRACTOR, including, but not restricted to the following: acts of God or of the public enemy, acts of the DEPARTMENT in its contractural capacity, acts of another contractor in the performance of a contract with the DEPARTMENT, floods, fires, epidemics, quarantine restrictions, strikes, freight embargoes, unusually severe weather and delays of Subcontractors or Suppliers due to such causes. Any delay in receipt of materials on the site, caused by other than one of the specifically mentioned occurences above, does not of itself justify a time extension, provided that the CONTRACTOR shall within twenty four (24) hours from the beginning of any such delay (unless the Contracting Officer shall grant a further period of the time prior to the date of final settlement of the Contract), notify the Contracting Officer in writing of the cause of delay. The Contracting Officer shall ascertain the facts and the extent of the delay and extend the time for completing the Work when the findings of fact justify such an extension.

11.6 Essence of Contract:

All time limits stated in the Contract Documents are of the essence of the Contract.

11.7 Reasonable Completion Time:

It is expressly understood and agreed by and between the CONTRACTOR and the DEPARTMENT that the date of

beginning and the time for Substantial Completion of the Work described herein are reasonable times for the completion of the Work.

11.8 Delay Damages:

Whether or not the CONTRACTOR's right to proceed with the Work is terminated, he and his Sureties shall be liable for damages resulting from his refusal or failure to complete the Work within the specified time.

Liquidated and actual damages for delay shall be paid by the CONTRACTOR or his Surety to the DEPARTMENT in the amount as specified in the Supplementary Conditions for each Calendar Day the completion of the Work or any part thereof is delayed beyond the time required by the Contract, or any extension thereof. If a listing of incidents resulting from a delay and expected to give rise to actual or liquidated damages is not established by th Contract Documents, then the CONTRACTOR and his Surety shall be liable to the DEPARTMENT for any actual damages occasioned by such delay. The CONTRACTOR acknowledges that the liquidated damages established herein are not a peualty but rather constitute an estimate of damages that the DEPARTMENT will sustain by reason of delayed completion. These liquidated and actual damages are intended as compensation for losses anticipated to arise, and include those items enumerated in the Supplementary Conditions.

These damages will continue to run both before and after termination in the event of default termination. These liquidated damages do not cover excess costs of completion or DEPARTMENT costs, fees, and charges related to reprocurement. If a default termination occurs, the CONTRACTOR or his Surety shall pay in addition to these damages, all excess costs and expenses related to completion as provided by Article 14.2.5.

ARTICLE 12 - QUALITY ASSURANCE

12.1 Warranty and Guaranty:

The CONTRACTOR warrants and guarantees to the DEPARTMENT that all Work will be in accordance with the Contract Documents and will not be Defective. Prompt notice of all defects shall be given to the CONTRACTOR. All Defective Work, whether or not in place, may be rejected, corrected or accepted as provided for in this article.

12.2 Access to Work:

The DEPARTMENT and the DEPARTMENT's representatives, testing agencies and governmental agencies with jurisdiction interests will have access to the Work at reasonable times for their observation, inspecting and testing. The CONTRACTOR shall provide proper and safe conditions for such access.

12.3 Tests and Inspections:

- 12.3.1 The CONTRACTOR shall give the Contracting Officer timely notice of readiness of the Work for all required inspections, tests or Approvals.
- 12.3.2 If Regulatory Requirements of any public body having jurisdiction require any Work (or part thereof) to specifically be inspected, tested or approved, the CONTRACTOR shall assume full responsibility therefor, pay all costs in connection therewith and furnish the Contracting Officer the required certificates of inspection, testing or approval. The CONTRACTOR shall also be responsible for and shall pay all costs in connection with any inspection or testing required in connection with DEPARTMENT's acceptance of a Supplier of materials or equipment proposed to be incorporated in the Work, or of inaterials or equipment submitted for Approval prior to the CONTRACTOR's purchase thereof for incorporation in the Work. The cost of all inspections, tests and approvals in addition to the above which are required by the Contract Documents shall be paid by the CONTRACTOR. The DEPARTMENT may perform additional tests and inspections which it deems necessary to insure quality control. All such failed tests or inspections shall be at the CONTRACTOR's expense.
- 12.3.4 If any Work (including the work of others) that is to be inspected, tested or Approved is covered without written concurrence of the Contracting Officer, it must, if requested by the Contracting Officer, be uncovered for observation. Such uncovering shall be at the CONTRACTOR's expense unless the CONTRACTOR has given the Contracting Officer timely notice of CONTRACTOR's intention to cover the same and the Contracting Officer has not acted with reasonable promptness in response to such notice.
- 12.3.5 Neither observations nor inspections, tests or Approvals by the DEPARTMENT or others shall relieve the CONTRACTOR from the CONTRACTOR's obligations to perform the Work in accordance with the Contract Documents.

12.4 Uncovering Work:

12.4.1 If any Work is covered contrary to the written request of the Contracting Officer, it must, if requested by the Contracting Officer, be uncovered for the Contracting Officer's observation and replaced at the CONTRACTOR's expense.

12.4.2 If the Contracting Officer considers it necessary or advisable that covered Work be observed inspected or tested, the CONTRACTOR, at the Contracting Officer's request, shall uncover, expose or otherwise make available for observation, inspection or testing as the Contracting Officer may require, that portion of the Work in question, furnishing all necessary labor, material and equipment. If it is found that such Work is Defective, the CONTRACTOR shall bear all direct, indirect and consequential costs of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction, (including but not limited to fees and charges of engineers, architects, attorneys and other professionals) and the DEPARTMENT shall be entitled to an appropriate decrease in the Contract Price. If, however, such Work is not found to be Defective, the CONTRACTOR shall be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to such uncovering, exposure, observation, inspection.

12.5 DEPARTMENT May Stop the Work:

If the Work is Defective, or the CONTRACTOR fails to supply suitable materials or equipment, or fails to furnish or perform the Work in such a way that the completed Work will conform to the Contract Documents, the Contracting Officer may order the CONTRACTOR to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of the Contracting Officer to stop the Work shall not give rise to any duty on the part of the Contracting Officer to exercise this right for the benefit of the CONTRACTOR or any other party.

12.6 Correction or Removal of Defective Work:

If required by the Contracting Officer, the CONTRACTOR shall promptly, as directed, either correct all Defective Work, whether or not fabricated, installed or completed, or, if the Work has been rejected by the Contracting Officer, remove it from the site and replace it with Work which conforms to the requirements of the Contract Documents. The CONTRACTOR shall bear all direct, indirect and consequential costs of such correction or removal (including but not limited to fees and charges of engineers, architects, attorneys and other professionals) made necessary thereby.

12.7 One Year Correction Period:

If within one year after the date of Substantial Completion of the relevant portion of the work or such longer period of time as may be prescribed by Regulatory Requirements or by the terms of any applicable special guarantee required by the Contract Documents or by any specific provision of the Contract Documents, any Work is found to he Defective, the CONTRACTOR shall promptly, without cost to the DEPARTMENT and in accordance with the Contracting Officer's written instructions, either correct such Defective Work, or, if it has been rejected by the Contracting Officer, remove it from the site and replace it with conforming Work. If the CONTRACTOR does not promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, the DEPARTMENT may have the Defective Work corrected or the rejected Work removed and replaced, and all direct, indirect and consequential costs of such removal and replacement (including but not limited to fees and charges of engineers, architects, attorneys and other professionals) will be paid by the CONTRACTOR. In special circumstances where a particular item of equipment is placed in continuous service for the benefit of the DEPARTMENT before Substantial Completion of all the Work, the correction period for that item may begin on an earlier date if so provided in the Specifications or by Change Order. Provisions of this paragraph are not intended to shorten the statute of limitations for bringing an action.

12.8 Acceptance of Defective Work:

Instead of requiring correction or removal and replacement of Defective Work, the Contracting Officer may accept Defective Work, the CONTRACTOR shall bear all direct, indirect and consequential costs attributable to the Contracting Officer's evaluation of and determination to accept such Defective Work (costs to include but not be limited to fees and charges of engineers, architects, attorneys and other professionals). If any such acceptance occurs prior to final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and the DEPARTMENT shall be entitled to an appropriate decrease in the Contract Price. If the DEPARTMENT has already made final payment to the CONTRACTOR, an appropriate amount shall be paid by the CONTRACTOR or his Surety to the DEPARTMENT.

12.9 DEPARTMENT May Correct Defective Work:

If the CONTRACTOR fails within a reasonable time after written notice from the Contracting Officer to proceed to correct Defective Work or to remove and replace rejected Work as required by the Contracting Officer in accordance with paragraph 12.6, or if the CONTRACTOR fails to perform the Work in accordance with the Contract Documents, or if the CONTRACTOR fails to comply with any other provision of the Contract Documents, the DEPARTMENT may, after 7 days' written notice to the CONTRACTOR, correct and remedy any such deficiency. In exercising the rights and remedies under this paragraph the DEPARTMENT shall proceed expeditiously. To the extent necessary to complete corrective and remedial action, the Contracting Officer may exclude the CONTRACTOR from all or part of the site, take possession of all or part of the Work, and suspend the CONTRACTOR's services related thereto, take possession of the CONTRACTOR's tools, appliances, construction equipment and machinery at the site and incorporate in the Work all materials and equipment stored at the site or approved remote storage sites or for which the DEPARTMENT has paid the CONTRACTOR but which are stored elsewhere. The CONTRACTOR shall allow the Contracting Officer and his authorized representatives such access to the site as may be necessary to enable the Contracting Officer to exercise the rights and remedies under this paragraph. All direct, indirect and consequential costs of the DEPARTMENT in exercising such rights and remedies will be charged against the CONTRACTOR, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and the DEPARTMENT shall be entitled to an appropriate decrease in the Contract Price. Such direct, indirect and consequential costs will include but not be limited to fees and charges of engineers, architects, attorneys and other professionals, all court and arbitration costs and all costs of repair and replacement of work of others destroyed or damaged by correction, removal or replacement of the CONTRACTOR's Defective Work. The CONTRACTOR shall not be allowed an extension of time because of any delay in performance of the work attributable to the exercise, by the Contracting Officer, of the DEPARTMENT's rights and remedies hereunder.

ARTICLE 13 - PAYMENTS TO CONTRACTOR AND COMPLETION

13.1 Schedule of Values:

The Schedule of Values established as provided in paragraph 6.6 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to the Contracting Officer. Progress payments on account of Unit Price Work will be based on the number of units completed.

13.2 Preliminary Payments:

Upon approval of the Schedule of Values the CONTRACTOR may be paid for direct costs substantiated by paid invoices and other prerequisite documents required by the General Requirements. Direct costs shall include the cost of bonds, insurance, approved materials stored on the site or at approved remote storage sites, deposits required by a Supplier prior to fabricating materials, and other approved direct mobilization costs substantiated as indicated above. These payments shall be included as a part of the total Contract Price as stated in the Contract.

13.3 Application for Progress Payment:

The CONTRACTOR shall submit to the Contracting Officer for review an Application for Payment filled out and signed by the CONTRACTOR covering the Work completed as of the date of the Application for Payment and accompanied by such supporting documentation as is required by the Contract Documents. Progress payments will be made as the Work progresses on a monthly basis.

13.4 Review of Applications for Progress Payment:

Contracting Officer will either indicate in writing a recommendation of payment or return the Application for Payment to the CONTRACTOR indicating in writing the Contracting Officer's reasons for refusing to recommend payment. In the latter case, the CONTRACTOR may make the necessary corrections and resubmit the Application for Payment.

13.5 Stored Materials and Equipment:

If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, paid invoice or other documentation warranting that the DEPARTMENT has received the materials and equipment free and clear of all charges, security interests and encumbrances and evidence that the DEPARTMENT's interest therein, all of which will be satisfactory to the Contracting Officer. No payment will be made for perishable materials that could be rendered useless because of long storage periods. No progress payment will be made for living plant materials until planted.

13.6 CONTRACTOR's Warranty of Title:

The CONTRACTOR warrants and guarantees that title to all Work, materials and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to the DEPARTMENT no later than the time of payment free and clear of any claims, liens, security interests and further obligations.

13.7 Withholding of Payments:

The DEPARTMENT may withhold or refuse payment for any of the reasons listed below provided it gives written notice of its intent to withhold and of the basis for withholding:

13.7.1 The Work is Defective, or completed Work has been damaged requiring correction or replacement, or has been installed without Approval of Shop Drawings, or by an unapproved Subcontractor, or for unsuitable storage of materials and equipment.

- 13.7.2 The Contract Price has been reduced by Change Order,
- 13.7.3 The DEPARTMENT has been required to correct Defective Work or complete Work in accordance with paragraph 12.9.
- 13.7.4 The DEPARTMENT's actual knowledge of the occurrence of any of the events enumerated in paragraphs 14.2.1.a through 14.2.1.k inclusive.
- 13.7.5 Claims have been made against the DEPARTMENT or against the funds held by the DEPARTMENT on account of the CONTRACTOR's actions or inactions in performing this Contract, or there are other items entitling the DEPARTMENT to a set off.
- 13.7.6 Subsequently discovered evidence or the results of subsequent inspections or test, nullify any previous payments for reasons stated in subparagraphs 13.7.1 through 13.7.5.
- 13.7.7 The CONTRACTOR has failed to fulfill or is in violation of any of his obligations under any provision of this Contract.

13.8 Retainage:

At any time the DEPARTMENT finds that satisfactory progress is not being made it may in addition to the amounts withheld under 13.7 retain a maximum amount equal to 10% of the total amount earned on all subsequent progress payments. This retainage may be released at such time as the Contracting Officer finds that satisfactory progress is being made.

13.9 Request for Release of Funds:

If the CONTRACTOR believes the basis for withholding is invalid or no longer exists, immediate written notice of the facts and Contract provisions on which the CONTRACTOR relies, shall be given to the DEPARTMENT, together with a request for release of funds and adequate documentary evidence proving that the problem has been cured. In the case of withholding which has occurred at the request of the Department of Labor, the CONTRACTOR shall provide a letter from the Department of Labor stating that withholding is no longer requested. Following such a submittal by the CONTRACTOR, the DEPARTMENT shall have a reasonable tune to investigate and verify the facts and seek additional assurances before determining whether release of withhold payments is justified.

13.10 Substantial Completion:

When the CONTRACTOR considers the Work ready for its intended use the CONTRACTOR shall notify the Contracting Officer in writing that the Work or a portion of Work which has been specifically identified in the Contract Documents is substantially complete (except for items specifically listed by the CONTRACTOR as incomplete) and request that the DEPARTMENT issue a certificate of Substantial Completion. Within a reasonable time thereafter, the Contracting Officer, the CONTRACTOR and appropriate Consultant(s) shall make an inspection of the Work to determine the status of completion. If the Contracting Officer does not consider the Work substantially complete, the Contracting Officer will notify the CONTRACTOR in writing giving the reasons therefor. If the Contracting Officer considers the Work substantially complete, the Contracting Officer considers the Work substantially complete, the Contracting Officer considers the Work substantially complete, the Contracting Officer work substantially complete, the Contracting Officer will within fourteen days execute and deliver to the CONTRACTOR a certificate of Substantial Completion with tentative list of items to be completed or corrected. At the time of delivery of the certificate of Substantial Completion the Contracting Officer will deliver to the CONTRACTOR a written division of responsibilities pending Final Completion with respect to security, operation, safety, maintenance, heat, utilities, insurance and warranties which shall be consistent with the terms of the Contract Documents.

The DEPARTMENT shall be responsible for all DEPARTMENT costs resulting from the initial inspection and the first re-inspection, the CONTRACTOR shall pay all costs incurred by the DEPARTMENT resulting from re-

inspections, thereafter.

13.11 Access Following Substantial Completion:

The DEPARTMENT shall have the right to exclude the CONTRACTOR from the Work after the date of Substantial Completion, but the DEPARTMENT shall allow CONTRACTOR reasonable access to complete or correct items on the tentative list.

13.12 Final Inspection:

Upon written notice from the CONTRACTOR that the entire Work or an agreed portion thereof is complete, the Contracting Officer will make a final inspection with the CONTRACTOR and appropriate Consultant(s) and will notify the CONTRACTOR in writing of all particulars in which this inspection reveals that the Work is incomplete or Defective. The CONTRACTOR shall immediately take such measures as are necessary to remedy such deficiencies. The CONTRACTOR shall pay for all costs incurred by the DEPARTMENT resulting from re-inspections.

13.13 Final Completion and Application for Payment:

After the CONTRACTOR has completed all such corrections to the satisfaction of the Contracting Officer and delivered all schedules, guarantees, bonds, certificates of payment to all laborers, Subcontractors and Suppliers, and other documents - all as required by the Contract Documents; and after the Contracting Officer has indicated in writing that the Work has met the requirements for Final Completion, and subject to the provisions of paragraph 13.18, the CONTRACTOR may make application for final payment following the procedure for progress payments. The final Application for Payment shall be accompanied by all remaining certificates, warranties, guarantees, releases, affidavits, and other documentation required by the Contract Documents.

13.14 Final Payment:

- 13.14.1 If on the basis of the Contracting Officer's observation of the Work during construction and final inspection, and the Contracting Officer's review of the final Application for Payment and accompanying documentation all as required by the Contract Documents; and the Contracting Officer is satisfied that the Work has been completed and the CONTRACTOR's other obligations under the Contract Documents have been fulfilled, the DEPARTMENT will process final Application for Payment. Otherwise, the Contracting Officer will return the Application for Payment to the CONTRACTOR, indicating in writing the reasons for refusing to process final payment, in which case the CONTRACTOR shall make the necessary corrections and resubmit the final Application for Payment.
- 13.14.2 If, through no fault of the CONTRACTOR, Final Completion of the Work is significantly delayed, the Contracting Officer shall, upon receipt of the CONTRACTOR's final Application for Payment, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by the DEPARTMENT for Work not fully completed or corrected is less than the retainage provided for in paragraph 13.9, and if bonds have been furnished as required in paragraph 5.1, the written consent of the Surety to the payment of the balance due for that portion of the Work fully completed and accepted and accepted shall be submitted by the CONTRACTOR to the DEPARTMENT with the application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of claims.

13.15 Final Acceptance:

Following certification of payment of payroll and revenue taxes, and final payment to the CONTRACTOR, the DEPARTMENT will issue a letter of Final Acceptance, releasing the CONTRACTOR from further obligations under the Contract, except as provided in paragraph 13.17.

13.16 CONTRACTOR's Continuing Obligation:

The CONTRACTOR's obligation to perform and complete the Work and pay all laborers, Subcontractors, and materialmen in accordance with the Contract Documents shall be absolute. Neither any progress or final payment by the DEPARTMENT, nor the issuance of a certificate of Substantial Completion, nor any use or occupancy of the Work or any part thereof by the DEPARTMENT or Using Agency, nor any act of acceptance by the DEPARTMENT nor any failure to do so, nor any review and Approval of a Shop Drawing or sample submission, nor any correction of Defective Work by the DEPARTMENT will constitute an acceptance of Work not in accordance with the Contract Documents or a release of the CONTRACTOR's obligation to perform the Work in accordance with the Contract Documents.

When it is anticipated that restarting, testing, adjusting, or balancing of systems will be required following Final Acceptance and said requirements are noted in Section(s) 01650, such Work shall constitute a continuing obligation under the Contract.

13.17 Waiver of Claims by CONTRACTOR:

The making and acceptance of final payment will constitute a waiver of all claims by the CONTRACTOR against the DEPARTMENT other than those previously made in writing and still unsettled.

13.18 No Waiver of Legal Rights:

The DEPARTMENT shall not be precluded or be estopped by any payment, measurement, estimate, or certificate inade either before or after the completion and acceptance of the Work and payment therefor, from showing the true amount and character of the Work performed and materials furnished by the CONTRACTOR, nor from showing that any payment, measurement, estimate or certificate is untrue or is incorrectly made, or that the Work or materials are Defective. The DEPARTMENT shall not be precluded or estopped, notwithstanding any such measurement, estimate, or certificate and payment in accordance therewith, from recovering from the CONTRACTOR or his Sureties, or both, such damages as it may sustain by reason of his failure to comply with requirements of the Contract Documents. Neither the acceptance by the DEPARTMENT, or any representative of the DEPARTMENT, nor any payment for or acceptance of the whole or any part of the Work, nor any extension of the Contract Time, nor any possession taken by the DEPARTMENT, shall operate as a waiver of any portion of the Contract or of any power herein reserved, or of any right to damages. A waiver by the DEPARTMENT of any breach of the Contract shall not be held to be a waiver of any other subsequent breach.

ARTICLE 14 - SUSPENSION OF WORK, DEFAULT AND TERMINATION

14.1 DEPARTMENT May Suspend Work:

- 14.1.1 The DEPARTMENT may, at any time, suspend the Work or any portion thereof by notice in writing to the CONTRACTOR. If the Work is suspended without cause the CONTRACTOR shall be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to any suspension if the CONTRACTOR makes an Approved claim therefor as provided in Article 15. However, no adjustment shall be made under this clause for any suspension, delay, or interruption to the extent that suspension is due to the fault or negligence of the CONTRACTOR, or that suspension is necessary for Contract compliance, or that performance would have been so suspended, delayed, or interrupted by any other cause, including the fault or negligence of the CONTRACTOR.
- 14.1.2 In case of suspension of Work, the CONTRACTOR shall be responsible for preventing damage to or loss of any of the Work already performed and of all materials whether stored on or off the site or Approved remote storage sites.

14.2 Default of Contract:

- 14.2.1 The Contracting Officer may give the CONTRACTOR and its surety a written Notice to Cure Default if the CONTRACTOR:
 - a. fails to begin work in the time specified,
 - b. fails to use sufficient resources to assure prompt completion of the work,
 - c. performs the work unsuitably or neglects or refuses to remove and replace rejected materials or work,
 - d. stops work,
 - e. fails to resume stopped work after receiving notice to do so,
 - f. becomes insolvent (except that if the CONTRACTOR declares bankruptcy, termination will be under Title 11 US Code 362 and/or 365. The CONTRACTOR'S bankruptcy does not relieve the surety of any obligations to assume the Contract and complete the work in a timely manner.
 - g. Allows any final judgment to stand against him unsatisfied for period of 60 days, or
 - h. Makes an assignment for the benefit of creditors without the consent of the Contracting Officer, or
 - i. Disregards Regulatory Requirements of any public body having jurisdiction, or
 - j. Otherwise violates in any substantial way any provisions of the Contract Documents, or
 - k. fails to comply with Contract minimum wage payments or civil rights requirements, or
 - I. is a party to fraud, deception, misrepresentation, or
 - m. for any cause whatsoever, fails to carry on the Work in an acceptable manner.
- 14.2.2 The Notice to Cure Default will detail the conditions determined to be in default, the time within which to cure the default and may, in the Contracting Officer's discretion, specify the actions necessary to cure the default. Failure to cure the delay, neglect or default within the time specified in the Contracting Officer's written notice to cure authorizes the DEPARTMENT to terminate the contract. The Contracting Officer may allow more time to cure than originally stated in the Notice to Cure Default if he deems it to be in the best interests of the DEPARTMENT. The DEPARTMENT will provide the CONTRACTOR or its surety with a written Notice of Default Termination that details the default and the failure to cure it.
- 14.2.3 If the CONTRACTOR or its Surety, within the time specified in the above notice of default, shall not proceed in accordance therewith, then the DEPARTMENT may, upon written notification from the Contracting Officer of the fact of such delay, neglect or default and the CONTRACTOR's failure to comply with such notice, have full power and authority without violating the Contract, to take the prosecution of the Work out of the hands of the CONTRACTOR. The DEPARTMENT may terminate the services of the CONTRACTOR, exclude the CONTRACTOR from the site and take possession of the Work and of all the CONTRACTOR's tools, appliances, construction equipment and machinery at the site and use the same to the full extent they could be

used by the CONTRACTOR (without liability to the CONTRACTOR for trespass or conversion), incorporate in the Work all inaterials and equipment stored at the site or for which the DEPARTMENT has paid the CONTRACTOR but which are stored elsewhere, and finish the Work as the DEPARTMENT may deem expedient. The DEPARTMENT may enter into an agreement for the completion of said Contract according to the terms and provisions thereof, or use such other methods that in the opinion of the Contracting Officer are required for the completion of said Contract in an acceptable manner.

- 14.2.4 The Contracting Officer may, by written notice to the CONTRACTOR and its Surety or its representative, transfer the employment of the Work from the CONTRACTOR to the Surety, or if the CONTRACTOR abandons the Work undertaken under the Contract, the Contracting Officer may, at its option with written notice to the Surety and without any written notice to the CONTRACTOR, transfer the employment for said Work directly to the Surety. The Surety shall submit its plan for completion of the Work, including any contracts or agreements with third parties for such completion, to the DEPARTMENT for approval prior to beginning completiou of the Work. Approval of such contracts shall be in accordance with all applicable requirements and procedures for approval of subcontracts as stated in the Contract Documents.
- 14.2.5 After the notice of termination is issued, the DEPARTMENT may take over the work and complete it by contract or otherwise and may take possession of and use materials, appliances, equipment or plant on the work site necessary for completing the work.
- 14.2.6 Rather than taking over the work itself, the DEPARTMENT may transfer the obligation to perform the work from the CONTRACTOR to its surety. The surety must submit its plan for completion of the work, including any contracts or agreements with third parties for completion, to the DEPARTMENT for approval prior to beginning work. The surety must follow the Contract requirements for approval of subcontracts, except that the limitation on percent of work subcontracted will not apply.
- 14.2.7 On receipt of the transfer notice, the surety must take possession of all materials, tools, and appliances at the work site, employ an appropriate work force, and complete the Contract work, as specified. The Contract specifications and requirements shall remain in effect. However the DEPARTMENT will make subsequent Contract payments directly to the Surety for work performed under the terms of the Contract. The CONTRACTOR shall forfeit any right to claim for the same work or any part thereof. The CONTRACTOR shall not be entitled to receive any further balance of the amount to be paid under the Contract.
- 14.2.8 Upon receipt of the notice terminating the services of the CONTRACTOR, the Surety shall enter upon the premises and take possession of all materials, tools, and appliances thereon for the purpose of completing the Work included under the Contract and employ by contract or otherwise any person or persons to finish the Work and provide the materials therefore, without termination of the continuing full force and effect of this Contract. In case of such transfer of employment to the Surety, the Surety shall be paid in its own name on estimates covering Work subsequently performed under the terms of the Contract and according to the terms thereof without any right of the CONTRACTOR to make any claim for the same or any part thereof.
- 14.2.9 If the Contract is terminated for default, the CONTRACTOR and the Surety shall be jointly and severally liable for damages for delay as provided by paragraph 11.8, and for the excess cost of completion, and all costs and expenses incurred by the DEPARTMENT in completing the Work or arranging for completion of the Work, including but not limited to costs of assessing the Work to be done, costs associated with advertising, soliciting or negotiating for bids or proposals for completion, and other reprocurement costs. Following termination the CONTRACTOR shall not be entitled to receive any further balance of the amount to be paid under the Contract until the Work is fully finished and accepted, at which time if the unpaid balance exceeds the amount due the DEPARTMENT and any amounts due to persons for whose benefit the DEPARTMENT has withheld funds, such excess shall be paid by the DEPARTMENT to the CONTRACTOR. If the damages, costs, and expenses due the DEPARTMENT exceed the unpaid balance, the CONTRACTOR and its Surety shall pay the difference.
- 14.2.10 If, after notice of termination of the CONTRACTOR's right to proceed under the provisions of this clause, it is determined for any reason that the CONTRACTOR was not in default under the provisions of this clause, or that the delay was excusable under the provisions of this clause, or that termination was wrongful, the rights and obligations of the parties shall be determined in accordance with the clause providing for convenience termination.

14.3 Rights or Remedies:

Where the CONTRACTOR's services have been so terminated by the DEPARTMENT, the termination will not affect any rights or remedies of the DEPARTMENT against the CONTRACTOR then existing or which may thereafter accrue. Any retention or payment of moneys due the CONTRACTOR by the DEPARTMENT will not release the CONTRACTOR from liability.

14.4 **Convenience Termination:**

- 14.4.1 The performance of the Work may be terminated by the DEPARTMENT in accordance with this section in whole or in part, whenever, for any reason the Contracting Officer shall determine that such termination is in the best interest of the DEPARTMENT. Any such termination shall be effected by delivery to the CONTRACTOR of a Notice of Termination, specifying termination is for the convenience of the DEPARTMENT the extent to which performance of Work is terminated, and the date upon which such termination becomes effective.
- 14.4.2 Immediately upon receipt of a Notice of Termination and except as otherwise directed by the Contracting Officer, the CONTRACTOR shall:
 - a. Stop Work on the date and to the extent specified in the Notice of Termination;
 - b. Place no further orders or subcontracts for materials, services, or facilities except as may be necessary for completion of such portion of the Work as is not terminated;
 - c. Terminate all orders and subcontracts to the extent that they relate to the performance of Work terminated by the Notiee of Termination;
 - d. With the written Approval of the Contracting Officer, to the extent he may require, settle all outstanding liabilities and all claims arising out of such termination of orders and subcontracts, the cost of which would be reimbursable, in whole, or in part, in accordance with the provisions of the Contract;
 - e. Submit to the Contracting Officer a list, certified as to quantity and quality, of any or all items of termination inventory exclusive of items the disposition of which had been directed or authorized by the Contracting Officer;
 - f. Transfer to the Contracting Officer the completed or partially completed record drawings, Shop Drawings, information, and other property which, if the Contract had been completed, would be required to be furnished to the DEPARTMENT;
 - g. Take such action as may he necessary, or as the Contracting Officer may direct, for the protection and preservation of the property related to the Contract which is in the possession of the CONTRACTOR and in which the DEPARTMENT has or may acquire any interest.

The CONTRACTOR shall proceed immediately with the performance of the above obligations.

- 14.4.3 When the DEPARTMENT orders termination of the Work effective on a certain date, all Work in place as of that date will be paid for in accordance with Article 13 of the Contract. Materials required for completion and on hand but not incorporated in the Work will be paid for at invoice cost plus 15% with materials becoming the property of the DEPARTMENT or the CONTRACTOR may retain title to the materials and be paid an agreed upon lump sum. Materials on order shall be cancelled, and the DEPARTMENT shall pay reasonable factory cancellation charges with the option of taking delivery of the materials in lieu of payment of cancellation charges. The CONTRACTOR shall be paid 10% of the cost, freight not included, of materials cancelled, and direct expenses only for CONTRACTOR chartered freight transport which cannot be cancelled without charges, to the extent that the CONTRACTOR can establish them. The extra costs due to cancellation of bonds and insurance and that part of job start-up and phase-out costs not amortized by the amount of Work accomplished shall be paid by the DEPARTMENT. Charges for loss of profit or consequential damages shall not be recoverable except as provided above.
 - a. The following costs are not payable under a termination settlement agreement or Contracting Officer's determination of the termination claim:
 - J. Loss of anticipated profits or consequential or compensatory damages

- 2. Unabsorbed home office overhead (also termed "General & Administrative Expense") related to ongoing business operations
- 3. Bidding and project investigative costs
- 4. Direct costs of repairing equipment to render it operable for use on the terminated work
- 14.4.4 The termination claim shall be submitted promptly, but in no event later than 90 days from the effective date of termination, unless extensions in writing are granted by the Contracting Officer upon written request of the CONTRACTOR made within the 90-day period. Upon failure of the CONTRACTOR to submit his termination claim within the time allowed, the Contracting Officer may determine, on the basis of information available to bim, the amount, if any, due to the CONTRACTOR by reason of the termination and shall thereupon pay to the CONTRACTOR the amount so determined.
- 14.4.5 The CONTRACTOR and the Contracting Officer may agree upon whole or any part of the amount or amounts to be paid to the CONTRACTOR by reason of the total or partial termination of Work pursuant to this section. The Contract shall be amended accordingly, and the CONTRACTOR shall be paid the agreed amount.
- 14.4.6 In the event of the failure of the CONTRACTOR and the Contracting Officer to agree in whole or in part, as provided heretofore, as to the amounts with respect to costs to be paid to the CONTRACTOR in connection with the termination of the Work the Contracting Officer shall determine, on the basis of information available to him, the amount, if any, due to the CONTRACTOR by reason of the termination and shall pay to the CONTRACTOR the amount determined as follows:
 - a. All costs and expenses reimbursable in accordance with the Contract not previously paid to the CONTRACTOR for the performance of the Work prior to the effective date of the Notice of Termination;
 - b. So far as not included under "a" above, the cost of settling and paying claims arising out of the termination of the Work under subcontracts or orders which are properly chargeable to the terminated portions of the Contract;
 - c. So far as practicable, claims by the CONTRACTOR for idled or stand-by equipment shall be made as follows: Equipment claims will be reinbursed as follows:
 - 1. Contractor-owned equipment usage, based on the CONTRACTOR'S ownership and operating costs for each piece of equipment as determined from the CONTRACTOR'S accounting records. Under no circumstance, may the CONTRACTOR base equipment claims on published rental rates.
 - 2. Idle or stand-by time for Contractor-owned equipment, based on the CONTRACTOR'S internal ownership and depreciation costs. Idle or stand-by equipment time is limited to the actual period of time equipment is idle or on stand-by as a direct result of the termination, not to exceed 30 days. Operating expenses will not be included for payment of idle or stand-by equipment time.
 - 3. Rented equipment, based on reasonable, actual rental costs. Equipment leased under "capital leases" as defined in Financial Accounting Standard No. 13 will be considered Contractor-owned equipment. Equipment leased from an affiliate, division, subsidiary or other organization under common coutrol with the CONTRACTOR will be considered Contractor-owned equipment, unless the lessor has an established record of leasing to unaffiliated lessees at competitive rates consistent with the rates the CONTRACTOR has agreed to pay and no more than forty percent of the lessor's leasing business, measured in dollars, is with organizations affiliated with the lessor.
- 14.4.7 The CONTRACTOR shall have the right of appeal under the DEPARTMENT's claim procedures, as defined in Article 15, for any determination made by the Contracting Officer, except if the CONTRACTOR has failed to submit his claim within the time provided and has failed to request extension of such time, CONTRACTOR shall have no such right of appeal. In arriving at the amount due the CONTRACTOR under this section, there shall be deducted:
 - a. All previous payments made to the CONTRACTOR for the performance of Work under the Contract prior to termination;
 - b. Any claim for which the DEPARTMENT may have against the CONTRACTOR;
 - c. The agreed price for, or the proceeds of sale of, any materials, supplies, or other things acquired by the

CONTRACTOR or sold pursuant to the provisions of this section and not otherwise recovered by or credited to the DEPARTMENT; and,

- d. All progress payments made to the CONTRACTOR under the provisions of this section.
- 14.4.8 Where the Work has been terminated by the DEPARTMENT said termination shall not affect or terminate any of the rights of the DEPARTMENT against the CONTRACTOR or his Surety then existing or which may thereafter accrue because of such default. Any retention or payment of monies by the DEPARTMENT due to the CONTRACTOR under the terms of the Contract shall not release the CONTRACTOR or its Surety from liability.
- 14.4.9 The CONTRACTOR's termination claim may not include claims that pre dated the notice for termination for convenience. Those claims shall be prosecuted by the CONTRACTOR under Article 15.
- 14.4.10 The CONTRACTOR'S termination claim may not exceed the total dollar value of the contract as awarded plus agreed upon change orders less the amounts that have been paid for work completed.
 - a. Unless otherwise provided for in the Contract Documents, or hy applicable statute, the CONTRACTOR, from the effective date of termination and for a period of three years after final settlement under this Coutract, shall preserve and make available to the DEPARTMENT at all reasonable times at the office of the CONTRACTOR, all its books, records, documents, and other evidence bearing on the cost and expenses of the CONTRACTOR under his Contract and relating to the Work terminated hereunder.
 - b. <u>Definitions</u>. In this Subsection 108-1.09, the term "cost" and the term "expense" mean a monetary amount in U.S. Dollars actually incurred by the CONTRACTOR, actually reflected in its contemporaneously maintained accounting or other financial records and supported by original source documentation.
 - c. <u>Cost Principles</u>. The DEPARTMENT may use the federal cost principles at 48 CFR §§ 31.201-1 to 31.205-52 (or succeeding cost principles for fixed price contracts) as guidelines in determining allowable costs under this Subsection to the extent they are applicable to construction contracts and consistent with the specifications of this Contract. The provisions of this coutract control where they are more restrictive than, or inconsistent with, these federal cost principles."

ARTICLE 15 - CLAIMS FOR ADJUSTMENT AND DISPUTES

15.1 Notification

- 15.1.1 The CONTRACTOR shall notify the DEPARTMENT in writing as soon as the CONTRACTOR becomes aware of any act or occurrence which may form the basis of a claim for additional compensation or an extension of Contract Time or of any dispute regarding a question of fact or interpretation of the Contract. The DEPARTMENT has no obligation to investigate any fact or occurrence that might form the basis of a claim or to provide any additional compensation or extension of Contract Time unless the CONTRACTOR has notified the DEPARTMENT in writing in a timely manner of all facts the CONTRACTOR believes form the basis for the claim.
- 15.1.2 If the CONTRACTOR believes that he is entitled to an extension of Contract Time, then the CONTRACTOR must state the contract section on which he basis his extension request, provide the DEPARTMENT with sufficient information to demonstrate that the CONTRACTOR has suffered excusable delay, and show the specific amount of time to which the CONTRACTOR is eutitled. The DEPARTMENT will uot grant an extension of Contract Time if the CONTRACTOR does not timely submit revised schedules under Section 01310.
- 15.1.3 If the matter is not resolved by agreement within 7 days, the CONTRACTOR shall submit an Intent to Claim, in writing, to the DEPARTMENT within the next 14 days.
- 15.1.4 If the CONTRACTOR believes additional compensation or time is warranted, then he must immediately begin keeping complete, accurate, and specific daily records concerning every detail of the potential claim including actual costs incurred. The CONTRACTOR shall provide the DEPARTMENT access to any such records and furnish the DEPARTMENT copies, if requested. Equipment costs must be based on the CONTRACTOR's internal rates for ownership, depreciation, and operating expenses and not on published reutal rates. In computing damages, or costs claimed for a change order, or for any other claim against the DEPARTMENT for additional time, compensation or both, the CONTRACTOR must prove actual damages based on internal eosts for equipment, labor or efficiencies. Total cost, modified total cost or jury verdict forms of presentation of damage claims are not permissible to show damages. Labor inefficiencies must be shown to actually have occurred and can be proven solely based on job records. Theoretical studies are not a permissible means of showing labor inefficiencies. Home office overhead will not be allowed as a component of any claim against the DEPARTMENT.
- 15.1.5 If the claim or dispute is not resolved by the DEPARTMENT, then the CONTRACTOR shall submit a written Claim to the Contracting Officer within 90 days after the CONTRACTOR becomes aware of the basis of the claim or should have known the basis of the claim, whichever is earlier. The Contracting Officer will issue written acknowledge of the receipt of the Claim.
- 15.1.6 The CONTRACTOR waives any right to claim if the DEPARTMENT was not notified properly or afforded the opportunity to inspect conditions or monitor actual costs or if the Claim is not filed on the date required.

15.2 Presenting the Claim

- 15.2.1 The Claim must include all of the following:
 - a. The act, event, or condition the claim is based on
 - b. The Contract provisions which apply to the claim and provide relief
 - c. The item or items of Contract work affected and how they are affected
 - d. The specific relief requested, including Contract Time if applicable, and the basis upon which it was calculated
 - e. A statement certifying that the claim is made in good faith, that the supporting cost and pricing data are accurate and complete to the best of your knowledge and belief, and that the amount requested accurately reflects the Contract adjustment which the CONTRACTOR believes is due.

15.3 Claim Validity, Additional Information, and DEPARTMENT's Action

- 15.3.1 The Claim, in order to be valid, must not only show that the CONTRACTOR suffered damages or delay but that it was caused by the act, event, or condition complained of and that the Contract provides entitlement to relief for such act, event, or condition.
- 15.3.2 The DEPARTMENT can make written request to the CONTRACTOR at any time for additional information relative to the Claim. The CONTRACTOR shall provide the DEPARTMENT the additional information within 30 days of receipt of such a request. Failure to furnish the additional information may be regarded as a waiver of the Claim.

15.4 Contracting Officer's Decision

The CONTRACTOR will be furnished the Contracting Officer's Decision within 90 days, unless the Contracting Officer requests additional information or gives the CONTRACTOR notice that the time for issuing a decision is being extended for a specified period under AS 36.30.620. The Contracting Officer's decision is final and conclusive unless, within 14 days of receipt of the decision, the CONTRACTOR delivers a Notice of Appeal to the Appeals Officer. Procedures for appeals are covered under AS 36.30.625 and AS 36.30.630.

15.5 Fraud and Misrepresentation in Making Claims

Criminal and Civil penalties authorized under AS 36.30.687 (including, but not limited to, forfeiture of all claimed amounts) may be imposed on the CONTRACTOR if the CONTRACTOR makes or uses a misrepresentation in support of a claim or defraud or attempt to defraud the DEPARTMENT at any stage of prosecuting a claim under this Contract.

INDEX TO GENERAL CONDITIONS

A	Article or Paragraph Number
Acceptance of Insurance	
Access to the Work	
Actual Damages	
Addenda-definition of	Article 1
Advertisement - definition of	Article 1
Alaska Agricultural/Wood Products	
Alaska Bidder - definition of	
Alaska Preferences	7.12
Alaska Products	
Application for Payment-definition of	Article 1
Application for Payment, Final	
Application for Progress Payment	
Application for ProgressPayment-review of	
Approved or Approval -definition of	Article 1
Authorized Minor Variations in Work	
Availability of Lands	4.1
Award-defined	Article 1
В	
Before Starting Construction	
Bid Bonds-definition of	Article 1
Bidder-definition of	Article 1
Bonds and insurances-in general	Article 5
Bonds, Delivery of	5.1
Bonds, Performance and Other	5.2

Builder's Risk Insurance ("ALL RISK	')5	.4.2.d
-------------------------------------	-----	--------

С

Cash Allowances	10.8
Change Order-definition of	Article 1
Change Orders-to be executed	9.4
Changes in the Work	9.1
Claims, Waiver of-on Final Payment	13.17
Clarifications and Interpretations	2.2.1.d; 3.6
Cleaning	6.5
Completion, Final	13.14
Completion, Substantial	13.10
Conferences, Preconstruction – definition of	Article 1
Conflict, Error, Discrepancy-CONTRACTOR to Report	3.5
Construction Machinery, Equipment, etc	6.4
Consultant-definition of	Article 1
Continuing the Work	6.23
Continuing the Work	
	Article 1
Contract-definition of	Article 1 9.1; 9.4; 9.6
Contract-definition of Contract Documents-amending and Supplementing	Article 1 9.1; 9.4; 9.6 Article 1
Contract-definition of Contract Documents-amending and Supplementing Contract Documents- definition of	Article 1 9.1; 9.4; 9.6 Article 1 3.4
Contract-definition of Contract Documents-amending and Supplementing Contract Documents- definition of Contract Documents-Intent	Article 1 9.1; 9.4; 9.6 Article 1 3.4 3.7
Contract-definition of Contract Documents-amending and Supplementing Contract Documents- definition of Contract Documents-Intent Contract Documents-Reuse of	Article 1 9.1; 9.4; 9.6 Article 1 3.4 3.7 9.4; 9.7; 10.1
Contract-definition of Contract Documents-amending and Supplementing Contract Documents- definition of Contract Documents-Intent Contract Documents-Reuse of Contract Price, Change of	Article 1 9.1; 9.4; 9.6 Article 1 3.4 3.7 9.4; 9.7; 10.1 Article 1
Contract-definition of Contract Documents-amending and Supplementing Contract Documents- definition of Contract Documents-Intent Contract Documents-Reuse of Contract Price, Change of Contract Price-definition of	Article 1 9.1; 9.4; 9.6 Article 1 3.4 9.4; 9.7; 10.1 Article 1 Article 1 2.1
Contract-definition of Contract Documents-amending and Supplementing Contract Documents- definition of Contract Documents-Intent Contract Documents-Reuse of Contract Price, Change of Contract Price-definition of Contract Price-definition of	Article 1 9.1; 9.4; 9.6 Article 1 3.4 3.7 9.4; 9.7; 10.1 Article 1 2.1 Article 1
Contract-definition of Contract Documents-amending and Supplementing Contract Documents- definition of Contract Documents-Intent Contract Documents-Reuse of Contract Price, Change of Contract Price-definition of Contract Officer's Authorities and Limitations Contracting Officer- definition of	Article 1 9.1; 9.4; 9.6 Article 1 3.4 3.7 9.4; 9.7; 10.1 Article 1 2.1 Article 1 2.2

Contract Time-definition of	Article 1
CONTRACTOR-definition of	Article 1
CONTRACTOR May Stop Work or Terminate	.3.5.1; 4.6; 14.4.1
CONTRACTOR'S Continuing Obligation	. 13.16
CONTRACTOR'S Duty to Report Discrepancy in Documents	.3.5
CONTRACTOR'S Fee-Cost Plus	10.3.3
CONTRACTOR'S Liability Insurance	.5.4.2
CONTRACTOR'S Records	. 6.26
CONTRACTOR'S Responsibilities-in general	Article 6
CONTRACTOR'S Warranty to Title	. 13.6
Contractors-other	.8.1; 8.2
Contractual Liability Insurance	.5.4.2.b
Coordination	. 6.13.5; 8.4
Copies of Contract Documents	.3.2
Correction or Removal of Defective Work	. 12.6
Correction Period, One Year	. 12.7
Correction, Removal or Acceptance of Defective Work-in general	. 12.6; 12.8
Cost and Pricing Data	.10.3.4
Cost-net decrease	.10.6.2.d; 10.6.2.e
Cost of Work	. 10.4
Costs, Supplemental	.10.4.5

D

Day, Calendar-definition of	Article 1
Defective-definition of	Article 1
Defective Work, Acceptance of	12.8
Defective Work, Correction or Removal of	12.6; 12.9
Defective Work-in general	12.6; 12.8

Defective Work, Rejecting	. 12.4.2; 12.5
Definitions	. Article 1
Delivery of Bonds	
DEPARTMENT-definition of	Article 1
DEPARTMENT May Correct Defective Work	12.9
DEPARTMENT May Stop Work	12.5
DEPARTMENT May Suspend Work	14.1
DEPARTMENT'S Liability Insurance	
DEPARTMENT'S Responsibilities-in general	2.1
DEPARTMENT'S Separate Representative at site	2.1.1; 2.1.3
Determination for Unit Prices	10.10
Differing Site Conditions	9.9
Directive-definition of	Article 1
Directive-to be executed	9.3
Directive-required performance	9.3.5
Disputes, Decisions by Contracting Officer	2.2.1; 15.4
Documents, Copies of Contract	3.2
Documents, Record	6.16
Documents, Reuse	3.7
Drawings-definition of	Article 1
E	
Easements	4.l
Emergencies	6.19
Equipment, Labor, Materials and	6.3; 6.4; 6.5
Equivalent Materials and Equipment	6.9
Explorations of physical conditions	4.3
Explosives	6.25

F

Fee, CONTRACTOR'S-Costs Plus	10.3.3
Final Acceptance	13.15
Final Acceptance- definition of	Article l
Final Completion and Application for Payment	13.13
Final Completion- definition of	Article 1
Final Inspection	13.12
Final Payment	13.14
Final Payment, Processing of	13.14

G

General Requirements-definition of	. Article 1
Giving Notice	3.5.1; 4.4.4; 4.6; 5.4.2; 6.17.3; 6.19; 6.20.4; 7.4; 7.11; 8.1.4; 8.3; 9.3.6; 9.8; 9.9; 10.10; 11.1; 11.2; 11.5; 12.1; 12.3.1; 12.3.4; 12.9; 13.10; 13.12; 14.1.1; 14.2.1 thru 14.2.4; 14.4.1; 14.4.3; 15.1
Guarantee of Work-by CONTRACTOR	12.1
I	
Indemnification	7.1; 7.3; 5.5
Inspection, Final	13.12

Inspection, Final	13.12
Inspection, Tests and	12.3
Install-definition of	Article 1
Insurance, Bonds and- in general	Article 5
Insurance, Certification of	5.4.2
Insurance, Completed Operations	5.4.2.b
Insurance, CONTRACTOR'S Liability	5.4.2.b
Insurance, Contractual Liability	5.4.2.b

Insurance, Owner's Liability	5.4.1
Insurance, Property Damage	5.4.2.b
Insurance, Waiver of Subrogation Rights	.5.4.2.a.1, 5.4.3
Intent of Contract Documents	.3.4
Interpretations and Clarifications	.2.2.1.3; 3.6
Investigations of physical consitions	.4.3
Invitation for Bids- definition of	Article 1

\mathbf{L}

Labor, Materials and Equipment	6.3; 6.4; 6.5
Laws and Regulations- general	Article 7
Liability Insurance- CONTRACTOR'S	5.4.1
Liability Insurance-Owner's	5.4.1
Liens, Resulting Judgements	14.2.1.g
Liquidated Damages	.11.8

\mathbf{M}

Materials and equipment- furnished by CONTRACTOR	6.4
Materials and equipment- incorporated in Work	6.5
Materials or equipment- equivalent	6.9
Multi-prime contracts	. 8. 1

Ν

Notice, Giving of (See Giving Notice)	
Notice of Final Acceptance	13.15
Notice of Intent to Award-definition of	Article 1
Notice to Proceed-definition of	Article 1
Notice to Proceed-giving of	11.1; 11.2; 11.3

0

"Or-Equal" Item	6.9
Other contractors	Article 8
Other work	8.1.1
Overtune Work-authorization of	7.14; 10.4.1
Owner-definition of (See DEPARTMENT)	Article 1

P

Partial Utilization	.13.10
Partial Utilization (See Substantial Conpletion)- definition of	. Article l
Partial Utilization- Property Indurance	.13.10
Patent Fees and Royalties	.7.3
Payment, Recommendation of	. 13.4
Payments to CONTRACTOR-in general	. Article 13
Payments of CONTRACTOR- withholding	.13.7
Performance and other Bonds	.5.2
Permits	7.2
Physical Conditions-in general	. Article 4
Physical Conditions- Contracting officer's review	9.9
Physical Conditions- existing structures	4.3
Physical Conditions- explorations and reports	4.3
Physical Conditions-possible document change	9.9
Physical Conditions-price and time adjustments	9.9
Physical Conditions-report of differing	4.6; 9.9
Physical Conditions- Underground Utilities	4.4
Preconstruction Conference – definition of	Article l
Premises, Use of	6.14
Price, Change of Contract	10.1
Price, Contract-definition of	Article 1
Progress Payment, Application for	13.3

Progress Payment-retainage	. 13.8
Progress schedule	. 6.6; 6.7; 6.8
Project-definition of	.Article 1
Project Manager-definition of	.Article I
Project Representation- provision for	.2.1.1
Project, Starting the	
Property Insurance	5.4.3
Property Insurance- Partial Utilization	.13.10
Protection, Safety and	6.17

R

Recommendation of Progress Payment	.13.4
Record Documents	.6.16
Reference Points	.4.7
Regulations, Laws and	Article 7
Rejecting Defective Work	.12.4.2; 12.5
Related Work at Site,	.3.4.1
Removal or Correction of Defective Work	. 12.6; 12.9
Responsibilities, CONTRACTOR'S-in general	. Article 6
Retainage	.13.8
Reuse of Documents	.3.7
Review of Shop Drawings and Samples	.6.21
Right of Ways	.4.1
Royalties, Patent Fees and	.7.3

S

Safety and Protection	6.17
Samples	6.20; 6.21

Schedule of Progress	6.6; 6.7; 6.8
Schedule of Shop Drawing submissions	6.6; 6.7; 6.8; 6.20.1
Schedule of Values- definition	Article l
Schedule of Values	6.6; 6.7; 6.8
Schedules, Finalizing	6.7
Shop Drawings and Samples	6.20; 6.21
Shop Drawings-definition of	Article I
Shop Drawings, use to approve substitutions	6.9.4; 6.20.4
Site, Visits to-by Contracting Officer	2.4
Specifications-defutiion of	Article 1
Starting Construction, Before	6.6.1
Starting the Project	11.2
Stopping Work-by CONTRACTOR	3.5.1; 4.6; 14.4.2
Stopping Work-by Owner	12.5; 14.1
Subcontractor-definition of	Article 1
Subcontractors-in general	6.13
Subcontracts-required provisions	6.13.1; 6.13.3
Substantial Completion- certification of	13.10
Substantial Completion- certification of	
	Article [
Substantial Completion- definition of	Article 1 6.9
Substantial Completion- definition of Substitute or "Or-Equal" Items	Article I 6.9 Article 4, 9.9
Substantial Completion- definition of Substitute or "Or-Equal" Items Subsurface Conditions	Article 1 6.9 Article 4, 9.9 Article 1
Substantial Completion- definition of Substitute or "Or-Equal" Items Subsurface Conditions Supplemental Agreement- definition of	Article [6.9 Article 4, 9.9 Article 1 9.6
Substantial Completion- definition of Substitute or "Or-Equal" Items Subsurface Conditions Supplemental Agreement- definition of Supplemental Agreement- general use	Article I 6.9 Article 4, 9.9 Article 1 9.6 10.4.5
Substantial Completion- definition of Substitute or "Or-Equal" Items Subsurface Conditions Supplemental Agreement- definition of Supplemental Agreement- general use Supplemental costs	Article I 6.9 Article 4, 9.9 Article 1 9.6 10.4.5 Article 1
Substantial Completion- definition of Substitute or "Or-Equal" Items Subsurface Conditions Supplemental Agreement- definition of Supplemental Agreement- general use Supplemental costs Supplemental costs	Article I 6.9 Article 4, 9.9 Article 1 9.6 10.4.5 Article 1 3.5; 4.3; 5.4; 11.8

Surety-consent to payment	13.14.2
Surety-Consultant has no duty to	2.1.3
Surety-notice to	9.8; 14.2
Surety-qualification of	5.2; 5.3
Surety Replacement	5.3
Suspending Work, by Owner	14.1
Suspension of Work and Termination-in general	Article 14
Superintendent-CONTRACTOR's	6.2
Supervision and Superintendence	6.1; 6.2

Т

Taxes-Payment by CONTRACTOR	7.2
Termination-by Owner	14.4.1
Termination, Suspension of Work and-in general	Article 14
Tests and Inspections	12.3
Time, Change of Contract	9.4; 11.4
Time, Computations of	11.3
Time, Contract-definition of	Article 1

U

Uncovering Work	12.4
Underground Utilities- general	4.4
Underground Utilities-not shown or indicated	4.6
Underground Utilities- protection of	4.4.2.d
Underground Utilities- shown or indicated	4.4.1
Unit Price Work-definition of	Article 1
Unit Price Work-general	.10.9
Unit Prices	10.9.1

Unit Prices, Determination for	10.10
Use of Premises	6.14
Utility Owner's Notification	4.4.2.c; 4.4.3; 4.4.4; 4.5; 4.6
Utility, Damaged	4.5

\mathbf{V}

Values, Schedule of	6.6; 6.7; 6.8
Variations in Work- Authorized	9.2
Visits to Site-by Contracting Officer	2.4

W

Waiver of Claims-on Final Payment	13.17
Waiver of Rights by insured parties	13.18
Warranty and Guarantee-by CONTRACTOR	12.1
Warranty of Title, CONTRACTOR'S	13.6
Work, Access to	8.2; 13.11; 12.2
Work-by others-general	Article 8
Work Continuing During Disputes	6.23
Work, Cost of	.10.4
Work-definition of	Article 1
Work, Neglected by CONTRACTOR	.14.2.1.c
Work, Stopping by CONTRACTOR	.3.5.1; 4.6
Work, Stopping by Owner	12.5; 14.1

SECTION 00800 SUPPLEMENTARY CONDITIONS MODIFICATIONS TO THE GENERAL CONDITIONS (STATE FUNDED CONTRACTS)

The following supplements modify, change, delete from, add to the "General Conditions of the Construction Contract for Buildings", revised December, 1987 (c) 4/96. Where any article of the General Conditions is modified, or and Paragraph, Subparagraph, or Clause thereof is modified or deleted by these Supplementary Conditions, the unaltered provisions of that Article, Paragraph, Subparagraph, of Clause shall remain in effect.

SC-1-DEFINITIONS

At General Conditions Article 1, add the following definitions:

"APPROVED. 'Approved' or 'Approval' as used in this contract document shall mean that the Department has received a document, form or submittal from the contractor and that the Department has taken "No exceptions" to the item submitted. Unless the context clearly indicates otherwise, approved or approval shall not mean that the Department approves of the methods or means, or that the item or form submitted meets the requirements of the contract or constitutes acceptance of the Contractor's work. Where approved or approval means acceptance, then such approval must be set forth in writing and signed by the contracting officer or his designee.

ARCHITECT. Where used in the contract documents, "ARCHITECT" shall mean the DEPARTMENT'S ENGINEER.

ARCHITECT/ENGINEER. Where used in the contract documents, "ARCHITECT/ENGINEER" shall mean the DEPARTMENT'S ENGINEER.

ENGINEER. The DEPARTMENT'S authorized representative of the Contracting Officer, as defined in the DEPARTMENT'S *delegation of authority letter* to be issued after notice-to-proceed, who is responsible for administration of the contract.

EQUIPMENT. All machinery together with the necessary supplies for upkeep and maintenance, and also tools and apparatus necessary for the proper construction and acceptable completion of the work.

FURNISH. To procure, transport, and deliver to the project site materials, labor, or equipment, for installation or use on the project.

INSPECTOR. The Engineer's authorized representative assigned to make detailed observations relating to contract performance.

INTERIM WORK AUTHORIZATION. A written order by the Engineer initiating changes to the Contract, within its general scope, until a subsequent Change Order is executed.

LABORATORY. The official testing laboratories of the DEPARTMENT or such other laboratories as may be designated by the Engineer or identified in the contract documents.

MATERIALS. Any substances specified for use in the construction of the project.

PRECONSTRUCTION CONFERENCE. A meeting between the CONTRACTOR and the Engineer, and other parties affected by the construction, to discuss the project before the CONTRACTOR begins work.

QUALITY ASSURANCE (QA). Where referred to in the technical specifications (Divisions 2 through 16), Quality Assurance refers to measures to be provided by the CONTRACTOR as specified.

QUALITY CONTROL (QC). Tests and inspections by the CONTRACTOR to insure the acceptability of materials incorporated into the work. QC test reports are used as a basis upon which to determine whether the Work conforms to the requirements of the Contract Documents and to determine its acceptability for payment.

TRAFFIC CONTROL PLAN (TCP). A drawing of one or more specific plans that detail the routing of pedestrian, and/or vehicular traffic through or around a construction area.

UTILITY. The privately, publicly or cooperatively owned lines, facilities and systems for producing, transmitting or distributing communications, power, electricity, light, heat, gas, oil, crude products, water, steam, waste, storm water not connected with highway or street drainage, and other similar commodities, including publicly owned fire and police signal systems, street lighting systems, and railroads which directly or indirectly serve the public or any part thereof. The term "utility" shall also mean the utility company, inclusive of any wholly owned or controlled subsidiary."

At General Conditions Article 1, definition of **Contract Time**, last sentence, Replace "...Final Completion..." with:

"....Substantial Completion...".

At General Conditions Article 1, definition of **Conditions of the Contract**: Delete the text of this definition in its entirety.

At General Conditions Article 1, definition of **Contract Time**: Delete the text of this definition and replace with the following:

"The number of Calendar Days following issuance of Notice-to-Proceed in which the project shall be rendered Substantially Complete, or if specified as a calendar date, the Substantial Completion date specified in the Contract Documents."

At General Conditions Article 1, definition of **Controlling Item**: Delete the text of this definition and replace with the following:

"Any feature of the Work on the critical path of a network schedule."

At General Conditions Article 1, definition of **Defective**: Delete the text of this definition and replace with the following:

"Work that is unsatisfactory, faulty or deficient, or does not conform to the Contract Documents."

At General Conditions Article 1, definition of **Effective Date of the Contract**: Delete the text of this definition in its entirety.

At General Conditions Article 1, definition **Shop Drawings**: Add the following text:

"Where used in the Contract Documents, "Shop Drawings" shall also mean "Submittals"."

At General Conditions Article 1, second paragraph: Delete this paragraph in its entirety and replace with the following:

"The titles and headings of the articles, sections, and subsections herein are intended for convenience of reference."

At General Conditions Article 1, third paragraph starting with "Whenever used in the Specifications....", Delete this paragraph in its entirety.

At General Conditions Article 1, fourth paragraph, last sentence: Revise it to read as follows:

Ketchikan Pioneer Home Revised Walkway Renovations - JNU 16-22C

"Words defined in Article 1 are to be interpreted as defined."

SC-2.1-AUTHORITIES AND LIMITATIONS

At General Conditions Article 2.1.1, delete this paragraph in its entirety and replace with the following:

"The Contracting Officer alone, shall have the power to bind the DEPARTMENT and to exercise the rights, responsibilities, authorities and functions vested in the Contracting Officer by the Contract Documents. The Contracting Officer shall have the right to designate in writing authorized representatives to act for him. Wherever any provision of the Contract Documents specifies an individual or organization, whether governmental or private, to perform any act on behalf of or in the interest of the DEPARTMENT that individual or organization shall be deemed to be the Contracting Officer's authorized representative under this Contract but only to the extent so specified. "

At General Conditions Article 2.1.4 starting with "The term of "Contracting Officer" when used...", delete this article in its entirety.

SC-2.4-VISITS TO SITE/PLACE OF BUSINESS

At General Conditions Article 2.4, delete this article in its entirety.

SC-4.1-AVAILABILITY OF LANDS

At General Conditions Article 4.1, add the following:

"The CONTRACTOR shall provide all waste and disposal areas, including disposal areas for hazardous or contaminated materials, at no additional cost to the DEPARTMENT."

SC-4.3-EXPLORATIONS AND REPORTS

At General Conditions Article 4.3, - Not applicable

SC-4.7-SURVEY CONTROL

At General Conditions Article 4.7, delete the third sentence and substitute the following text:

"Copies of all survey notes shall be provided to the DEPARTMENT at an interval determined by the Project Manager. The Project Manager may request submission on a weekly or longer period at his discretion. Any variations between the Contract Documents and actual field conditions shall be identified in the survey notes."

SC-5.2-BONDS

At General Condition Article 5.2, delete the second, third, fourth, fifth, and sixth paragraphs in their entirety.

SC-5.4.2-INSURANCE REQUIREMENTS, GENERAL

At General Condition Article 5.4.2, revise the first sentence to read as follows:

"The CONTRACTOR shall maintain in force at all times during the performance of the work under this agreement the following policies and minimum limits of liability."

SC-5.4.2a-WORKMANS COMPENSATION INSURANCE

At General Condition Article 5.4.2a, replace paragraph "a" in its entirety and replace it with the following:

Ketchikan Pioneer Home Revised Walkway Renovations – JNU 16-22C

- "a. <u>Workers' Compensation Insurance</u>: The Contractor shall provide and maintain, for all employees of the Contractor engaged in work under this contract, Workers' Compensation Insurance as required by AS 23.30.045. The Contractor shall be responsible for Workers' Compensation Insurance for any subcontractor who provides services under this contract, to include:
 - 1. Waiver of Subrogation against the State and Employer's Liability Protection in the amount of \$500,000 each accident/\$500,000 each disease.
 - 2. If the Contractor directly utilizes labor outside of the State of Alaska in the prosecution of the work, "Other States" endorsement shall be required as a condition of the contract.
 - 3. Whenever the work involves activity on or about navigable waters, the Workers' Compensation policy shall contain a United States Longshoreman's and Harbor Worker's Act endorsement, and when appropriate, a Maritime Employer's Liability (Jones Act) endorsement with a minimum limit of \$1,000,000."

SC-5.4b-COMPREHENSIVE GENERAL LIABILITY INSURANCE

At General Conditions Article 5.4b, delete minimum limits of liability items 1 and 2 in their entirety and substitute the following text:

"1. If the CONTRACTOR carries a *Comprehensive General Liability* policy, the limits of liability shall not be less than a Combined Single Limit for bodily injury, property damage and Personal Injury Liability of:

\$1,000,000 each occurrence \$2,000,000 aggregate

2. If the CONTRATOR carries a *Commercial General Liability* policy, the limits of liability shall not be less than:

\$1,000,000 each occurrence (Combined Single Limit for bodily injury and property damage) \$1,000,000 for Personal Injury Liability

\$2,000,000 aggregate for Products-Completed Operations \$2,000,000 general aggregate

The State of Alaska, DEPARTMENT of Health & Social Services shall be named as an "Additional Insured" under all liability coverages listed above."

SC-5.4.2d-BUILDERS RISK INSURANCE (SUBCONTRACTORS)

At General Condition Article 5.4.2d, revise the last sentence to read as follows:

"Builders Risk Insurance will only be required of subcontractors if so stated in the Supplementary Conditions."

SC-5.4.3-INSURANCE REQUIREMENTS, EVIDENCE OF INSURANCE

At General Conditions Article 5.4.3, delete this subsection and replace with the following:

"In addition to providing the above coverages the Contractor shall, in any contract or agreement with subcontractors performing work, require that all indemnities and waivers of subrogation it obtains, and that any stipulation to be named as an additional insured it obtains, also be extended to waive rights of subrogation against the State of Alaska and to add the State of Alaska as additional named indemnitee and as additional insured.

Evidence of insurance shall be furnished to the Department prior to the award of the contract. Such

Ketchikan Pioneer Home Revised Walkway Renovations – JNU 16-22C

evidence, executed by the carrier's representative and issued to the Department, shall consist of a certificate of insurance or the policy declaration page with required endorsements attached thereto which denote the type, amount, class of operations covered, effective (and retroactive) dates, and dates of expiration. Acceptance by the Department of deficient evidence does not constitute a waiver of contract requirements.

When a certificate of insurance is furnished, it shall contain the following statement: "This is to certify that the policies described herein comply with all aspects of the insurance requirements of (Project Name and Number)."

SC-6.6.1-PROGRESS SCHEDULE

At General Condition Article 6.6.1, change the phrase "Within reasonable time prior to the Pre-Construction Conference..." to read:

"Within seven days after the Pre-Construction Conference."

SC-6.6.2-SCHEDULE OF SHOP DRAWINGS AND SCHEDULE OF VALUES

At General Condition Article 6.6.2, change the phrase "Within fifteen days after the date of the Notice To Proceed,..." to read:

"Prior to submitting the CONTRACTOR's first Application for Payment..."

SC-6.9–SUBSTITUTES "OR EQUAL" ITEMS

Add the following article:

"6.9.5 - Substitutions shall be permitted during or after the bid period as allowed and in accordance with Document 00020 - Invitation for Bids, Document 00700 – General Conditions, and Document 01630 - Product Options and Substitutions."

SC-6.13.1-SUBCONTRACT PROVISIONS

At General Condition Article 6.13.1, delete the third sentence and add the following text:

"All subcontracts shall contain provisions for prompt payment, release of retainage, and interest on late payment amounts and retainage as specified in A.S. 36.90.210. Contracts between subcontractors, regardless of tier, must also contain these provisions."

SC-6.27-LOAD RESTRICTIONS

Add new General Conditions Article 6.27 as follows:

"6.27 Load Restrictions

The CONTRACTOR shall comply with all load restrictions as set forth in the "Administrative Permit Manual", and Title 17, Chapter 25, of the Alaska Administrative Code in the hauling of materials on public roads, beyond

the limits of the project, and on all public roads within the project limits that are scheduled to remain in use upon completion of the project.

Overload permits may, at the discretion of the State, be issued for travel beyond the project limits for purposes of mobilization and/or demobilization. Issuance of such a permit will not relieve the CONTRACTOR of liability for damage which may result from the moving of equipment.

Ketchikan Pioneer Home Revised Walkway Renovations – JNU 16-22C

The operation of equipment of such weight or so loaded as to cause damage to any type of construction will not be permitted. No overloads will be permitted on the base course or surface course under construction. No loads will be permitted on a concrete pavement, base or structure before the expiration of the curing period. The CONTRACTOR shall be responsible for all damage done by his equipment."

SC-7.12-APPLICABLE ALASKA PREFERENCES

At General Condition Article 7.12.2, delete the last portion of the first sentence commencing at the words, "...when the bid documents designate..." and replace with the words:

"...when the bidder designates the use of Alaska products. The Bidder shall complete the Alaska Products Preference Worksheet per its instructions and submit it with the Bid Proposal." Continue with existing second sentence.

SC-7.13-PREFERENTIAL EMPLOYMENT

At General Condition Article 7.13, delete the text of this article in its entirety.

SC-7.14.1-CERTIFIED PAYROLLS

At General Condition Article 7.14.1, add the following text:

"Regardless of project funding source, copies of all certified payrolls supplied to the State DEPARTMENT of Labor by the CONTRACTOR shall be supplied also to the Project Manager <u>upon request</u>, including submittals made by, or on behalf of, subcontractors."

Add General Condition Article 7.14.3, as follows:

"Within three calendar days of award of a construction contract, the CONTRACTOR shall file a "Notice of Work" with the Department of Labor and shall pay all related fees. The Contracting Officer will not issue Notice to Proceed to the CONTRACTOR until such notice and fees have been paid to the Department of Labor. Failure of the CONTRACTOR to file the Notice of Work and pay fees within this timeframe shall not constitute grounds for an extension of contract time or adjustment of contract price."

SC-7.16-COVENANT AGAINST CONTINGENT FEES

At General Conditions Article 7.16, delete the text of this article in its entirety.

SC-7.17-OFFICIALS NOT TO BENEFIT

At General Conditions Article 7.17, delete the text of this article in its entirety.

SC-7.18-PERSONAL LIABILITY OF PUBLIC OFFICIALS

At General Conditions Article 7.18, delete the text of this article in its entirety.

SC-9.4-CHANGE ORDER

At General Conditions Article 9.4, change the first sentence to read:

"A change in Contract Time, Contract Price, or responsibility may be made for changes within the scope of the Work by Change Order."

At General Conditions Article 9.4, add the following sentence:

Ketchikan Pioneer Home Revised Walkway Renovations - JNU 16-22C

"A Change Order shall be considered executed when it is signed by the DEPARTMENT."

SC-9.10-INTERIM WORK AUTHORIZATION

At General Conditions Article 9.10, add the following new paragraph:

"9.10 Interim Work Authorization

An Interim Work Authorization may be used to establish a change within the scope of the Work; however, only a Change Order shall establish associated changes in Contract Time and Price. Work authorized by Interim Work Authorization shall be converted to a Change Order. The basis of payment shall be as stated in the Interim Work Authorization, unless it states that the basis of payment has not been established and is to be negotiated, in which case the Cost of the Work shall be documented pursuant to Article 10.4, to establish a basis for negotiating a lump sum price for the Change Order."

SC-10.3.2-CHANGE ORDER PRICE DETERMINATION FOR LUMP SUM CHANGE ORDERS

At General Conditions Article 10.3.2, Delete this paragraph in its entirety and replace it with the following.

- "10.3.2 By mutual acceptance of a lump sum price which includes overhead and profit. The following maximum rates of cost markup (to cover both overhead and profit of the CONTRACTOR) shall be used in the negotiation of a Lump Sum Change Order:
 - a. 17% where a cost is borne directly by prime contractor (first tier contractor).
 - b. 10% where a cost is borne by a subcontractor (lower tier contractor).

Where the cost is borne by a subcontractor acting as a first tier contractor, the allowable overhead and profit markup for lump sum change orders shall not exceed 17%. Any lower tier subcontractors, including the CONTRACTOR in this case, for whom the first tier subcontractor performs the work, shall be allowed an overhead and profit markup that does not exceed 10%.

SC-10.4-COST OF THE WORK

At General Conditions Article 10.4.1, replace the second sentence from the end of the paragraph with the following:

"Such employees shall include manual workers up through the level of foreman but shall not include general foremen, superintendents, and non-manual employees."

At General Conditions Article 10.4.2, replace the first sentence with the following:

"Cost of all materials and equipment furnished and incorporated or consumed in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith."

SC-10.4.5.c-COST OF THE WORK (SUPPLEMENTAL COSTS)

At General Condition Article 10.4.5.c, add the following:

"For any machinery or special equipment (other than small tools) which has been authorized by the Project Manager, the CONTRACTOR shall receive the rental rates in the current edition and appropriate volume of the "Rental Rate Blue Book for Construction Equipment", published by Dataquest, Inc., 1290 Ridder Park Drive, San Jose, CA 95131. Hourly rental rates shall be determined as follows:

The established hourly rental rate shall be equal to the adjusted monthly rate for the basic equipment plus the

adjusted monthly rate for applicable attachments, both divided by 176, and multiplied by the area adjustment factor, plus the estimated hourly operating cost.

The adjusted monthly rate is that resulting from application of the rate adjustment formula in order to eliminate replacement cost allowances in machine depreciation and contingency cost allowances.

Attachments shall not be included unless required for the time and materials work.

For equipment not listed in The Blue Book, the CONTRACTOR shall receive a rental rate as agreed upon before such work is begun. If agreement cannot be reached, the DEPARTMENT reserves the right to establish a rate based on similar equipment in the Blue Book or prevailing commercial rates in the area.

These rates shall apply for equipment used during the CONTRACTOR's regular shift of 10 hours per day. Where the equipment is used more than 10 hours per day, either on the CONTRACTOR's normal work or on time and materials, and either on single or multiple shifts, an overtime rate, computed as follows, shall apply:

The hourly overtime rate shall be equal to the adjusted monthly rate for the basic equipment plus the adjusted monthly rate for applicable attachments, both divided by 352, and multiplied by the area adjustment factor, plus the estimated hourly operating cost.

Equipment which must be rented or leased specifically for work required under this section shall be authorized in writing by the Project Manager. The CONTRACTOR shall be paid invoice price plus 15%.

When it is necessary to obtain equipment from sources beyond the project limits exclusively for time and materials, work, the actual cost of transferring the equipment to the site of the work and return will be allowed as an additional item of expense. Where the move is made by common carrier, the move-in allowance will be limited to the amount of the freight bill or invoice. If the CONTRACTOR hauls the equipment with his own forces, the allowance will be limited to the rental rate for the hauling unit plus operator wages. In the event that the equipment is transferred under its own power, the moving allowance will be limited to one-half of the normal hourly rental rate plus operator's wages. In the event that the move-out is to a different location, payment will in no instance exceed the amount of the move-in. Move-in allowance shall not be made for equipment brought to the project for time and materials work which is subsequently retained on the project and utilized for completion of contract items, camp maintenance, or related work.

Equipment ordered to be on a stand-by basis shall be paid for at the stand-by rental rate for the number of hours in the CONTRACTOR'S normal work shift, but not to exceed 8 hours per day. The stand-by rental rate shall be computed as follows:

The hourly stand-by rate shall be equal to the adjusted monthly rate for the basic equipment plus the adjusted monthly rate for applicable attachments, both divided by 352, all multiplied by the area adjustment factor.

Time will be recorded to the nearest one-quarter hour for purposes of computing compensation to the CONTRACTOR for equipment utilized under these rates.

The equipment rates as determined above shall be full compensation, including overhead and profit, for providing the required equipment and no additional compensation will be made for other costs such as, but not limited to, fuels, lubricants, replacement parts or maintenance costs. Cost of repairs, both major and minor, as well as charges for mechanic's time utilized in servicing equipment to ready it for use prior to moving to the project and similar charges will not be allowed."

SC-10.11-DISADVANTAGED BUSINESSS ENTERPRISE PROGRAM

At General Conditions Article 10.11, Delete this paragraph in its entirety for this State Funded Contract.

SC-11.3-COMPUTATION OF CONTRACT TIME

At General Condition Article 11.3.1, third sentence, change "...the date of Final Completion..." to:

"...the date of Substantial Completion ... "

At General Condition Article 11.3.2, first sentence, change "...the date of Final Completion..." to:

"...the date of Substantial Completion."

Add General Condition Article 11.3.3, to state as follows:

"The Contract Time shall be as stated on form 25D-9, Proposal."

SC-11.8-DELAY DAMAGES

At General Condition Article 11.8, add the following:

"For each calendar day that the work remains incomplete after the expiration of the Contract Time, liquidated damages in the amount of <u>\$422.00</u> per calendar day shall be assessed to the CONTRACTOR. If no money is due the CONTRACTOR, the DEPARTMENT shall have the right to recover said sum from the CONTRACTOR, the surety or both. The amount of these deductions is to reimburse the DEPARTMENT for estimated liquidated damages incurred as a result of the CONTRACTOR's failure to complete the work within the time specified. As liquidated damages, such deductions are not to be considered as penalties.

Permitting the CONTRACTOR to continue and finish the work or any part of it after the time fixed for its completion, or after the date to which the time for completion may have been extended, will in no way operate as a waiver on the part of the DEPARTMENT of any of its rights under the Contract."

SC 12-ONE YEAR CORRECTION PERIOD

At General Condition Article 12.7, in the first sentence, change the phrase "Final Completion" to:

"Substantial Completion of the relevant portion of the Work..."

SC 13.3-APPLICATION FOR PROGRESS PAYMENT

At General Conditions Article 13.3, revise the last sentence to read as follows:

"Progress payments will be made as the Work progresses on a monthly basis."

SC 13.13-FINAL COMPLETION AND APPLICATION FOR PAYMENT

At General Conditions Article 13.13, first sentence, delete the following items:

"maintenance and operating instructions certificates of inspection marked up record documents"

The preceding items are some of the requirements for Substantial Completion, as addressed in Section 01701.
SC 13.16–CONTRACTOR'S CONTINUING OBLIGATION

At General Condition Article 13.16, add the following paragraph:

"When it is anticipated that restarting, testing, adjusting, or balancing of systems will be required following Final Acceptance and said requirements are noted in Section(s) 01650, such Work shall constitute a continuing obligation under the Contract."

SC 14.2–DEFAULT OF CONTRACT

At General Conditions Article 14.2, delete this section in its entirety and replace with the following:

"14.2.1 The Contracting Officer may give the contractor and his surety a written Notice to Cure

Default if the contractor:

- a. fails to begin work in the time specified,
- b. fails to use sufficient resources to assure prompt completion of the work,
- c. performs the work unsuitably or neglect or refuse to remove and replace rejected materials or work,
- d. stops work,
- e. fails to resume stopped work after receiving notice to do so,
- f. becomes insolvent (except that if you declare bankruptcy, termination will be under Title 11 US Code 362 and/or 365. Your bankruptcy does not relieve the surety of any obligations to assume the Contract and complete the work in a timely manner.
- g. Allows any final judgment to stand against him unsatisfied for period of 60 days, or
- h. Makes an assignment for the benefit of creditors without the consent of the Contracting Officer, or
- i. Disregards Regulatory Requirements of any public body having jurisdiction, or
- j. Otherwise violates in any substantial way any provisions of the Contract Documents, or
- k. fails to comply with Contract minimum wage payments or civil rights requirements, or
- I. are party to fraud, deception, misrepresentation, or
- m. for any cause whatsoever, fails to carry on the Work in an acceptable manner.
- 14.2.2 The Notice to Cure Default will detail the conditions determined to be in default, the time within which to cure the default and may, in the Contracting Officer's discretion, specify the actions necessary to cure the default. Failure to cure the delay, neglect or default within the time specified in the Contracting Officer's written notice to cure authorizes the Department to terminate the contract. The Contracting Officer may allow more time to cure than originally stated in the Notice to Cure Default if he deems it to be in the best interests of the Department. The Department will provide you and your surety with a written Notice of Default Termination that details the default and the failure to cure it.
 - 14.2.3 If the CONTRACTOR or Surety, within the time specified in the above notice of default, shall not proceed in accordance therewith, then the DEPARTMENT may, upon written notification from the Contracting Officer of the fact of such delay, neglect or default and the CONTRACTOR's failure to comply with such notice, have full power and authority without violating the Contract, to take the prosecution of the Work out of the hands of the CONTRACTOR. The DEPARTMENT may terminate the services of the CONTRACTOR, exclude the CONTRACTOR from the site and take possession of the Work and of all the CONTRACTOR's tools, appliances, construction equipment and machinery at the site and use the same to the full extent they could be used by the CONTRACTOR (without liability to the CONTRACTOR for trespass or conversion), incorporate in the Work all materials and equipment stored at the site or for which the DEPARTMENT has paid the CONTRACTOR

but which are stored elsewhere, and finish the Work as the DEPARTMENT may deem expedient. The DEPARTMENT may enter into an agreement for the completion of said Contract according to the terms and provisions thereof, or use such other methods that in the opinion of the Contracting Officer are required for the completion of said Contract in an acceptable manner.

- 14.2.4 The Contracting Officer may, by written notice to the CONTRACTOR and his Surety or his representative, transfer the employment of the Work from the CONTRACTOR to the Surety, or if the CONTRACTOR abandons the Work undertaken under the Contract, the Contracting Officer may, at his option with written notice to the Surety and without any written notice to the CONTRACTOR, transfer the employment for said Work directly to the Surety. The Surety shall submit its plan for completion of the Work, including any contracts or agreements with third parties for such completion, to the DEPARTMENT for Approval prior to beginning completion of the Work. Approval of such contracts shall be in accordance with all applicable requirements and procedures for Approval of subcontracts as stated in the Contract Documents.
- 14.2.5 After the notice of termination is issued, the Department may take over the work and complete it by contract or otherwise and may take possession of and use materials, appliances, equipment or plant on the work site necessary for completing the work.
- 14.2.6 Rather than taking over the work itself, the Department may transfer the obligation to perform the work from the contractor to your surety. The surety must submit its plan for completion of the work, including any contracts or agreements with third parties for completion, to the Department for approval prior to beginning work. The surety must follow the Contract requirements for approval of subcontracts, except that the limitation on percent of work subcontracted will not apply.
- 14.2.7 On receipt of the transfer notice, the surety must take possession of all materials, tools, and appliances at the work site, employ an appropriate work force, and complete the Contract work, as specified. The Contract specifications and requirements shall remain in effect. However the Department will make subsequent Contract payments directly to the Surety for work performed under the terms of the Contract. You forfeit any right to claim for the same work or any part thereof. You are not entitled to receive any further balance of the amount to be paid under the Contract.
- 14.2.8 Upon receipt of the notice terminating the services of the CONTRACTOR, the Surety shall enter upon the premises and take possession of all materials, tools, and appliances thereon for the purpose of completing the Work included under the Contract and employ by contract or otherwise any person or persons to finish the Work and provide the materials therefor, without termination of the continuing full force and effect of this Contract. In case of such transfer of employment to the Surety, the Surety shall be paid in its own name on estimates covering Work subsequently performed under the terms of the Contract and according to the terms thereof without any right of the CONTRACTOR to make any claim for the same or any part thereof.
- 14.2.9 If the Contract is terminated for default, the CONTRACTOR and the Surety shall be jointly and severally liable for damages for delay as provided by paragraph 11.8, and for the excess cost of completion, and all costs and expenses incurred by the DEPARTMENT in completing the Work or arranging for completion of the Work, including but not limited to costs of assessing the Work to be done, costs associated with advertising, soliciting or negotiating for bids or proposals for completion, and other reprocurement costs. Following termination the CONTRACTOR shall not be entitled to receive any further balance of the amount to be paid under the Contract until the Work is fully finished and accepted, at which time if the upaid balance exceeds the amount due the DEPARTMENT and any amounts due to persons for whose benefit the DEPARTMENT has withheld funds, such excess shall be paid by the DEPARTMENT to the CONTRACTOR. If the damages, costs, and expenses due the DEPARTMENT exceed the unpaid balance, the CONTRACTOR and his Surety shall pay the difference.

14.2.10 If, after notice of termination of the CONTRACTOR's right to proceed under the provisions of this clause, it is determined for any reason that the CONTRACTOR was not in default under the provisions of this clause, or that the delay was excusable under the provisions of this clause, or that termination was wrongful, the rights and obligations of the parties shall be determined in accordance with the clause providing for convenience termination.

14.3 Rights or Remedies:

Where the CONTRACTOR's services have been so terminated by the DEPARTMENT, the termination will not affect any rights or remedies of the DEPARTMENT against the CONTRACTOR then existing or which may thereafter accrue. Any retention or payment of moneys due the CONTRACTOR by the DEPARTMENT will not release the CONTRACTOR from liability.

14.4 Convenience Termination:

- 14.4.1 The performance of the Work may be terminated by the DEPARTMENT in accordance with this section in whole or in part, whenever, for any reason the Contracting Officer shall determine that such termination is in the best interest of the DEPARTMENT. Any such termination shall be effected by delivery to the CONTRACTOR of a Notice of Termination, specifying termination is for the convenience of the DEPARTMENT the extent to which performance of Work is terminated, and the date upon which such termination becomes effective.
- 14.4.2 Immediately upon receipt of a Notice of Termination and except as otherwise directed by the Contracting Officer, the CONTRACTOR shall:
 - a. Stop Work on the date and to the extent specified in the Notice of Termination;
 - b. Place no further orders or subcontracts for materials, services, or facilities except as may be necessary for completion of such portion of the Work as is not terminated;
 - c. Terminate all orders and subcontracts to the extent that they relate to the performance of Work terminated by the Notice of Termination;
 - d. With the written Approval of the Contracting Officer, to the extent he may require, settle all outstanding liabilities and all claims arising out of such termination of orders and subcontracts, the cost of which would be reimbursable, in whole, or in part, in accordance with the provisions of the Contract;
 - e. Submit to the Contracting Officer a list, certified as to quantity and quality, of any or all items of termination inventory exclusive of items the disposition of which had been directed or authorized by the Contracting Officer;
 - f. Transfer to the Contracting Officer the completed or partially completed record drawings, Shop Drawings, information, and other property which, if the Contract had been completed, would be required to be furnished to the DEPARTMENT;
 - g. Take such action as may be necessary, or as the Contracting Officer may direct, for the protection and preservation of the property related to the Contract which is in the possession of the CONTRACTOR and in which the DEPARTMENT has or may acquire any interest.

The CONTRACTOR shall proceed immediately with the performance of the above obligations.

14.4.3 When the DEPARTMENT orders termination of the Work effective on a certain date, all Work in place as of that date will be paid for in accordance with Article 13 of the Contract. Materials required for completion and on hand but not incorporated in the Work will be paid for at invoice cost plus 15 % with materials becoming the property of the DEPARTMENT - or the CONTRACTOR may retain title to the materials and be paid an agreed upon lump sum. Materials on order shall be cancelled, and the DEPARTMENT shall pay reasonable factory cancellation charges with the option of taking delivery of the materials in lieu of payment of

cancellation charges. The CONTRACTOR shall be paid 10% of the cost, freight not included, of materials cancelled, and direct expenses only for CONTRACTOR chartered freight transport which cannot be cancelled without charges, to the extent that the CONTRACTOR can establish them. The extra costs due to cancellation of bonds and insurance and that part of job start-up and phase-out costs not amortized by the amount of Work accomplished shall be paid by the DEPARTMENT. Charges for loss of profit or consequential damages shall not be recoverable except as provided above.

- a. The following costs are not payable under a termination settlement agreement or Contracting Officer's determination of the termination claim:
 - 1. Loss of anticipated profits or consequential or compensatory damages
 - 2. Unabsorbed home office overhead (also termed "General & Administrative Expense") related to ongoing business operations
 - 3. Bidding and project investigative costs
 - 4. Direct costs of repairing equipment to render it operable for use on the terminated work
- 14.4.4 The termination claim shall be submitted promptly, but in no event later than 90 days from the effective date of termination, unless extensions in writing are granted by the Contracting Officer upon written request of the CONTRACTOR made within the 90 day period. Upon failure of the CONTRACTOR to submit his termination claim within the time allowed, the Contracting Officer may determine, on the basis of information available to him, the amount, if any, due to the CONTRACTOR by reason of the termination and shall thereupon pay to the CONTRACTOR the amount so determined.
- 14.4.5 The CONTRACTOR and the Contracting Officer may agree upon whole or any part of the amount or amounts to be paid to the CONTRACTOR by reason of the total or partial termination of Work pursuant to this section. The Contract shall be amended accordingly, and the CONTRACTOR shall be paid the agreed amount.
- 14.4.6 In the event of the failure of the CONTRACTOR and the Contracting Officer to agree in whole or in part, as provided heretofore, as to the amounts with respect to costs to be paid to the CONTRACTOR in connection with the termination of the Work the Contracting Officer shall determine, on the basis of information available to him, the amount, if any, due to the CONTRACTOR by reason of the termination and shall pay to the CONTRACTOR the amount determined as follows:
 - a. All costs and expenses reimbursable in accordance with the Contract not previously paid to the CONTRACTOR for the performance of the Work prior to the effective date of the Notice of Termination;
 - b. So far as not included under "a" above, the cost of settling and paying claims arising out of the termination of the Work under subcontracts or orders which are properly chargeable to the terminated portions of the Contract;
 - c. So far as practicable, claims by the contractor for idled or stand-by equipment shall be made as follows: Equipment claims will be reimbursed as follows:
 - 1. Contractor-owned equipment usage, based on the contractor's ownership and operating costs for each piece of equipment as determined from the contractor's accounting records. Under no circumstance, may the contractor base equipment claims on published rental rates.
 - 2. Idle or stand-by time for Contractor-owned equipment, based on your internal ownership and depreciation costs. Idle or stand-by equipment time is limited to the actual period of time equipment is idle or on stand-by as a direct result of the termination, not to exceed 30 days. Operating expenses will not be included for payment of idle or stand-by equipment time.

- 3. Rented equipment, based on reasonable, actual rental costs. Equipment leased under "capital leases" as defined in Financial Accounting Standard No. 13 will be considered Contractor-owned equipment. Equipment leased from an affiliate, division, subsidiary or other organization under common control with you will be considered Contractor-owned equipment, unless the lessor has an established record of leasing to unaffiliated lessees at competitive rates consistent with the rates you have agreed to pay and no more than forty percent of the lessor's leasing business, measured in dollars, is with organizations affiliated with the lessor.
- 14.4.7 The CONTRACTOR shall have the right of appeal under the DEPARTMENT's claim procedures, as defined in Article 15, for any determination made by the Contracting Officer, except if the CONTRACTOR has failed to submit his claim within the time provided and has failed to request extension of such time, CONTRACTOR shall have no such right of appeal. In arriving at the amount due the CONTRACTOR under this section, there shall be deducted:
 - a. All previous payments made to the CONTRACTOR for the performance of Work under the Contract prior to termination;
 - b. Any claim for which the DEPARTMENT may have against the CONTRACTOR;
 - c. The agreed price for, or the proceeds of sale of, any materials, supplies, or other things acquired by the CONTRACTOR or sold pursuant to the provisions of this section and not otherwise recovered by or credited to the DEPARTMENT; and,
 - d. All progress payments made to the CONTRACTOR under the provisions of this section.
- 14.4.8 Where the Work has been terminated by the DEPARTMENT said termination shall not affect or terminate any of the rights of the DEPARTMENT against the CONTRACTOR or his Surety then existing or which may thereafter accrue because of such default. Any retention or payment of monies by the DEPARTMENT due to the CONTRACTOR under the terms of the Contract shall not release the CONTRACTOR or his Surety from liability.
- 14.4.9 The contractor's termination claim may not include claims that pre dated the notice for termination for convenience. Those claims shall be prosecuted by the contractor under Article 15.
- 14.4.10 The contractor's termination claim may not exceed the total dollar value of the contract as awarded plus agreed upon change orders less the amounts that have been paid for work completed.
 - a. Unless otherwise provided for in the Contract Documents, or by applicable statute, the CONTRACTOR, from the effective date of termination and for a period of three years after final settlement under this Contract, shall preserve and make available to the DEPARTMENT at all reasonable times at the office of the CONTRACTOR, all its books, records, documents, and other evidence bearing on the cost and expenses of the CONTRACTOR under his Contract and relating to the Work terminated hereunder.
 - b. <u>Definitions</u>. In this Subsection 108-1.09, the term "cost" and the term "expense" mean a monetary amount in U.S. Dollars actually incurred by you, actually reflected in your contemporaneously maintained accounting or other financial records and supported by original source documentation.
 - c. <u>Cost Principles</u>. The Department may use the federal cost principles at 48 CFR §§ 31.201-1 to 31.205-52 (or succeeding cost principles for fixed price contracts) as guidelines in determining allowable costs under this Subsection to the extent they are applicable to construction contracts and consistent with the specifications of this Contract. The provisions of this contract control where they are more restrictive than, or inconsistent with, these federal cost principles."

SC-15-CLAIMS AND DISPUTES

At General Conditions Article 15 – Claims and Disputes, delete this section in its entirety and substitute the following text:

"ARTICLE 15 - CLAIMS FOR ADJUSTMENT AND DISPUTES

15.1 Notification

- 15.1.1 The CONTRACTOR shall notify the DEPARTMENT in writing as soon as the CONTRACTOR becomes aware of any act or occurrence which may form the basis of a claim for additional compensation or an extension of Contract Time or of any dispute regarding a question of fact or interpretation of the Contract. The DEPARTMENT has no obligation to investigate any fact or occurrence that might form the basis of a claim or to provide any additional compensation or extension of Contract Time unless the CONTRACTOR has notified the DEPARTMENT in writing in a timely manner of all facts the CONTRACTOR believes form the basis for the claim.
- 15.1.2 If the CONTRACTOR believes that he is entitled to an extension of Contract Time, then the CONTRACTOR must state the contract section on which he basis his extension request, provide the DEPARTMENT with sufficient information to demonstrate that the CONTRACTOR has suffered excusable delay, and show the specific amount of time to which the CONTRACTOR is entitled. The DEPARTMENT will not grant an extension of Contract Time if the CONTRACTOR does not timely submit revised schedules under **Section 01310**.
- 15.1.3 If the matter is not resolved by agreement within 7 days, the CONTRACTOR shall submit an Intent to Claim, in writing, to the DEPARTMENT within the next 14 days.
- 15.1.4 If the CONTRACTOR believes additional compensation or time is warranted, then he must immediately begin keeping complete, accurate, and specific daily records concerning every detail of the potential claim including actual costs incurred. The CONTRACTOR shall provide the DEPARTMENT access to any such records and furnish the DEPARTMENT copies, if requested. Equipment costs must be based on the CONTRACTOR's internal rates for ownership, depreciation, and operating expenses and not on published rental rates. In computing damages, or costs claimed for a change order, or for any other claim against the Department for additional time, compensation or both, the contractor must prove actual damages based on internal costs for equipment, labor or efficiencies. Total cost, modified total cost or jury verdict forms of presentation of damage claims are not permissible to show damages. Labor inefficiencies must be shown to actually have occurred and can be proven solely based on job records. Theoretical studies are not a permissible means of showing labor inefficiencies. Home office overhead will not be allowed as a component of any claim against the Department.
- 15.1.5 If the claim or dispute is not resolved by the DEPARTMENT, then the CONTRACTOR shall submit a written Claim to the Contracting Officer within 90 days after the CONTRACTOR becomes aware of the basis of the claim or should have known the basis of the claim, whichever is earlier. The Contracting Officer will issue written acknowledge of the receipt of the Claim.
- 15.1.6 The CONTRACTOR waives any right to claim if the DEPARTMENT was not notified properly or afforded the opportunity to inspect conditions or monitor actual costs or if the Claim is not filed on the date required.

15.2 Presenting the Claim

- 15.2.1 The Claim must include all of the following:
 - a. The act, event, or condition the claim is based on
 - b. The Contract provisions which apply to the claim and provide relief
 - c. The item or items of Contract work affected and how they are affected

- d. The specific relief requested, including Contract Time if applicable, and the basis upon which it was calculated
- e. A statement certifying that the claim is made in good faith, that the supporting cost and pricing data are accurate and complete to the best of your knowledge and belief, and that the amount requested accurately reflects the Contract adjustment which the CONTRACTOR believes is due.

15.3 Claim Validity, Additional Information, and DEPARTMENT's Action

- 15.3.1 The Claim, in order to be valid, must not only show that the CONTRACTOR suffered damages or delay but that it was caused by the act, event, or condition complained of and that the Contract provides entitlement to relief for such act, event, or condition.
- 15.3.2 The DEPARTMENT can make written request to the CONTRACTOR at any time for additional information relative to the Claim. The CONTRACTOR shall provide the DEPARTMENT the additional information within 30 days of receipt of such a request. Failure to furnish the additional information may be regarded as a waiver of the Claim.

15.4 Contracting Officer's Decision

The CONTRACTOR will be furnished the Contracting Officer's Decision within 90 days, unless the Contracting Officer requests additional information or gives the CONTRACTOR notice that the time for issuing a decision is being extended for a specified period under AS 36.30.620. The Contracting Officer's decision is final and conclusive unless, within 14 days of receipt of the decision, the CONTRACTOR delivers a Notice of Appeal to the Appeals Officer. Procedures for appeals are covered under AS 36.30.625 and AS 36.30.630.

15.5 Fraud and Misrepresentation in Making Claims

Criminal and Civil penalties authorized under AS 36.30.687 (including, but not limited to, forfeiture of all claimed amounts) may be imposed on the CONTRACTOR if the CONTRACTOR makes or uses a misrepresentation in support of a claim or defraud or attempt to defraud the DEPARTMENT at any stage of prosecuting a claim under this Contract."

END OF SECTION

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Laborers' & Mechanics' Minimum Rates of Pay

Effective September 1, 2015 Issue 31



Title 36. Public Contracts AS 36.05 & AS 36.10 Wage & Hour Administration Pamphlet No. 600

27





Department of Labor and Workforce Development

Office of the Commissioner

Post Office Box 111149 Juneau, Alaska 99811 Main: 907.465.2700 fax: 907.465-2784

September 1, 2015

TO ALL CONTRACTING AGENCIES:

At the Alaska Department of Labor and Workforce Development, our goal is putting Alaskans to work. This pamphlet is designed to help contractors awarded public construction contracts understand the most significant laws of the State of Alaska pertaining to prevailing wage and resident hire requirements.

This pamphlet identifies current prevailing wage rates and resident hire classifications for public construction contracts (any construction projects awarded by the State of Alaska or its political subdivisions, such as local governments and certain non-profit organizations). Because these rates may change, this publication is printed in the spring and fall of every year, so please be sure you are using the appropriate rates. The rates published in this edition become effective September 1, 2015.

All projects with a final bid date of September 11, 2015, or later, must pay the prevailing wage rates contained in this pamphlet. As the law now provides, these rates will remain stable during the life of a contract or for 24 calendar months, whichever is shorter. **The 24 months period begins on the date the prime contract is awarded.** Upon expiration of the initial 24-month period, the <u>latest</u> wage rates issued by the department shall become effective for a subsequent 24-month period or until the original contract is completed, whichever occurs first. This process shall be repeated until the original contract is completed.

The term "original contract" means the signed contract that resulted from the original bid and any amendments, including changes of work scope, additions, extensions, change orders, and other instruments agreed to by the parties that have not been subject to subsequent open bid procedures.

If a higher federal rate is required due to partial federal funding or other federal participation, the higher rate must be paid.

For additional copies of this pamphlet, contact the nearest office of the Division of Labor Standards and Safety, Wage and Hour office or the Web address at: <u>http://labor.state.ak.us/lss/pamp600.htm</u>

For questions regarding prevailing wage or resident hire requirements, please contact the nearest Wage and Hour office. These offices are listed on Page x.

Sincerely,

Heidi Drygas

Commissioner

Table of Contents

Excerpts from Alaska Law

ec. 36.05.005. Applicability	ii
ec. 36.05.010. Wage rates on public construction.	ii
ec. 36.05.040. Filing schedule of employees, wages paid and other information	ii
ec. 36.05.045. Notice of work and completion; withholding of payment	ii
ec. 36.05.060. Penalty for violation of this chapter	iv
ec. 36.05.070. Wage rates in specifications and contracts for public works	iv
ec. 36.05.080. Failure to pay agreed wages	iv
ec. 36.05.090. Payment of wages from withheld payments and listing contractors who violate contracts	iv
ec. 36.05.900. Definition	.v

Additional Information

Laborer Classification Clarification	v
Accommodations and Per Diem	v
Apprentice Hiring Requirements	vi
Apprentice Rates	vii
Fringe Benefit Plans	vii
Special Prevailing Wage Rate Determination	vii
Request for Notice of Proposed Change of Labor Standards Regulations	viii
Alaska Hire Employment Preference	ix
Debarment List	X

Note to Readers: The statutes and administrative regulations listed in this publication were taken from the official codes, as of the effective date of the publication. However, there may be errors or omissions that have not been identified and changes that occurred after the publication was printed. This publication is intended as an informational guide only and is not intended to serve as a precise statement of the statutes and regulations of the State of Alaska. To be certain of the current laws and regulations, please refer to the official codes.

EXCERPTS FROM ALASKA LAW

(*The following statute (36.05.005) applies to projects bid on or after October 20, 2011)* Sec. 36.05.005. Applicability.

This chapter applies only to a public construction contract that exceeds \$25,000.

Sec. 36.05.010. Wage rates on public construction.

A contractor or subcontractor who performs work on a public construction contract in the state shall pay not less than the current prevailing rate of wages for work of a similar nature in the region in which the work is done. The current prevailing rate of wages is that contained in the latest determination of prevailing rate of wages issued by the Department of Labor and Workforce Development at least 10 days before the final date for submission of bids for the contract. The rate shall remain in effect for the life of the contract or for 24 calendar months, whichever is shorter. At the end of the initial 24-month period, if new wage determinations have been issued by the department, the latest wage determination shall become effective for the next 24-month period or until the contract is completed, whichever occurs first. This process shall be repeated until the contract is completed.

Sec. 36.05.040. Filing schedule of employees, wages paid, and other information.

All contractors or subcontractors who perform work on a public construction contract for the state or for a political subdivision of the state shall, before the Friday of every second week, file with the Department of Labor and Workforce Development a sworn affidavit for the previous reporting period, setting out in detail the number of persons employed, wages paid, job classification of each employee, hours worked each day and week, and other information on a form provided by the Department of Labor and Workforce Development.

Sec. 36.05.045. Notice of work and completion; withholding of payment.

- (a) Before commencing work on a public construction contract, the person entering into the contract with a contracting agency shall designate a primary contractor for purposes of this section. Before work commences, the primary contractor shall file a notice of work with the Department of Labor and Workforce Development. The notice of work must list work to be performed under the public construction contract by each contractor who will perform any portion of work on the contract and the contract price being paid to each contractor. The primary contractor shall pay all filing fees for each contractor performing work on the contract, including a filing fee based on the contract price being paid for work performed by the primary contractor's employees. The filing fee payable shall be the sum of all fees calculated for each contractor. The filing fee shall be one percent of each contractor's contract price. The total filing fee payable by the primary contractor under this subsection may not exceed \$5,000. In this subsection, "contractor" means an employer who is using employees to perform work on the public construction contract under the contract or a subcontract.
- (b) Upon completion of all work on the public construction contract, the primary contractor shall file with the Department of Labor and Workforce Development a notice of completion together with payment of any additional filing fees owed due to increased contract amounts. Within 30 days after the department's receipt of the primary contractor's notice of completion, the department shall inform the contracting agency of the amount, if any, to be withheld from the final payment.
- (c) A contracting agency
 - (1) may release final payment of a public construction contract to the extent that the agency has received verification from the Department of Labor and Workforce Development that
 - (A) the primary contractor has complied with (a) and (b) of this section;
 - (B) the Department of Labor and Workforce Development is not conducting an investigation under this title; and
 - (C) the Department of Labor and Workforce Development has not issued a notice of a violation of this chapter to the primary contractor or any other contractors working on the public construction contract; and

- (2) shall withhold from the final payment an amount sufficient to pay the department's estimate of what may be needed to compensate the employees of any contractors under investigation on this construction contract, and any unpaid filing fees.
- (d) The notice and filing fee required under (a) of this section may be filed after work has begun if
 - (1) The public construction contract is for work undertaken in immediate response to an emergency; and
 - (2) The notice and fees are filed not later than 14 days after the work has begun.
- (e) A false statement made on a notice required by this section is punishable under AS 11.56.210.

Sec. 36.05.060. Penalty for violation of this chapter.

A contractor who violates this chapter is guilty of a misdemeanor and upon conviction is punishable by a fine of not less than \$100 nor more than \$1,000, or by imprisonment for not less than 10 days nor more than 90 days, or by both. Each day a violation exists constitutes a separate offense.

Sec. 36.05.070. Wage rates in specifications and contracts for public works.

- (a) The advertised specifications for a public construction contract that requires or involves the employment of mechanics, laborers, or field surveyors must contain a provision stating the minimum wages to be paid various classes of laborers, mechanics, or field surveyors and that the rate of wages shall be adjusted to the wage rate under <u>AS 36.05.010</u>.
- (b) Repealed by §17 ch 142 SLA 1972.
- (c) A public construction contract under (a) of this section must contain provisions that
 - (1) the contractor or subcontractors of the contractor shall pay all employees unconditionally and not less than once a week;
 - (2) 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;
 - (3) the scale of wages to be paid shall be posted by the contractor in a prominent and easily accessible place at the site of the work;
 - (4) the state or a political subdivision 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
 - (A) the rates of wages required by the contract to be paid laborers, mechanics, or field surveyors on the work; and
 - (B) the rates of wages in fact received by laborers, mechanics, or field surveyors.

Sec. 36.05.080. Failure to pay agreed wages.

Every contract within the scope of <u>AS 36.05.070</u> shall contain a provision that 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 the contract to be paid, the state or its political subdivision may, by written notice to the contractor, terminate the contractor's right to proceed with the work or the part of the work for which there is a failure to pay the required wages and to prosecute the work to completion by contract or otherwise, and the contractor's sureties are liable to the state or its political subdivision for excess costs for completing the work.

Sec. 36.05.090. Payment of wages from withheld payments and listing contractors who violate contracts.

- (a) The state disbursing officer in the case of a state public construction contract and the local fiscal officer in the case of a political subdivision public construction contract shall pay directly to laborers, mechanics, or field surveyors from accrued payments withheld under the terms of the contract the wages due laborers, mechanics, or field surveyors under <u>AS 36.05.070</u>.
- (b) The state disbursing officer or the local fiscal officer shall distribute to all departments of the state government and to all political subdivisions of the state a list giving the names of persons who have disregarded their obligations to employees. A person appearing on this list and a firm, corporation,

partnership, or association in which the person has an interest may not work as a contractor or subcontractor on a public construction contract for the state or a political subdivision of the state until three years after the date of publication of the list. If the accrued payments withheld under the contract are insufficient to reimburse all the laborers, mechanics, or field surveyors with respect to whom there has been a failure to pay the wages required under <u>AS 36.05.070</u>, the laborers, mechanics, or field surveyors have the right of action or intervention or both against the contractor and the contractor's sureties conferred by law upon persons furnishing labor or materials, and in the proceedings it is not a defense that the laborers, mechanics, or field surveyors accepted or agreed to accept less than the required rate of wages or voluntarily made refunds.

Sec. 36.05.900. Definition.

In this chapter, "contracting agency" means the state or a political subdivision of the state that has entered into a public construction contract with a contractor.

ADDITIONAL INFORMATION

LABORER CLASSIFICATION CLARIFICATION

The laborer rates categorized in class code S1201-S1206 apply in one area of Alaska; the area that is south of N63 latitude and west of W138 Longitude. The laborer rates categorized in class code N1201-N1206 apply in two areas of Alaska; the Alaska areas north of N63 latitude and east of W138 longitude. The following graphic representations should assist with clarifying the applicable wage rate categories:



ACCOMMODATIONS AND PER DIEM

The Alaska Department of Labor and Workforce Development has adopted a per diem requirement for blocklayers, bricklayers, carpenters, dredgemen, heat & frost insulators/asbestos workers, ironworkers, laborers, operative plasterers & cement masons, painters, piledrivers, power equipment operators, roofers, surveyors, truck

drivers/surveyors, and tunnel workers. This per diem rate creates an allowable alternative to providing board and lodging under the following conditions:

Employer-Provided Camp or Suitable Accommodations

Unless otherwise approved by the Commissioner, the employer shall ensure that a worker who is employed on a project that is 65 road miles or more from the international airport in either Fairbanks, Juneau or Anchorage or is inaccessible by road in a 2-wheel drive vehicle and who is not a domiciled resident of the locality of the project shall receive meals and lodging. Lodging shall be in accordance with all applicable state and federal laws. In cases where the project site is not road accessible, but the employee can reasonably get to the project worksite from their permanent residence within one hour, the Commissioner may waive these requirements for that employee upon a written request from the employer.

The term "domiciled resident" means a person living within 65 road miles of the project, or in the case of a highway project, the mid-point of the project, for at least 12 consecutive months prior to the award of the project. However, if the employer or person provides sufficient evidence to convince the department that a person has established a permanent residence and an intent to remain indefinitely within the distance to be considered a "domiciled resident," the employer shall not be required to provide meals and lodging or pay per diem.

Where the employer provides or furnishes board, lodging or any other facility, the cost or amount thereof shall not be considered or included as part of the required prevailing wage basic hourly rate and cannot be applied to meet other fringe benefit requirements. The taxability of employer provided board and lodging shall be determined by the appropriate taxation enforcement authority.

Per Diem

Employers are encouraged to use commercial facilities and lodges; however, when such facilities are not available, per diem in lieu of meals and lodging must be paid at the basic rate of \$75.00 per day, or part thereof, the worker is employed on the project. Per diem shall not be allowed on highway projects west of Livengood on the Elliott Highway, at Mile 0 of the Dalton Highway to the North Slope of Alaska, north of Mile 20 on the Taylor Highway, east of Chicken, Alaska, on the Top of the World Highway and south of Tetlin Junction to the Alaska-Canada border.

The above-listed standards for room and board and per diem only apply to the crafts as identified in Pamphlet 600, *Laborers' and Mechanics' Minimum Rates of Pay*. Other crafts working on public construction projects shall be provided room and board at remote sites based on the department's existing policy guidelines. In the event that a contractor provides lodging facilities, but no meals, the department will accept payment of \$36 per day for meals to meet the per diem requirements.

APPRENTICE HIRING REQUIREMENTS

On July 24, 2005, Administrative Order No. 226 established a 15 percent goal for hiring apprentices in certain job categories on highway, airport, harbor, dam, tunnel, utility or dredging projects awarded by the Alaska Department of Transportation and Public Facilities that exceed \$2.5 million. This Order will apply to all projects in the referenced categories that are advertised after September 1, 2005. On these projects, the hours worked by apprentices will be compared to the hours worked by journeyman level workers to determine if the 15 percent goal has been met. This on-the-job training goal is critical to ensure that the Alaska work force is prepared for the future. For additional details, contact the nearest Wage and Hour office at the address listed on Page xi of this publication. Administrative Order No. 226 may be viewed in its entirety on the Internet at http://www.gov.state.ak.us/admin-orders/226.html or call any Wage and Hour office to receive a copy.

APPRENTICE RATES

Apprentice rates at less than the minimum prevailing rates may be paid to apprentices according to an apprentice program which has been registered and approved by the Commissioner of the Alaska Department of Labor and Workforce Development in writing or according to a bona fide apprenticeship program registered with the U.S. Department of Labor, Office of Apprenticeship. Any employee listed on a payroll at an apprentice wage rate who is not registered as above shall be paid the journeyman prevailing minimum wage in that work classification. Wage rates are based on prevailing crew makeup practices in Alaska and apply to work performed regardless of either the quality of the work performed by the employee or the titles or classifications which may be assigned to individual employees.

FRINGE BENEFIT PLANS

Contractors/subcontractors may compensate fringe benefits to their employees in any one of three methods. The fringe benefits may be paid into a union trust fund, into an approved benefit plan, or paid directly on the paycheck as gross wages.

Where fringe benefits are paid into approved plans, funds, or programs including union trust funds, the payments must be contributed at least monthly. If contractors submit their own payroll forms and are paying fringe benefits into approved plans, funds, or programs, the employer's certification must include, in addition to those requirements of <u>8 AAC 30.020(c)</u>, a statement that fringe benefit payments have been or will be paid at least monthly. Contractors who pay fringe benefits to a plan must ensure the plan is one approved by the Internal Revenue Service and that the plan meets the requirements of <u>8 AAC 30.025</u> (eff. 3/2/08) in order for payments to be credited toward the prevailing wage obligation.

SPECIAL PREVAILING WAGE RATE DETERMINATION

Special prevailing wage rate determinations may be requested for special projects or a special worker classification if the work to be performed does not conform to traditional public construction for which a prevailing wage rate has been established under <u>8 AAC 30.050(a)</u> of this section. Requests for special wage rate determinations must be in writing and filed with the Commissioner <u>at least 30 days before the award of the contract</u>. An applicant for a special wage rate determination shall have the responsibility to support the necessity for the special rate. An application for a special wage rate determination filed under this section must contain:

- (1) a specification of the contract or project on which the special rates will apply and a description of the work to be performed;
- (2) a brief narrative explaining why special wage rates are necessary;
- (3) the job class or classes involved;
- (4) the special wage rates the applicant is requesting, including survey or other relevant wage data to support the requested rates;
- (5) the approximate number of employees who would be affected; and
- (6) any other information which might be helpful in determining if special wage rates are appropriate.

Requests made pursuant to the above should be addressed to:

Director Alaska Department of Labor and Workforce Development Labor Standards & Safety Division Wage and Hour Administration P.O. Box 111149 Juneau, AK 99811-1149 -or-Email: anchorage.lss-wh@alaska.gov

LABOR STANDARDS REGULATIONS NOTICE REQUEST

If you would like to receive *notices of proposed changes to regulations* for Wage and Hour or Mechanical Inspection, please indicate below the programs for which you are interested in receiving such notices, print your name and email or mailing address in the space provided, and send this page to:

Alaska Department of Labor and Workforce Development Labor Standards & Safety Division Wage and Hour Administration 1251 Muldoon Road, Suite 113 Anchorage, AK 99504-2098 Email: anchorage.lss-wh@alaska.gov

For *REGULATIONS* information relating to any of the following:

- □ Wage and Hour Title 23 Employment Practices
- □ Wage and Hour Title 36 Public Works
- Employment Agencies
- Child Labor
- Employment Preference (Local Hire)
- Plumbing Code
- Electrical Code
- D Boiler/Pressure Vessel Construction Code
- Elevator Code
- Certificates of Fitness
- **Recreational Devices**

Request any of the following PUBLICATIONS by checking below:

- □ Wage and Hour Title 23 Employment Practices
- ☐ Minimum Wage & Overtime Poster
- Public Construction Pamphlet
 Public Construction Wage Rat

Child Labor Poster

- D Public Construction Wage Rates
- Child Labor Pamphlet

PLEASE NOTE: DUE TO INCREASED MAILING AND PRINTING COSTS, ONLY ONE OF EACH PUBLICATION REQUESTED WILL BE MAILED TO YOU. IF YOU WISH TO RECEIVE ADDITIONAL COPIES OR SUBSEQUENT PUBLICATIONS, PLEASE CONTACT OUR OFFICE AT (907) 269-4900.

Name:	 	
Mailing Address:	 	
Email Address:	 	

DEPARTMENT OF LABOR & WORKFORCE DEVELOPMENT ALASKA EMPLOYMENT PREFERENCE INFORMATION

By authority of <u>AS 36.10.150</u> and <u>8 AAC 30.064</u>, the Commissioner of Labor and Workforce Development has determined the State of Alaska to be a Zone of Underemployment. A Zone of Underemployment requires that Alaska residents who are eligible under <u>AS 36.10.140</u> be given a minimum of 90 percent employment preference on public works contracts throughout the state in certain job classifications. **This 90 percent Alaska resident hiring preference applies on a project-by-project, craft-by-craft or occupational basis and must be met each workweek by each contractor/subcontractor in each of the following classifications:**

Boilermakers	Electricians	Laborers	Roofers
Bricklayers	Engineers & Architects	Mechanics	Sheet Metal Workers
Carpenters	Equipment Operators	Millwrights	Surveyors
Cement Masons	Foremen & Supervisors	Painters	Truck Drivers
Culinary Workers	Insulation Workers	Piledriving Occupations	Tug Boat Workers
	Ironworkers	Plumbers & Pipefitters	Welders

This determination became effective July 1, 2015, and remains in effect through June 30, 2017. This determination will be applied to projects with a bid submission deadline on or after July 1, 2015 and to projects previously covered by the 2013 Alaska employment preference determination. This will afford contractors an opportunity to consider the impacts of Alaska resident hire in their bids.

The first person on a certified payroll in any classification is called the "first worker" and is not required to be an Alaskan resident. However, once the contractor adds any more workers in the classification, then all workers in the classification are counted, and the 90 percent calculation is applied to compute the number of required Alaskans to be in compliance. To compute the number of Alaskan residents required in a workweek in a particular classification, multiply the total number of workers in the classification by 90 percent. The result is then rounded down to the nearest whole number to determine the number of Alaskans that must be employed in that classification.

If a worker works in more than one classification during a week, the classification in which they spent the most time would be counted for employment preference purposes. If the time is split evenly between two classifications, the worker is counted in both classifications.

If you have difficulty meeting the 90 percent requirement, an approved waiver must be obtained <u>before</u> a non-Alaska resident is hired who would put the contractor/subcontractor out of compliance (<u>8 AAC 30.081 (e) (f)</u>). The waiver process requires proof of an adequate search for qualified Alaskan workers. Qualified Alaska residents identified through the search must be hired before waivers for non-resident workers may be granted. To apply for a waiver, contact the nearest Wage and Hour Office for instructions.

Here is an example to apply the 90 percent requirement to four boilermaker workers. Multiply four workers by 90% and drop the fraction (.90 X 4 = 3.6 - .6 = 3). The remaining number is the number of Alaskan resident boilermakers required to be in compliance in that particular classification for that week.

The penalties for being out of compliance are serious. <u>AS 36.10.100</u> (a) states "A contractor who violates a provision of this chapter shall have deducted from amounts due to the contractor under the contract the prevailing wages which should have been paid to a displaced resident and these amounts shall be retained by the contracting agency." If a contractor/subcontractor is found to be out of compliance, penalties accumulate until they come into compliance.

Contractors are responsible for determining residency status. If you have difficulty determining whether a worker is an Alaska resident, you should contact the nearest Wage and Hour Office. Contact Wage and Hour in Anchorage at (907) 269-4900, in Fairbanks at (907) 451-2886, or in Juneau at (907) 465-4842.

Alaska Department of Labor and Workforce Development Labor Standards & Safety Division Wage and Hour Administration Web site: http://labor.state.ak.us/lss/pamp600.htm

Anchorage

1251 Muldoon Road, Suite 113 Anchorage, Alaska 99504-2098 Phone: (907) 269-4900

Email: anchorage.lss-wh@alaska.gov Juneau

1111 W. 8th Street, Suite 302 Juneau, Alaska 99801 Phone: (907) 465-4842

Email: juneau.lss-wh@alaska.gov

DEBARMENT LIST

<u>AS 36.05.090(b)</u> states that "the state disbursing officer or the local fiscal officer shall distribute to all departments of the state government and to all political subdivisions of the state a list giving the names of persons who have disregarded their obligations to employees."

A person appearing on the following debarment list and a firm, corporation, partnership, or association in which the person has an interest may not work as a contractor or subcontractor on a public construction contract for the state or a political subdivision of the state for three years from the date of debarment.

Company Name

Bengal Groups, LLC Mohammed Ali, Individual Fry's Services, LLC John Paul Freie, Individual **Debarment Expires**

November 3, 2017 November 3, 2017 November 16, 2017 November 16, 2017 Fairbanks

Regional State Office Building 675 7th Ave., Station J-1 Fairbanks, Alaska 99701-4593 Phone: (907) 451-2886 Email: fairbanks.lss@alaska.gov

SPECIAL NOTICE TO BIDDERS

NEW "LITTLE DAVIS BACON ACT" CHANGES FILING PROCESS AND ASSESSES SPECIAL FEES ON PUBLIC WORKS CONSTRUCTION PROJECTS

The news release concerning these changes is at: http://labor.state.ak.us/news/2003/news03-23.htm

Governor Sean Parnell signed changes to CSHB 155 into law on July 22, 2011 (effective October 20, 2011), in addition to Governor Murkowski CSHB 155 changes on June 16, 2003 (effective July 2, 2003). The new laws allow contractors working on certain public construction projects to file bi-weekly versus weekly-certified payrolls to the Alaska Department of Labor and Workforce Development (DOLWD), filing requirements **and** it levies filing fees.

• What does this change accomplish?

State Funded Projects - Instead of submitting certified payrolls weekly, prime Contractors working on State funded public construction projects are now allowed to file certified payrolls every other week - biweekly payroll reports on State funded project shall not contain Social Security Numbers. In conjunction with this statutory change, the DOLWD is revising the certified payroll form. The revised certified payroll form is available at: http://www.labor.state.ak.us/lss/lssforms.htm

Federally Funded Projects - Federal weekly payroll filing requirements under 29 CFR 5.5 (a) (3) <u>are not changed</u> by this new law. But, the assessment of a one percent fee based on the estimated value of work performed and of the value of each subcontractor's price now applies (see below).

And, Federal Statue and form 25D-55 <u>still require</u> Social Security Numbers for the certified weekly payroll reports submitted on Federally funded projects.

• Are there special forms to file and fees to pay?

Effective October 20, 2011, the prime Contractor working on any public construction project exceeding \$25,000 must file a "Notice of Work" and a "Notice of Completion" form with the DOLWD.

A one percent filing fee will be assessed on contracts with an amount of \$25,000 or more. The fee will be based on the estimated value of work to be performed by the prime contractor, and one percent of the value of each subcontractor's price. The maximum fee is \$5,000.00.

Amounts paid to owner/operators who do not use employees are exempt from the filing fee.

The Contractor must provide to the Contracting Agency a copy of the "Notice of Work" form that has been date stamped as received by the DOL along with confirmation of fee payment before work on the project may commence.

And, the Contractor must file a "Notice of Completion" with the DOLWD when work is completed. The Contracting Agency <u>will not</u> perform the "close-out for final project completion" until notice from the DOLWD that they have processed the Contractors "Notice of Completion" form. The "Notice of Work" and "Notice of Completion" forms are available at: http://www.labor.state.ak.us/lss/lssforms.htm

• What about emergency work and projects bid opened before July 1, 2003?

There are special provisions for filing the "Notice of Work" and the payment of fees for an emergency response project. Contractors have 14 days after starting work in which to file the "Notice of Work" and pay the fees on an emergency response project.

A prime Contractor under a contract that had a final bid date before July 1, 2003 will not be required to pay a filing fee, regardless of when the work starts.

• How can I find out more about this new law?

Contact the Dept. of Labor Workforce and Development, Wage and Hour Administration at:

Juneau	907.465.4842
Anchorage	907.269.4900
Fairbanks	907.451.2886

Issued October 21, 2011



STATE OF ALASKA DEPARTMENT OF HEALTH & SOCIAL SERVICES

SECTION 00850 DRAWING INDEX Ketchikan Pioneer Home Revised Walkway Renovations JNU 16-22C

GENERAL

- G0.0 Cover, Vicinity Map, Index & Summary of Work
- G1.0 General Notes, Legend & Abbreviations

<u>CIVIL</u>

- C0.1 Existing Site & Survey Control
- C1.0 Demolition Plan
- C2.0 Site Plan North
- C2.1 Site Plan South
- C2.3 Handrail Plan South
- C2.4 Proposed Grading Plan
- C3.0 Civil Details
- C3.1 Civil Details
- C3.2 Civil Details

SECTION 01005 ADMINISTRATIVE PROVISIONS

PART I GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Local Conditions
- B. Permits, Fees, and Inspections
- C. Alternates
- D. Preconstruction Meeting
- E. Applications for Payment
- F. Contractor Use of Premises
- G. Owner Occupancy
- H. Owner Furnished Products
- I. Coordination
- J. Reference Standards

1.02 RELATED REQUIREMENTS

A. General and Special Conditions

1.03 LOCAL CONDITIONS

- A. Bidders shall familiarize themselves with the Contract Documents and existing conditions, which affect Work, required by the Contract Documents. It will be assumed that bidders have made a personal examination of the jobsite, existing conditions, and documents for prior construction projects associated with this facility made available by the Owner for review by Bidders during the bid period.
- B. Failure to visit the jobsite, to review existing conditions, or to review documents for prior construction projects associated with this facility made available by the Owner for review by Bidders during the bid period will in no way relieve the successful Bidder nom the necessity of furnishing any materials or performing any Work that may be required to complete the Work in accordance with the Contract Documents with no additional cost to the Owner.
- C. For building access and for access to the documents for prior construction projects associated with this facility contact:

Markus Schiller, Maintenance Foreman, (907) 225-4111 ext. 303 OR Cell (907) 545-5160 OR markus.schiller@alaska.gov

1.04 PERMITS, FEES, AND INSPECTIONS

- A. Obtain, pay for, and comply with the requirements of all permits, fees, and inspections required by public authorities.
- B. Transmit copies of permit applications, permits received, and public authority inspection reports to the Contracting Officer within three days of making permit application or receiving permits or reports.

1.05 ALTERNATES

- A. Alternates will be exercised at the option of Owner as specified on Bid Schedule. Accepted alternates will be indicated on the Contract and included within the conformed Contract Documents.
- B. Coordinate related work and modify surrounding work affected by accepted alternates as required to complete the Work.
- C. Provide all Work as part of the Base Bid except that Work specifically indicated to be provided as part of an alternate.

1.06 PRECONSTRUCTION MEETING

- A. Attend Owner initiated preconstruction meeting.
- 1.07 APPLICATIONS FOR PAYMENT
 - A. Submit two copies of each application under procedures of Section 01027.
 - B. Content and Format: That specified for schedule of values in Section 01027.

1.08 CONTRACTOR USE OF PREMISES

- A. Limit use of premises for Work and for construction operations, to allow for Owner occupancy, Work of other Contractors, and public access.
- B. Limit areas of construction operations to those areas requiring renovation only.
- C. Give written notice two weeks in advance of beginning of Work in any Work area.
- D. Do not smoke except in specifically designated smoking areas.
- E. Take reasonable and adequate precautions to protect the Owner's property from damage during execution of Work. Restore any damage to Owner property resulting from execution of Work or replace in a manner satisfactory to the Contracting Officer.
- F. Take reasonable and adequate precautions to protect the Owner's property from damage during execution of Work. Restore any damage to Owner property resulting from execution of Work or replace in a manner satisfactory to the Contracting Officer.
- G. Limit construction activities which generate noise levels in excess of NC=40 in classrooms, NC=50 in office areas, and NC=60 in other areas to between 7 p.m. and 7 a.m. Monday through Friday and all day Saturday and Sunday.
- H. Limit construction access to building to the location indicated. Keep construction access points locked at all times. Contractor will be provided with two sets of keys for construction access points.
- I. Move Owner tools, equipment, shelving, stored materials, etc. as required to accomplish Work. Return to original location as soon as possible.
- J. Protect Owner tools, equipment, shelving, stored materials, and equipment, etc. from Work.

- K. In Owner occupied areas:
 - 1. Limit use of premises for Work and for construction operations to between 7:00 a.m. and 7:00 p.m. Monday through Saturday. **NOTE:** <u>Contractor must also</u> <u>reduce loud or noisy activities (jackhammer for example) until after 8:00 am.</u> If requested by the Contractor and approved by the Project Manager the Contractor may work on the project outside these hours if the Contractor's activities do not interfere with owner operations.
 - 2. Cover and protect from dust and debris, at the start of each work day, electronic office equipment such as personal computers, computer terminals, facsimile machines, copiers, printers, postage meters, VCRs, monitors, typewriters, etc. Remove protection at the end of each work day.
 - 3. Do not use furniture, such as countertops, desks, filing cabinets, book shelves, and tables as work surfaces or as steps to access Work.
 - 4. At the end of each workday, move back to original location equipment and furniture moved to accommodate Work. Do not move electronic equipment unless absolutely necessary to accomplish Work.
 - 5. At the end of each workday replace ceiling tiles removed to access Work.
 - 6. At the end of each work day, clean work areas, including floors with a vacuum, and remove tools, equipment, and construction material from work areas.
- M. Coordinate temporary shutdowns of any of the existing facilities' mechanical or electrical systems affecting systems in Owner occupied areas with the Contracting Officer. Schedule shutdowns for nights and weekends. Provide a minimum five-day notice.
- N. Existing systems shall be fully operational for intended purpose at the beginning of each Owner workday.

1.09 OWNER OCCUPANCY

- A. The Owner will occupy premises during entire period of construction for the conduct of its normal operations.
- B. Maintain IBC complying access to and through corridors, stairways, and building exits at all times.
- C. Cooperate with Owner to minimize conflict and to facilitate its operations. In case of conflict accept Contracting Officer's direction as final and adjust use of premises accordingly.
- D. Coordinate Work in and use of premises with the Owner

1.10 COORDINATION

- 1. Coordinate Work of the various Sections of Specifications prior to ordering materials and fabrication to assure efficient and orderly sequence of installation of construction elements, with provisions for accommodating items installed later. Notify Contracting Officer of conflicts between elements prior to installation of any element.
- 2. Verify characteristics of elements of interrelated operating equipment are compatible;

- 3. Coordinate Work of various Sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
- 4. Coordinate space requirements and installation of mechanical and electrical Work, which is indicated diagrammatically on Drawings. Follow routing shown for ducts and conduits as closely as practical. Make piping, duct, and conduit runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- 5. In finished areas, unless otherwise indicated, conceal pipes, ducts, and wiring in the construction.
- 6. After Owner acceptance of Work, coordinate access to site by various trades for correction of defective Work and Work not in accordance with Contract Documents, to minimize disruption of Owner activities.

1.11 REFERENCE STANDARDS

- A. For products or workmanship specified by association, trades, or regulatory agency standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
- B. Obtain a copy of standards referenced. Maintain a copy at the jobsite during execution of Work to which the standard applies.
- C. The date of the standard is that in effect as of the bid date except when a specific date is specified.
- 1.12 ONE YEAR CORRECTION PERIOD
 - A. If within one year after the date of Final Completion or such longer period of time as may be prescribed by Regulatory Requirements or by the terms of any applicable special guarantee required by the Contract Documents or by any specific provision of the Contract Documents, any Work, materials, or products are found to be defective, the Contractor shall promptly, without cost to the Owner and in accordance with the Contracting Officer's written instructions, either correct such defective Work, or, if it has been rejected by the Contracting Officer, remove it from the site and replace it with conforming Work.
 - B. If the Contractor does not promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, the Owner may have the defective Work corrected or the rejected Work removed and replaced, and all direct, indirect, and consequential costs of such removal and replacement (including but not limited to fees and charges of engineers, architects, attorneys, and other professionals) will be paid by the Contractor.
 - C. In special circumstances where a particular item of equipment is placed in continuous service for the benefit of the Owner before Substantial Completion of all the Work, the correction period for that item may begin on an earlier date if so provided in the Specifications of by Change Order.
 - D. Provisions of this paragraph are not intended to shorten the statue of limitations for bringing an action.

PART 2PRODUCTSNot UsedPART 3PARTSNot Used

END OF SECTION 01005

SECTION 01010

SUMMARY OF WORK

PART 1 GENERAL

- 1.01 REQUIREMENTS INCLUDED
 - A. Basic Bid.
 - B. Work by Others.
 - C. Hazardous Materials
 - D. Work Inside Facility
 - E. Work Plans and Access to Facility, Individual Work Areas
 - F. Shut Offs/Disruptions to Service
 - G. Use of Premises.
 - H. Using Agency Occupancy.
 - I. Coordination
 - J. Parking/Staging

1.02 RELATED REQUIREMENTS

- A. Document 00100 Information available to bidders.
- B. Document 00700 General Conditions: Provisions for use of site, and Using Agency occupancy. Relations of CONTRACTOR- Subcontractors.
- C. Document 00800 Supplementary Conditions: Modifications to General Conditions.
- D. Section 01400 Quality Control
- 1.03 WORK COVERED BY CONTRACT DOCUMENTS
 - A. Work covered by the contract documents is located
 - B. The DEPARTMENT is acting for the State of Alaska.

1.04 CONTRACT METHOD

A. Construct the Work under a single lump sum Contract.

1.05 BASIC BID

- A. That portion of the Work described within these documents (taken as a whole) as the Basic Bid scope. Basic Bid work includes all work shown on the plans and specifications.
- B. Project will be constructed under a general construction contract.

1.06 WORKS BY OTHERS

- A. Cooperate with other Contractors and the DEPARTMENT to minimize conflict with construction operation.
- 1.07 HAZARDOUS MATERIALS
 - A. All light fixtures to be removed shall be treated as positive for containing PCBs unless proven otherwise.
 - B. CONTRACTOR to be aware that other hazardous materials may be within the facility. See Section 00700 Article 4.3.

1.08 WORK INSIDE FACILITY

- A. Limit use of premises for Work and for construction operations to between 7:00 a.m. and 7:00 p.m. Monday through Saturday. NOTE: <u>Contractor must also reduce loud or noisy activities</u> (jackhammer for example) until after 8:00 am. If requested by the Contractor and approved by the Project Manager the Contractor may work on the project outside these hours if the Contractor's activities do not interfere with owner operations.
- B. CONTRACTOR shall not under any circumstances leave tools or equipment unattended within the limits of the project site unless secured in a locked tool storage shed/box or vehicle. CONTRACTOR will be liable for any damages to persons and/or property resulting from unattended tools or equipment.
- C. No firearms or ammunition allowed on the grounds, to include locked vehicles.
- D. The use of powder-activated tools must be approved by the project manager. Request for such tools must be submitted to the Maintenance Supervisor in writing three (3) working days in advance.

1.09 SHUTOFFS / DISRUPTIONS TO SERVICE

- A. Work with the Maintenance Supervisor to schedule disruption for a time, which minimizes impact on facility operations. Provide the Engineer written notification of any disruption to service at least 24 hours in advance of scheduled disruption or shutoff.
- B. Plan work to minimize down time. Work with DEPARTMENT to schedule disruption for a time that minimizes impact on USING AGENCY's operations.
- C. Provide written work plan and schedule for disruptions to service that exceed one hour.
- D. Contractor must provide protection as stated in Municipal Fire Codes and Safety Codes while working on the fire protection system.

1.10 CONTRACTOR'S USE OF PREMISES

- A. Coordinate use of the premises under direction of DEPARTMENT.
- B. Assume full responsibility for protection and safekeeping of products under this Contract.
- C. Assume full responsibility for the protection of the existing facility and contents, from damage due to construction operations.

1.11 USING AGENCY OCCUPANCY

- A. The User Agency will continue operations adjacent to the site during entire construction period. Cooperate with DEPARTMENT in scheduling operations to minimize conflict and to facilitate the User Agency's operations.
- B. CONTRACTOR shall provide Material Safety Data Sheets for all products that may produce unpleasant odors.

1.12 COORDINATION

- A. Coordinate Work of the various elements of the plans to assure efficient and orderly sequence of installation of construction elements, with provisions for accommodating items installed later.
- B. Verify if characteristics of elements of interrelated operating equipment are compatible; coordinate Work of various trades having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.

- C. Coordinate space requirements and installation of mechanical and electrical work, which are indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduits, as closely as practicable; make runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs. Coordinate work with existing elements in the building. Do not locate piping, conduit or other products where they will block access to equipment or junction boxes.
- D. In finished areas except as otherwise shown, conceal pipes, ducts, and wiring in the construction. .
- E. Execute cutting and patching to integrate elements of Work, provide openings for penetrations of existing surfaces. Seal penetrations through floors, walls, partitions, and ceilings.
- 1.13 PARKING / STAGING
 - A. CONTRACTOR to coordinate staging area with Facility Maintenance Supervisor.
 - B. CONTRACTOR may use established facility parking.
 - C. CONTRACTOR will be responsible for all additional required storage/staging and parking off site at no charge to the Department.

PART 2	PRODUCTS	Not Used
PART 3	EXECUTION	Not Used

END OF SECTION

SECTION 01020 INTENT OF DOCUMENTS

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

A. Explanation of intent and terminology of the Construction Documents.

1.02 RELATED REQUIREMENTS

- A. Document 00700 General Conditions: Article 1 Definitions relating to 'Drawings' and 'Specifications'.
- B. Document 00700 General Conditions: Article 3 Contract Documents relating to Intent, Amending, and Reuse.

1.03 SPECIFICATION FORMAT AND COMPOSITION

- A. Specifications are divided into Divisions and Sections for the convenience of writing and using. Titles are not intended to imply a particular trade jurisdiction. DEPARTMENT is not bound to define the limits of any subcontract, and will not enter into disputes between the CONTRACTOR and his employees, including Subcontractors.
- B. Pages are numbered independently for each Section, and recorded in the Table of Contents. Section number is shown with the page number at the bottom of each page. The end of each Section of the specifications is ended by "End of Section". It is CONTRACTOR'S responsibility to verify that Contract Documents received for bidding and/or construction are complete in accordance with Table of Contents.
- C. The language employed in the Contract Documents is addressed directly to the CONTRACTOR. Imperative or indicative language is generally employed throughout and requirements expressed are the mandatory responsibility of the CONTRACTOR, even though the work specified may be accomplished by specialty subcontractors engaged by the CONTRACTOR. References to third parties in this regard shall not be interpreted in any way as to relieve the CONTRACTOR of his or her responsibility under this Contract.
- D. These Specifications are of the abbreviated or "streamlined" type, and may include incomplete sentences.
- E. Omissions of words or phrases such as "the CONTRACTOR shall," "in conformity therewith," "shall be," "as noted on the Drawings," "according to the Drawings," "a," "an," "the" and "all" are intentional.
- F. Omitted words or phrases shall be supplied by inference in the same manner as they are when a "note" occurs on the Drawings.

1.04 DRAWINGS: CONTENT EXPLANATION

- A. Drawings, Dimensions and Measurements.
 - 1. Contract Documents do not purport to describe in detail, absolute and complete construction information. In some instances drawings are diagrammatic.

- 2. CONTRACTOR shall provide verification of actual site conditions and shall provide complete and operational systems as specified when drawings do not provide full detail.
- 3. Where on any of the Drawings a portion of the work is drawn out and the remainder is indicated in outline, the parts drawn out shall apply also to all other portions of the Work.
- 4. Wherever a detail is referenced and developed for a specific condition, same or similar detail shall apply to identical or similar conditions elsewhere on Project even though not specifically referenced.
- 5. Where the word "similar" occurs on the Drawings, it shall be interpreted in its general sense and not as meaning identical, all details shall be worked out in relation to their location and their connection with other parts of the work.
- 6. The figured dimensions on the Drawings or notes indicating dimensions shall be used instead of measurements of the Drawings by scale.
- 7. No scale measurements shall be used as a dimension to work with except on "full size" Drawings not dimensioned.

1.05 COMMON TERMINOLOGY

- A. Certain items used generally throughout the Specifications and Drawings are used as follows:
 - Indicated: The term "indicated" is a cross reference to details, notes or schedules on the Drawings, other paragraphs or schedules in the Specifications, and similar means of recording requirements in the Contract Documents. Where terms such as "shown", "noted", "schedules", and "specified" are used in lieu of "indicate", it is for the purpose of helping the reader accomplish the cross reference, and no limitation of location is intended except as specifically noted.
 - 2. Installer: The person or entity engaged by CONTRACTOR, his Subcontractor or sub-subcontractor for the performance of a particular unit of Work at the Project site, including installation, erection, application and similar required operations. It is a general requirement that installers be recognized experts in the work they are engaged to perform.
 - 3. Furnish: Except as otherwise defined in greater detail, the term "furnish" is used to mean"...supply and deliver to the Project site, ready for unpacking, assembly and installation..."
 - 4. Provide: Except to the extent further defined, the term "provide" means to furnish and install, complete and ready for the intended use.
 - 5. Guarantee and Warranty: "Warranty" is generally used in conjunction with products manufactured or fabricated away from the Project site, and "guarantee" is generally used in conjunction with units of work which require both products and substantial amounts of labor at the Project site. The resulting difference is that warranties are frequently issued by manufacturers, and guarantees are generally issued by CONTRACTOR and frequently supported (partially) by product warranties from manufacturers.

1.06 CONFLICTS

A. Report any conflicts to Contracting Officer for clarification.

PART 2 PRODUCTS Not Used

PART 3 EXECUTION Not Used

END OF SECTION

SECTION - 01027 APPLICATIONS FOR PAYMENT

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

A. Procedures for preparation and submittal of Applications for Payment.

1.02 RELATED REQUIREMENTS

- A. Document 00510 Construction Contract Contract Form 06D-10a and Bid Schedule: Method of Payment and Contract Price and Amounts of Liquidated Damages.
- B. Document 00700 General Conditions: Progress Payments, and Final Payment.
- C. Section 00800 Supplementary Conditions to General Conditions of the Construction Contract for Buildings: SC-11.2 and SC-11.8.
- D. Section 01300 Submittals: Procedures, Schedule of Values .
- E. Section 01700 Contract Closeout: Closeout Procedures.

1.03 FORMAT

A. Application for Payment form in format approved by the DEPARTMENT.

1.04 PREPARATION OF APPLICATIONS

- A. Type required information on Application for Payment form approved by DEPARTMENT.
- B. Execute certification by original signature of authorized officer upon each copy of the Application for Payment.
- C. Submit names of individuals authorized to be responsible for information submitted on application for payment.
- D. Indicate breakdown of costs for each item of the Work on accepted schedule of values. Provide dollar value in each column for each line item for portion of Work performed and for stored products.
- E. List each authorized Change Order as an extension on continuation sheet, listing Change Order number and dollar amount as for an original item of Work.
- F. Prepare Application for Final Payment as specified in Section 01700.

1.05 SUBMITTAL PROCEDURES

- A. Submit two copies of each Application for Payment at times stipulated in Contract.
- B. Submit under transmittal letter specified in Section 01300.

1.06 SUBSTANTIATING DATA

- A. When DEPARTMENT requires substantiating information, submit data justifying line item amounts in question.
- B. Substantiating data required under 7.12.3 and 7.12.4 shall be submitted (or updated) when the Application for Payment includes a current request for payment on an item of Work required to include Alaska "agricultural/wood" products.
- C. Provide one copy of data with cover letter for each copy of Application. Show Application number and date, and line item by number and description.

1.07 SUBMITTALS WITH APPLICATION FOR PAYMENT

- A. Submit the following with each Application for Payment.
 - 1. Updated construction schedule as required by Section 01300 Submittals.
 - 2. Updated Schedule of Values as required by Section 01300 Submittals: Schedule of Values.
 - 3. The contractor's as-builts will be reviewed prior to approving each application for payment.
- PART 2 PRODUCTS Not Used
- PART 3 EXECUTION Not Used

END OF SECTION

SECTION 01028 CHANGE ORDER PROCEDURES

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

A. Procedures for processing Change Orders.

1.02 RELATED REQUIREMENTS

- A. Document 00312 Bid Schedule: Total amount bid for lump sum items
- B. Document 00510 Contract Form: Total amount of Contract Price, as awarded
- C. Document 00700 General Conditions: Governing requirements for changes in the Work, in Contract Price, and Contract Time.
- D. Document 00800 Supplementary Conditions: Modifications to Document 00700 General Conditions.
- E. Section 01027 Applications for Payment.
- F. Section 01300 Submittals: Construction Progress Schedules, Schedule of Values.
- G. Section 01600 Material and Equipment: Product Options, Substitutions.
- H. Section 01700 Contract Closeout: Project Record Documents.

1.03 SUBMITTALS

- A. Submit name of the individual authorized to accept changes, and to be responsible for informing others in CONTRACTOR's employ of changes in the Work.
- B. Change Order Forms will be prepared by the DEPARTMENT.

1.04 DOCUMENTATION OF CHANGE IN CONTRACT PRICE AND CONTRACT TIME

- A. Maintain detailed records of work done on a Cost of the Work plus a Fee basis. Provide full information required for evaluation of proposed changes, and to substantiate costs of changes in the Work. Incomplete or unsubstantiated costs will be disallowed.
- B. CONTRACTOR shall submit a complete, detailed, itemized cost breakdown addressing impact on Contract Time and Contract Price with each proposal.
- C. On request, provide additional data to support computations:
 - 1. Quantities of products, labor, and equipment.
 - 2. Taxes, insurance and bonds.
 - 3. Overhead and profit.

- 4. Justification for any change in Contract Time.
- 5. Credit for deletions from Contract, similarly documented.
- D. Support each claim for additional costs, and for work done on a cost of the Work plus a Fee basis, with additional information:
 - 1. Origin and date of claim.
 - 2. Dates and times work was performed, and by whom.
 - 3. Time records and wage rates paid.
 - 4. Invoices and receipts for products, equipment, and subcontracts, similarly documented.

1.05 PRELIMINARY PROCEDURES

- A. DEPARTMENT may submit a Proposal Request which includes: Detailed description of change with supplementary or revised Drawings and Specifications, the projected time for executing the change, with a stipulation of any overtime work required, and the period of time during which the requested price will be considered valid.
- B. CONTRACTOR may initiate a change by submittal of a request to DEPARTMENT describing the proposed change with a statement of the reason for the change, and the effect on Contract Price and Contract Time with full documentation.
- 1.06 CONSTRUCTION CHANGE AUTHORIZATION
 - A. Shall be in accordance with Article 9 Changes: in Document 00700 General Conditions.
- 1.07 FIXED PRICE CHANGE ORDER
 - A. CONTRACTOR shall submit an itemized price proposal in sufficient detail to fully explain the basis for the proposal. Attach invoices and receipts for products, equipment, subcontracts and as requested by the DEPARTMENT. CONTRACTOR and the DEPARTMENT shall then negotiate an equitable price (and time adjustment if appropriate) in good faith. The Change Order will reflect the results of those negotiations. If negotiations break down CONTRACTOR may be directed to perform the work under COST OF THE WORK CHANGE ORDER.

1.08 UNIT PRICE CHANGE ORDER

- A. For pre-determined Unit Prices and quantities, Change Order will be executed on a lump sum basis.
- B. For unit costs or quantities of units of Work which are not predetermined, execute Work under a Directive. Changes in Contract Price or Contract Time will be computed as specified for cost of the Work plus fee via Change Order.
- 1.09 COST OF THE WORK CHANGE ORDER
 - A. CONTRACTOR shall submit documentation required in 1.04 on a daily basis for certification by the Project Manager. Project Manager will indicate by signature that the submitted documentation is acceptable.
- B. After completion of the change and within 14 Calendar Days, unless extended by the Project Manager, the CONTRACTOR shall submit in final form an itemized account with support data of all costs. Support data shall have been certified by the Project Manager, as required above in paragraph A.
- 1.10 EXECUTION OF CHANGE ORDERS
 - A. DEPARTMENT will issue Change Orders for signatures of parties as provided in Conditions of the Contract.
- 1.11 CORRELATION OF CONTRACTOR SUBMITTALS
 - A. Promptly revise Schedule of Values and Application for Payment forms to record each authorized Change Order as a separate line item and adjust the Contract Price as shown on Change Order.
 - B. Promptly revise progress schedules to reflect any change in Contract Time, revise sub-schedules to adjust times for other items of Work affected by the change, and resubmit.
 - C. Promptly enter changes in project record documents.

PART 2PRODUCTS Not Used

PART 3 EXECUTION Not Used

SECTION 01040 COORDINATION

PART 1 GENERAL

- 1.01 REQUIREMENTS INCLUDED
 - A. Coordination of Work of Contract.

1.02 RELATED REQUIREMENTS

- A. Section 01010 Summary of Work.
- B. Section 01045 Cutting and Patching.
- C. Section 01200 Project Meetings.
- D. Section 01600 Material and Equipment: Substitutions.
- E. Section 10700 Contract Closeout Procedures.

1.03 DESCRIPTION

- A. Coordinate scheduling, submittals, and work of the various sections of Specifications to assure efficient and orderly sequence of installation of construction elements, with provisions for accommodating items to be installed later.
- B. Coordinate sequence of Work to accommodate Using Agency occupancy as specified in Section 01005.

1.04 MEETINGS

A. Coordinate sequence of Work to accommodate Using Agency occupancy as specified in Section 01005.

1.05 COORDINATION OF SUBMITTALS

- A. Schedule and coordinate submittals specified in Section 01300.
- B. Coordinate Work of various sections having interdependent responsibilities for installing connecting to, and placing in service, such equipment.
- C. Coordinated requests for substitutions to assure compatibility of space, of operating elements, and affect on Work of other sections.

1.06 COORDINATION OF SPACE

- A. Coordinate use of Project space and sequence of installation of mechanical and electrical Work which is indicated diagrammatically on Drawings. Follow routings shown for pipes, ducts, and conduits as closely as practicable, with due allowance for available physical space; make runs parallel with lines of building. Utilize space efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- B. In finished areas, except as otherwise shown, conceal pipes, ducts, and wiring in the construction. Coordinate locations of fixtures and outlets with finish elements.

1.07 COORDINATION OF CONTRACT CLOSEOUT

- A. Coordinate completion and cleanup of Work of separate sections in preparation for Substantial Completion.
- B. After Using Agency occupancy of premises, coordinate access to site by various sections for correction of Defective Work and Work not in accordance with Contract Documents, to minimize disruption of Using Agency activities.
- C. Assemble and coordinate close submittal specified in Section 01700.

PART 2 PRODUCTS	Not Used
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PART 3 EXECUTION Not Used

SECTION 01045 CUTTING AND PATCHING

PART 1 GENERAL

- 1.01 REQUIREMENTS INCLUDED
 - A. Requirements and limitations for cutting and patching of Work.
- 1.02 RELATED REQUIREMENTS
 - A. Section 01005 Administrative Provisions
 - B. Section 01010 Summary of Work.
 - C. Section 01600 Materials and Equipment: Substitutions.
 - D. Individual Specifications Sections:
 - 1. Cutting and patching incidental to Work of the section.
 - 2. Advance notification to other sections of openings required in Work of those sections.
 - 3. Limitations on cutting structural members.

1.03 SUBMITTALS

- A. Submit written request in advance of cutting or alteration which affects:
 - 1. Structural integrity of any element of Project.
 - 2. Integrity of weather-exposed or moisture-resistant element.
 - 3. Efficiency, maintenance, or safety of any operational element.
 - 4. Visual qualities of sight-exposed elements.
 - 5. Work of DEPARTMENT or separate Contractor.
- B. Include in request:
 - 1. Identification of Project and DEPARTMENT's Project number.
 - 2. Location and description of affected Work.
 - 3. Necessity for cutting or alteration.
 - 4. Description of proposed Work, and products to be used.
 - 5. Alternatives to cutting and patching.
 - 6. Effect on Work of DEPARTMENT or separate Contractor.
 - 7. Written permission of affected separate Contractor.
 - 8. Date and time Work will be executed.

PART 2 PRODUCTS

- 2.01 MATERIALS
 - A. Those required for original installation.
 - B. For any change in materials, submit request for substitution under provisions of Section 01600.

PART 3 EXECUTION

- 3.01 GENERAL
 - A. Execute cutting, fitting, and patching to complete Work, and to:
 - 1. Fit the several parts together, to integrate with other Work.
 - 2. Uncover Work to install ill-timed Work.
 - 3. Remove and replace non-conforming and Defective Work.
 - 4. Remove samples of installed Work for testing.
 - 5. Provide openings in elements of Work for penetrations of mechanical and electrical Work.

3.02 INSPECTION

- A. Inspect existing conditions, including elements subject to damage or movement during cutting and patching.
- B. Notify the Department immediately of any suspected hazardous materials.
- C. After uncovering, inspect conditions affecting performance of work.
- D. Beginning of cutting or patching means acceptance of existing conditions.

3.03 PREPARATION

- A. Provide supports to assure structural integrity of surroundings; devices and methods to protect other portions of Project from damage.
- B. Provide protection from elements for areas which may be exposed by uncovering Work; maintain excavations free of water.

3.04 PERFORMANCE

- A. Execute Work by methods to avoid damage to other Work, and which will provide proper surfaces to receive patching and finishing.
- B. Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval. Cutting structural reinforcement with heat is strictly forbidden without prior written approval.
- C. Restore Work with new products in accordance with requirements of Contract Documents.
- D. Fit Work tightly to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
- E. At penetrations of fire-rated wall, ceiling, or floor construction, completely seal voids with fire-rated material, full thickness of the construction element or in accordance with listed U.L. assembly requirements.
- F. Refinish surfaces to match adjacent finishes. For continuous surfaces, refinish to nearest intersection; for an assembly, refinish entire unit.

SECTION 01050

FIELD ENGINEERING

PART 1 - GENERAL

1.01 WORK INCLUDED

A. Survey staking. The intent of this section is to delineate the responsibility for different aspects of the construction surveying associated with the work.

1.02 RELATED WORK

A. Survey Control Points Data, Slopes and Elevations

1.02 SURVEY REFERENCE POINTS

A. The alignments and locations of new sidewalks, walls and drainage structures are referenced using survey coordinates with reference control points provided in tabular form. If necessary, the original building plans can be provided to the contractor and survey plats and/or existing street plans may be examined in Ketchikan at the Borough Planning Department, at the City of Ketchikan Department of Public Works, and the District Recorder's office.

All elevations shown on the plans are referenced to control reference points used on the project and provided in the plans in tabular form. It should not be assumed that they are referenced to MLLW.

- B. All survey and layout work shall be performed by the Contractor as part of the work. The Contractor shall transfer lines and grades from existing control to his or her own work at his or her own expense.
- C. Contractor construction staking shall consist of establishing sidewalk corners, angle points, points of curvature and tangency, wall corners, drainage structures and grade elevations for all. Contractor shall be responsible for reestablishing the control points lost or disturbed during the work and for re-referencing all necessary control points, running a circuit of bench levels to check or reestablish plan benchmarks and setting other benchmarks as needed.
- D. Contractor shall perform all construction layout and reference staking necessary for the proper control and satisfactory completion of all structures, grading, concrete placement, drainage, and all other appurtenances required for the completion of the construction work and acceptance of the project.
- E. Contractor field notes shall be kept in standard, bound notebooks or in an Owner approved computer file. The data shall be clear, orderly, and neat, consistent with standard engineering practices, and in accordance with the Owner's notebook procedures.

Ketchikan Pioneer Home Revised Walkway Renovations - JNU-16-22C

1.03 QUALIFICATIONS OF SURVEYOR

The layout of construction control and construction staking shall be under the supervision or reviewed by a professional land surveyor with current Alaska registration.

1.04 RECORDS

Maintain a complete, accurate log of all control and survey work as it progresses.

1.05 SUBMITTALS

In accordance with the requirements of Section 01340, submit the following project data:

- 1. Name and address of supervising licensed surveyor or licensed engineer.
- 2. On request of the DHSS Project Manager, submit documentation to verify accuracy of field engineering work.
- 3. Certificate signed by supervising licensed surveyor certifying that elevations and locations of improvements are in conformance with contract documents; or if at variance, in conformance with actual locations to be described in an attachment to the certificate.
- 4. Submit survey tie data in the form of sketches and as an electronic file written in NAD 83 state plane coordinates, with information as indicated in paragraph 2.01, below.

Part 2 - EXECUTION

2.01 SURVEY TIES

The Contractor shall provide horizontal "as-built" survey ties consisting of not less than three measured distances from points of reference not more than 100 feet away for the following items constructed as part of this project:

- 1. Buried curb and valve boxes
- 2. Buried wyes, tees, and abrupt alignment change locations for sanitary sewers and storm drains
- 3. Buried connections to existing water, sewer, and storm drain

The minimum angle between adjacent ties shall be 30 degrees. In addition to horizontal tie data, the Contractor shall measure the depth to top of pipe or fitting for items 2 and 3, above. Depth shall be relative to pavement, plus or minus 0.1 foot.

SECTION 01073 EXPLANATIONS: DRAWINGS AND SPECIFICATIONS

PART 1 GENERAL

1.1 REQUIREMENTS INCLUDED

A. Explanation of terminology used within the Drawings and Specifications.

1.2 RELATED REQUIREMENTS

- A. Section 01005 Administrative Provisions
- B. Section 01010 Summary of Work
- C. Section 01020 Intent of Documents

1.3 SPECIFICATION FORMAT AND COMPOSITION

- A. Specifications are divided into Divisions and Sections for the convenience of writing and using. Titles are not intended to imply a particular meaning or to fully describe the Work of each Division or Section, and are not an integral part of the text that specifies the requirements. Contracting Officer is not bound to define the limits of any subcontract, and will not enter into disputes between the Contractor and his employees, including subcontractors.
- B. Pages are numbered independently for each Section. Section number is shown with the page number at the bottom of each page. "End of Section" is noted on the last page of each Section. It is Contractor's responsibility to verify that Contract Documents received for bidding and construction are complete in accordance with Table of Contents.
- C. These Specifications are of the abbreviated, or "streamlined" type, and include incomplete sentences.
- D. Omissions of words or phrases such as "the Contractor shall," "in conformity therewith," "shall be," "as noted on the Drawings," "according to the Drawings," "a," "an," "the" and "all" are intentional.
- E. Omitted words or phrases shall be supplied by inference in the same manner as they are when a "note" occurs on the Drawings.

1.4 DRAWINGS: CONTENT EXPLANATION

- A. Where on any of the Drawings a portion of the Work is drawn out and the remainder is indicated in outline, the parts drawn out shall apply also to all other portions of the Work.
- B. Wherever a detail is referenced and developed for a specific condition, same or similar detail shall apply to identical or similar conditions elsewhere on Project even though not specifically referenced.
- C. Where the word "similar" occurs on the Drawings, it shall be interpreted in its general sense and not as meaning identical, all details shall be worked out in relation to their location and their connection with other parts of the Work.

- D. The figured dimensions on the Drawings or notes indicating dimensions shall be used instead of measurements of the Drawings by scale. No scale measurements shall be used as a dimension.
- E. Provide piping, ductwork, equipment, and accessories indicated on the Drawings unless it is specifically indicated that the piping, ductwork, equipment, or accessory is existing.
- F. Unless otherwise indicated, abbreviations and symbols used in the Drawings and Specifications are intended to have the meaning commonly accepted in the construction industry. Contact the Contracting Officer for definition if any question arises concerning them.
- G. Certain items used generally throughout the Specifications and Drawings are used as follows:
 - <u>Indicated:</u> The term "indicated" is a cross reference to details, notes or schedules on the Drawings, other paragraphs or schedules in the Specifications, and similar means of recording requirements in the Contract Documents. Where terms such as "shown", "noted", "schedules", and "specified" are used in lieu of "indicate", it is for the purpose of helping the reader accomplish the cross reference, and no limitation of location is intended except as specifically noted.
 - 2. <u>Installer:</u> The person or entity engaged by Contractor, his subcontractor or subsubcontractor for the performance of a particular unit of work at the Project site, including installation, erection, application, and similar required operations. It is a general requirement that installers be recognized experts in the Work they are engaged to perform.
 - 3. <u>Provide:</u> Except to the extent further defined, the term "provide" means to supply and install, complete and ready for the intended use.
 - 4. <u>Furnish:</u> Except as otherwise defined in greater detail, the term "furnish" is used to mean the same as "provide".
 - 5. <u>Guarantee and Warranty:</u> "Warranty" is generally used in conjunction with products manufactured or fabricated away from the Project site, and "guarantee" is generally used in conjunction with units of work which require both products and substantial amounts of labor at the Project site. The resulting difference is that warranties are frequently issued by manufacturers, and guarantees are generally issued by Contractor and frequently supported (partially) by product warranties from manufacturers.
 - 6. <u>Work:</u> Work is the act of, and the result of, performing services, furnishing labor, furnishing and incorporating materials and equipment into the Project and performing other duties and obligations, all as required by the Contract Documents. Such Work, however incremental, shall culminate in the entire completed Project, or the various separately identifiable parts thereof.
 - 7. <u>Contracting Officer:</u> Contracting Officer means Contracting Officer or Contracting Officer's Representative.

1.5 CONFLICTS

A. Report any conflicts to Contracting Officer for clarification.

Ketchikan Pioneer Home Revised Walkway Renovations JNU 16-22C

PART 2 PRODUCTS [Not Used]

PART 3 EXECUTION [Not Used]

SECTION 01090 REFERENCE STANDARDS

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Quality Assurance.
- B. Applicability of Reference Standards.
- C. Provision of Reference Standards at site.
- D. Acronyms used in Contract Documents for Reference Standards. Source of Reference Standards.

1.02 RELATED REQUIREMENTS

A. Document 00700 - General Conditions: Paragraph 3.4.2.

1.03 QUALITY ASSURANCE

- A. For products or workmanship specified by association, trade, or Federal Standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
- B. The date of the standard is that in effect as of the Project Advertisement date, or Effective Date of the Contract when there was no Advertisement, except when a specific date is specified.
- C. When required by an individual Specification section, obtain copy of standard. Maintain copy at site during submittals, planning, and progress of the specific Work, until Final Completion.
- D. Should specified reference standards conflict with Contract Documents, request clarification from the Architect/Engineer before proceeding. Local code requirements, where more stringent than referenced standards, shall govern.
- E. Neither the contractual relationship, duties, nor responsibilities of the parties in Contract nor those of the Architect/Engineer shall be altered by the Contract Documents by mention or inference otherwise in any reference document.

1.04 SCHEDULE OF REFERENCES

AA	Aluminum Association 818 Connecticut Avenue, N.W. Washington, DC 20006
AABC	Associated Air Balance Council 1000 Vermont Avenue, N.W. Washington, DC 20005
AASHTO	American Association of State Highway and Transportation Officials 444 North Capitol Street, N.W. Washington, DC 20001
ACI	American Concrete Institute Box 19150 Reford Station Detroit, MI 48219

ADC	Air Diffusion Council 230 North Michigan Avenue Chicago, IL 60601
AGC	Associated General Contractors America 1957 E Street, N.W. Washington, DC 20006
AI	Asphalt Institute Asphalt Institute Building College Park, MD_20740
AITC	American Institute of Timber Construction 333 W. Hampden Avenue Englewood, CO 80110
AISC	American Institute of Steel Construction 400 North Michigan Avenue Eighth Floor Chicago, IL 60611
AISI	American iron and Steel Institute 1000 16th Street, N.W. Washington, DC 20036
AMCA	Air Movement and Control Association 30 West University Drive Arlington Heights, IL 60004
ANSI	American National Standards Institute 1430 Broadway New York, NY 10018
ΑΡΑ	American Plywood Association Box 11700 Tacoma, WA 98411
ARI	Air-Conditioning and Refrigeration Institute 1815 North Fort Myer Drive Arlington, VA 22209
ASHRAE	American Society of Heating, Refrigeration and Air Conditioning Engineers 1791 Tullie Circle, N.E. Atlanta, GA 30329
ASME	American Society of Mechanical Engineers 345 East 47th Street
ASPA	New York, NY 10017 American Sod Producers Association Association Building Ninth and Minnesota Hastings, NE 68901

ASTM	American Society for Testing and Materials 1916 Race Street Philadelphia, PA 19103
AWWA	American Water Works Association 6666 West Quincy Avenue Denver, CO 80235
AWI	Architectural Woodwork Institute 2310 South Walter Reed Drive Arlington, VA 22206
AWPA	American Wood-Preservers' Association 7735 Old Georgetown Road Bethesda, MD 20014
AWS	American Welding Society 550 LeJeune Road Miami, FL 33135
CDA	Copper Development Association 57th Floor, Chrysler Building 405 Lexington Avenue New York, NY 10174
CLFMI	Chain Link Fence Manufacturers Institute 1101 Connecticut Avenue, N.W. Washington, DC 20036
CRSI	Concrete Reinforcing Steel Institute 933 Plum Grove Road Schaumburg, IL 60195
EJMA	Expansion Joint Manufacturers Association 707 Westchester Avenue White Plains, NY 10604
FGMA	Flat Glass Marketing Association 3310 Harrison White Lakes Professional Building Topeka, KS 66611
FM	Factory Mutual System 1151 Boston-Providence Turnpike Norwood, MA 02062
FS	Federal Specification General Services Administration Specifications and Consumer Information Distribution Section (WFSIS) Washington Navy Yard, Building 197 Washington, DC 20407

Ketchikan Pioneer Home Revised Walkway Renovations -	- JNU 16-22C 1603 Orrington Avenue Evanston, IL 60201	Section 01090 Reference Standards
IEEE	Institute of Electrical and Electronics Engineers 345 East 47th Street New York, NY 10017	
IMIAC	International Masonry Industry All-Weather Council International Masonry Institute 815 15th Street, N.W. Washington, DC 20005	
MFMA	Maple Flooring Manufacturers Association 2400 East Devon Suite 205 Des Plaines, IL 60018	
MIL	Military Specification Naval Publications and Forms Center 5801 Tabor Avenue Philadelphia, PA 19120	
ML/SFA	Metal Lath/Steel Framing Association Metal Manufacturers 221 North LaSalle Street Chicago, IL 60601	
NAAMM	National Association of Architectural Metal Manufacture 221 North LaSalle Street Chicago, IL 60601	ers
NEBB	National Environmental Balancing Bureau 8224 Old Courthouse Road Vienna, VA 22180	
NEMA	National Electrical Manufacturers' Association 2101 L Street, N.W. Washington, DC 20037	
NFPA	National Fire Protection Association Battery March Park Quincy, MA 02269	
NFPA	National Forest Products Association 1619 Massachusetts Avenue, N.W. Washington, DC 20036	
NSWMA	National Solid Wastes Management Association 1120 Connecticut Avenue, N.W. Washington, DC 20036	
NTMA	National Terrazzo and Mosiac Association 3166 Des Plaines Avenue Des Plaines, IL 60018	
PCA	Portland Cement Association 01090-4	

Ketchikan Pionee Revised Walkway			Ref
		5420 Old Orchard Road Skokie, IL 60077	
I	PCI	Prestressed Concrete Institute 201 North Wacker Drive Chicago, IL 60606	
I	PS	Product Standard U.S. Department of Commerce Washington, DC 20203	
I	RIS	Redwood Inspection Service One Lombard Street San Francisco, CA 94111	
I	RCSHSB	Red Cedar Shingle and Handsplit Shake Bureau 515 116th Avenue Bellevue, WA 98004	
:	SDI	Steel Deck Institute Box 3812 St. Louis, MO 63122	
:	SDI	Steel Door Institute 712 Lakewood Center North Cleveland, OH 44107	
:	SIGMA	Sealed Insulating Glass Manufacturers Association 111 East Wacker Drive Chicago, IL 60601	
:	SJI	Steel Joist Institute 1703 Parham Road Suite 204 Richmond, VA 23229	
:	SMACNA	Sheet Metal and Air Conditioning Contractors' National Association 8224 Old Court House Road Vienna, VA 22180	
:	SSPC	Steel Structures Painting Council 4400 Fifth Avenue Pittsburgh, PA 15213	
-	TAS	Technical Aids Series Construction Specifications Institute 601 North Madison Street Alexandria, VA 22314	
-	TCA	Tile Council of America, Inc. Box 326 Princeton, NJ 08540	

WCLIB West Cost Lumber Inspection Bureau Box 23145 Portland, OR 97223

- PART 2 PRODUCTS (Not Used)
- PART 3 EXECUTION (Not Used)

SECTION 01120 ALTERATION PROJECT PROCEDURES

PART 1 GENERAL

- 1.01 REQUIREMENTS INCLUDED
 - A. Procedural requirements.
 - B. Rehabilitation and renovation of existing spaces and materials.

1.02 RELATED REQUIREMENTS

- A. Section 01005 Administrative Provisions
- B. Section 01010 Summary of Work
- C. Section 01045 Cutting and Patching

PART 2 PRODUCTS

2.01 PRODUCTS FOR PATCHING AND EXTENDING WORK

- A. New Materials: As specified in individual Specification Sections.
- B. Match existing products and work for patching and extending Work.
- C. Determine type and quality of existing products by inspection and any necessary testing, and workmanship by use of existing as a standard. Presence of a product, finish, or type of Work, requires that patching, extending, or matching shall be performed as necessary to make Work complete and consistent with existing quality and Contract Documents.

PART 3 EXECUTION

3.01 GENERAL

- A. Remove existing work, materials and items as indicated on the Drawings, as required by job site conditions, as scheduled, and as specified herein, to accomplish new Work and alteration in the existing building.
- B. Remove work carefully and only to the extent required for the final Work. Minimize damage to adjacent materials.
- C. When portions of existing conditions are shown, it is not meant to indicate that all existing conditions are shown.
- D. Patch existing surfaces which are made defective in appearance or function by the execution of Work.
- E. Cut rigid materials using masonry saw or core drill. Pneumatic tools and electric hammers are not permitted.
- F. Conduct all operations with a minimum of noise.
- G. Take reasonable and adequate precautions to protect the Owner's property from

damage during demolition Work, moving of debris, and damage by the elements. Restore any damage to Owner property due to the aforesaid work or replace in a manner satisfactory to the Contracting Officer.

- H. Provide and maintain suitable barricades, shelters, lights, and danger signals during the progress of the Work. Provide barricades meeting the requirements of the applicable building codes. Assume the responsibility of barriers to completion of Contract and remove at completion of Contract.
- I. Locate penetrations to avoid structural members.

3.02 INSPECTION

- A. Verify that demolition is complete, and areas are ready for installation of new Work.
- B. Beginning of restoration Work means acceptance of existing conditions.

3.03 PREPARATION

- A. Plan all work in advance, informing Contracting Officer of procedure and schedule.
- B. Verify existing conditions affecting Work including existing sizes and materials indicated prior to beginning Work or ordering materials that are affected by existing conditions. Notify Contracting Officer of conflicts in writing.
- C. Erect dust-proof partitions where demolition work is in progress and as directed. Such partitions shall remain in place until their removal is directed.
- D. Where openings are to be cut in existing structures, cut such openings with care. Where materials, equipment, frames, etc., are to be removed, remove such items with care to minimize damage to adjacent materials.
- E. Cut, move, or remove items as necessary for access to alterations and renovations Work; replace and restore at completion.
- F. Cut pockets, openings, chases, depressions, etc., to install or allow for installation of materials or equipment.
- G. Remove from site unsuitable material not marked for salvage, such as rotted wood, rusted metals, and deteriorated masonry and concrete; replace materials as specified for finished Work.
- H. Remove from site, including concealed spaces, debris and abandoned items resulting from demolition operations from the site promptly. No accumulation of debris will be permitted.
- I. Prepare surfaces and remove surface finishes to provide for proper installation of new Work and new finishes.
- J. Close openings in exterior surfaces to protect existing work and salvage items from weather and extremes of temperature and humidity. Insulate ductwork and piping to prevent condensation in exposed areas.

3.04 INSTALLATION

A. Coordinate Work of alterations and renovations to expedite completion and to accommodate Owner occupancy. Remove, cut, and patch Work in a manner to

minimize damage and to provide means of restoring products and finishes to original condition.

- B. Refinish visible existing surfaces to remain in renovated rooms and spaces with a neat transition to adjacent new finishes.
- C. In addition to specified replacement of equipment restore existing mechanical and electrical systems to full operational condition.
- D. Install products as specified in individual Specification Sections.

3.05 TRANSITIONS

- A. Where new Work abuts or aligns with existing, make a smooth and even transition. Patched Work shall match existing adjacent work in texture and appearance.
- B. When finished surfaces are cut so that a smooth transition with new Work is not possible, terminate existing surface along a straight line at a natural line of division and make recommendation to Contracting Officer.

3.06 ADJUSTMENTS

- A. Where removal of partitions results in adjacent spaces becoming one, rework floors, walls, and ceilings to a smooth plane without breaks, steps, or bulkheads. Where a change of plane of 1/4 inch or more occurs, submit recommendation for providing a smooth transition for Contracting Officer review.
- B. Trim existing doors as necessary to clear new floor finishes; refinish trimmed areas.
- C. Fit Work at penetrations of surfaces as specified in Sections 01005 and 01045.

3.07 REPAIR OF DAMAGED SURFACES

- A. Patch or replace portions of existing surfaces which are disturbed, damaged, or otherwise made defective in appearance or function by the execution of Work under this Contract. Restore to original condition.
- B. Repair substrate prior to patching finish.

3.08 FINISHES

- A. Finish surfaces as specified in individual Sections.
- B. Finish patches to produce uniform finish and texture over entire area. When finish cannot be matched, refinish entire surface to nearest intersections.

3.09 CLEANING

- A. In addition to cleaning specified in Section 01500, clean Owner occupied areas of Work daily.
- B. After the demolition Work in any area is completed, clean the area before new construction is started.

SECTION 01126 - CONTRACTOR'S CERTIFICATION OF SUBCONTRACTS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Procedures for preparing, submitting and accepting subcontracts.

1.2 RELATED REQUIREMENTS

- A. Bidding and Contract Requirement Document 00100 Instructions to Bidders, Requirements of Apparent Low Bidder.
- B. Bidding and Contract Requirement Document 00101 Supplemental Information to Bidders.
- C. Bidding and Contract Requirement Document 00430 Subcontractor List
- D. Bidding and Contract Requirement Section 00700 General Conditions: Article 6.13 Subcontractors.
- E. Bidding and Contract Requirement Section 00800 Supplementary Conditions: Paragraph SC-6.13 – Replacing Subcontractors
- F. Section 01300 Submittals: Submittal Procedures.

1.3 SUBMITTALS

- A. Submit under transmittal letter specified in Section 01300 Submittals.
- B. CONTRACTOR shall submit the initial and final Subcontractor Certification Form(s).

1.4 **PREPARATION OF CERTIFICATION**

- A. CONTRACTOR to prepare and sign certification forms for all subcontractors regardless of subcontract amount (see Section 00700, Paragraph 6.13.1).
- B. Submit certification form to the DEPARTMENT for approval prior to the subcontractor's start of work. Attach additional information to the certification form where required,
- C. Certification Forms: Use only forms provided by the DEPARTMENT.
- D. The DEPARTMENT will reject substitute certification forms.

1.5 CONSIDERATION OF CERTIFICATION

- A. The DEPARTMENT will review each certification form after receipt and within a reasonable period of time, for the following:
 - 1. Completeness, including the attachments.
 - 2. Proper execution (signatures), including the attachments.
 - 3. Contractor restrictions for adding subcontractors, changing subcontractors, and value of contract.
- B. The DEPARTMENT will return any submittals that are incomplete or not properly executed under a transmittal letter denoting the deficiencies found. The CONTRACTOR shall correct and resubmit according to Section 01300 Submittals.
- C. SUBCONTRACTORS NOT APPROVED BY THE DEPARTMENT SHALL NOT BE ALLOWED ON SITE.
- D. The DEPARTMENT will not process payments for work performed by a non-certified subcontractor.

1.6 ACKNOWLEDGEMENT OF CERTIFICATION

A. Submittals examined by the DEPARTMENT and determined to be complete and properly executed shall be acknowledged as such by the DEPARTMENT on the approval line of the certification form and returned to the CONTRACTOR.

1.7 CHANGES TO APPROVED SUBCONTRACTORS LIST

A. Deletion or replacement of subcontractors listed on approved form 06D-5, or the addition of subcontractors not listed on approved form 06D-5 shall be in accordance with Bidding and Contract Requirement Document 00101, Supplementary Information to Bidders.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

STATE OF ALASKA Department of Health & Social Services FMS Facilities

SUBCONTRACTOR CERTIFICATION



Note: The Contractor shall provide this form for <u>ALL</u> subcontractors working on this project. This form is applicable to all projects, including Small Procurement Contracts, and must be completed in full.

PROJECT	Ketchikan Pioneer Home	Concrete Ramp	s & Sidewalks	PROJ #	JNU 16-18C
	Neterinkan i joneer nome	concrete Manip	a diuewalka	т ко <u></u> . <i>#</i> .	3140 10-100

PRIME CONTRACTOR:

Pursuant to the Contract Documents, we hereby stipulate the following concerning the award of Work to the last Subcontractor on the following list:

1.	First Tier Subcontractor:	DBE?	Yes	No
	Second Tier:	DBE?	Yes	No
	Third Tier:	DBE?	Yes	No
	Fourth Tier:	DBE?	Yes	No
2.	Date of Subcontract:			
3.	Amount of Subcontract: \$			
4.	Scope of Work:			
5.	Are the following documents kept on file by both the Contractor appropriate answer)?	and the S	ubcontractor (check the
	EEO-1 Certification (Form 25A304), federally funded projects only Contract Minimum Wage Schedule Civil Rights Representative (Form 25A302)		Yes Yes Yes	No No No
6.	Does the Subcontract contain provisions for prompt payment, re late payment and retainage conforming to AS 36.90.210?	lease of re	tainage, and ir	nterest on
	ale payment and retainage contorming to AO 50.30.210		Yes	No
7.	Does the Subcontract specifically bind the Subcontractor to the the Contract Documents for the benefit of the Department and do termination provisions as required by the Contract Documents?			
	termination provisions as required by the contract Documents?		Yes	No
8.	a. Does the Subcontractor have adequate insurance coverage Documents?	ges as sp	ecified in the	Contract
			Yes	No
	If not, does the Contractor stipulate that the insurance limits of the the Contractor and that he has notified his insurance carrier of the			
			Yes	No
	b. Does the evidence of insurance certify that the policies describ of the insurance requirements for this project?	ed thereon	comply with a	II aspects
			Yes	No

PROJ	ECT: Ketchikan Pioneer Home Concrete Ramps & Sidewalks	_ PROJECT #:_	JNU 16-18C
Subco	ontractor Name:		
	c. Does the evidence of insurance list the Department as an "Ac	ditional Insured"	or "Certificate
	Holder"?	Yes	No
	d. Does the evidence of insurance commit to providing 30 day	written notice of a	cancellation or
	reduction of any coverage?	Yes	No
	e. Insurance Expiration dates: Comprehensive or Commercial General Liability:		
	Automobile: Workers' Compensat	ion:	
	(Other):		
9.	Copies of the following professional certifications, licenses, and reg that apply):	istrations are attai	ched (circle all
	Business License (mandatory) Contractor License (mandatory) Land Surveyor's License		
	Electrical Administrator's License (mandatory for electrical su Mechanical Administrator's License (mandatory for mechanic Engineer/Architect Other:	cal subs)	
10.	Exceptions to any of the above are explained as follows:		
	IFICATION (to be completed and signed by PRIME CONTRACTO nd correct.	R): I certify all th	e above to be
CONT	RACTOR'S Signature:		
CONT	RACTOR'S Printed Name:		
CONT	RACTOR'S Company:		
Date:			
	DEPARTMENT'S APPROVAL/DISAPPROVA		
Contra	ubject subcontract is APPROVED . Nothing in this approval should be actor of the responsibility for complete performance of the work or a timent to reject defective work.		
SIGNA	ATURE: DATE: DATE: Mike Frawley, Contracting Officer		
The su	ubject subcontract is NOT APPROVED for the following reasons:		
SIGNA	ATURE: DATE:		
	Keith Stephens, Project Manager		
	FORM 05 _DDOC/OFFICE/FORMS/FR05.SUB.CERT.FORM		PAGE 2 OF 2 REV 2/12

SECTION 01200 PROJECT MEETINGS

PART 1 GENERAL

- 1.01 REQUIREMENTS INCLUDED
 - A. CONTRACTOR participation in preconstruction conferences.
 - B. CONTRACTOR administration of progress meetings.
- 1.02 RELATED REQUIREMENTS
 - A. Document 00120 Supplementary Instructions to Bidders: Pre-Bid Conference.
 - B. Section 01010 Summary of Work: Coordination.
 - C. Section 01300 Submittals: Construction Progress Schedules, Shop drawings, Product data, and Samples.
 - D. Section 01400 Quality Control.
 - E. Section 01700 Contract Closeout: Project Record Documents, Operation and Maintenance Data.
- 1.03 PRECONSTRUCTION CONFERENCES.
 - A. DEPARTMENT will administer preconstruction conference for execution of Contract and exchange of preliminary submittals and review of administrative procedures.
 - B. DEPARTMENT will administer site mobilization conference at Project site for clarification of CONTRACTOR responsibilities in use of site and coordination with Using Agency for occupancy throughout the duration of the work. CONTRACTOR shall provide the detailed written work plan in preparation for this meeting.
- 1.04 PROGRESS MEETINGS
 - A. Contractor shall schedule and administer weekly Project meetings throughout progress of the Work (unless this requirement is waived by the Project Manager), and other meetings as required to coordinate work, and preinstallation conferences.
 - B. Attendance: Job superintendent, major Subcontractors and Suppliers; DEPARTMENT and Consultants as appropriate to agenda topics for each meeting.
 - C. Minimum Required Agenda: Review of Work progress, status of progress schedule and adjustments thereto, Work anticipated in the next week, delivery schedules, submittals, maintenance of quality standards, pending changes and substitutions, and other items affecting progress of Work.
- PART 2 PRODUCTS Not Used
- PART 3 EXECUTION Not Used

SECTION 01230 ALTERNATES

PART 1 GENERAL

1.01 SUMMARY A. Th

- This Section includes administrative and procedural requirements for alternates.
- 1.02 DEFINITIONS
 - A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the Bidding Requirements that may be added to or deducted from the Base Bid amount if Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
 - 1. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternate into the Work. No other adjustments are made to the Contract Sum.

1.03 PROCEDURES

- A. Coordination: Modify or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
 - 1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.
- B. Notification: Immediately following award of the Contract, the owner will notify each party involved, in writing, of the status of each alternate. Indicate if alternates have been accepted, rejected, or deferred for later consideration. Include a complete description of negotiated modifications to alternates.
- C. Execute accepted alternates under the same conditions as other work of the Contract.
- D. Schedule: A Schedule of Alternates is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the work described under each alternate.
- Ε.
- PART 2 PRODUCTS (Not Used)
- PART 3 EXECUTION
- 3.01 SCHEDULE OF ALTERNATES
 - A. Not Applicable to this project

SECTION 01300 SUBMITTALS

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Procedures.
- B. Construction Progress Schedules.
- C. Schedule of Values.
- D. Shop Drawings, Product Data, and Samples.
- E. Field Samples.

1.02 RELATED REQUIREMENTS

- A. Section 01010 Summary of Work.
- B. Section 01027 Applications for Payment.
- C. Section 01400 Quality Control: Manufacturers' Field Services, Testing Laboratory Services.
- D. Section 01600 Material and Equipment: Products List.
- E. Section 01700 Contract Closeout: Closeout Procedures.

1.03 PROCEDURES

- A. Deliver submittals to DEPARTMENT as directed.
- B. Transmit each item under DEPARTMENT accepted form. Identify Project, CONTRACTOR, Subcontractor, Major Supplier, identify pertinent Drawing sheet and detail number, and Specification section number, as appropriate. Identify deviations from Contract Documents by submitting a DEPARTMENT supplied Substitution Request Form. Provide a minimum of 8 1/2" x 5 1/2" blank space on the front page for CONTRACTOR, and Consultant review stamps.
- C. Submit initial progress schedules and Schedule of Values in five copies in accordance with paragraph SC6.6 of Document 00800 Supplementary Conditions prior to submitting first Application for Payment. Form and content shall be reviewed by the DEPARTMENT. After review by DEPARTMENT revise and resubmit as required. Submit subsequent updated schedules (10) days prior to each Application for Payment.
- D. Comply with progress schedule for submittals related to Work progress. Coordinate submittal of related items.
- E. After DEPARTMENT review of submittal, revise and resubmit as required, identifying changes made since previous submittal. Provide total number of submittals as required for the first submission, if 6 are required and 4 were returned for revisions, submit 6 again. The DEPARTMENT and Consultants will not return the first or revised copies of rejected submittals for re-use. DO NOT submit partial copies of submittals for incorporation into rejected submittal packages which have been kept by the DEPARTMENT and/or Consultants. Provide COMPLETE copies for each review.
- F. If drawings, product submittals, samples, mock-ups, or other required submittals are incomplete or not properly submitted, the DEPARTMENT will not review the submittal and will immediately return submittal to CONTRACTOR. DEPARTMENT will review a submittal no more than three times (incomplete or improper submittals count as one).

G. <u>CONTRACTOR shall pay all review costs associated with more than three reviews,</u> <u>unless a resubmittal is required due to new comments addressing previously</u> <u>submitted information.</u>

1.04 CONSTRUCTION PROGRESS SCHEDULES

- A. Submit horizontal bar Gantt chart (see below for electronic version requirements). Schedule shall show:
 - 1. Separate bar for each major trade or operation, identifying the duration of each activity and precedent activities.
 - 2. Complete sequence of construction by activity, identifying Work of separate stages and other logically grouped activities. Show each work plan and separate work area as a separate activity or group of activities.
 - 3. Submittal dates for required for Shop Drawings, product data, and samples, and product delivery dates, including those furnished by DEPARTMENT and those under allowances.
 - 4. All required submittals and indicating the date for each required submittal.
 - 5. Show projected percentages of completion for each item of Work and submittal as of time of each Application for Progress Payment. See below for electronic version requirements.
 - 6. ELECTRONIC VERSION: REQUIRED FOR ALL PROJECTS WHEN THE ORIGINAL CONTRACT AMOUNT IS EQUAL TO OR GREATER THAN \$500,000.00. Submit Progress Schedule plotted on paper no larger than 24" x 36" and no smaller than 8 1/2" x 11" from the electronic program. Provide in electronic form on CD for IBM and compatible using Microsoft Project 2000 version 9.0. CD will not be returned by the DEPARTMENT.
 - 7. Submit Progress Schedule percentages in Tracking Gantt form plotted from and in electronic form as stated above.

1.05 SCHEDULE OF VALUES

- A. FORMAT
 - 1. Form and content must be acceptable to DEPARTMENT.
 - 2. CONTRACTOR's standard form or media-driven printout will be considered on request.
 - 3. Follow table of contents of Project manual for listing component parts. Identify each line item by number and title of listed Specification sections.
- B. CONTENT
 - List installed value of each major item of Work and each subcontracted item of Work as a separate line item to serve as a basis for computing values for progress payments. Round off values to nearest dollar.
 - 2. For each major subcontract, list products and operations of that subcontract as separate line items.
 - 3. Coordinate listings with progress schedule.
 - 4. Component listings shall each include a directly proportional amount of CONTRACTOR's overhead and profit.

- 5. For items on which payments will be requested for stored products, list sub-values for cost of stored products with taxes paid.
- 6. Specific line item Values as indicated below shall be minimum acceptable amounts and must be included on all approved Schedules of Values and Applications for Payment.
 - a. <u>Section 01700 Contract Closeout. Value of all required</u> <u>Substantial Completion Submittals and Closeout Submittals shall</u> <u>be not less than 10% of the final contracted amount.</u>
 - b. No progress payments will be made for Substantial Completion Submittals and Closeout Submittals until <u>all</u> submittals have been submitted to and accepted by the DEPARTMENT.
- 7. The sum of values listed shall equal total Contract Price.
- C. SUBMITTAL
 - 1. Submit four copies of Schedule prior to submitting the CONTRACTOR's first Application for Payment. Subsequent updated Schedule of Values shall be presented for review ten days prior to each Application for Payment.
 - 2. Transmit under DEPARTMENT accepted form transmittal letter. Identify Project by DEPARTMENT title and Project number; identify Contract by DEPARTMENT Contract number.
- D. SUBSTANTIATING DATA
 - 1. When DEPARTMENT requires substantiating information, submit data justifying line item amounts in question.
 - Provide one copy of data with cover letter for each copy of the Application for Payment. Show application number and date, and line item by number and description.
- 1.06 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES
 - A. SHOP DRAWINGS:
 - 1. Present in a clear and thorough manner. Label each Shop Drawing with DEPARTMENT's Project name and Project number; identify each element of the Shop Drawings by reference to sheet number and detail, schedule, or room number of Contract Documents.
 - 2. Identify field dimensions; show relation to adjacent or critical features or Work or products.
 - 3. Minimum Sheet Size: 8-1/2"x11". Larger sheets may be submitted in multiples of 8-1/2"x11".
 - B. PRODUCT DATA
 - Submit only pages which are pertinent; mark each copy of standard printed data to identify pertinent products, referenced to Specification section and Article number. Show reference standards, performance characteristics, and capacities; wiring and piping diagrams and controls; component parts; finishes; dimensions; and required clearances.
 - 2. Modify manufacturer's standard schematic drawings and diagrams to supplement standard information and to provide information specifically applicable to the Work. Delete information not applicable.

C. SAMPLES

- 1. Submit full range of manufacturer's standard finishes except when more restrictive requirements are specified, indicating colors, textures, and patterns, for DEPARTMENT selection.
- 2. Submit samples to illustrate functional characteristics of products, including parts and attachments.
- 3. Approved samples, which may be used in the Work, are indicated in the Specification section.
- 4. Label each sample with identification required for transmittal letter.
- 5. Provide field samples of finishes at Project, at location acceptable to DEPARTMENT, as required by individual Specification section. Install each sample complete and finished. Acceptable finishes in place may be retained in completed Work.

D. MANUFACTURER'S INSTRUCTIONS

- 1. When required in individual Specification Section, submit manufacturer's printed instructions for delivery, storage, assembly, installation start-up, adjusting, and finishing, in quantities specified for product data.
- 2. Manufacturer's instructions for storage, preparation, assembly, installation, start-up, adjusting, balancing, and finishing under provisions of Section 01400.

E. CONTRACTOR REVIEW

- 1. Review submittals prior to transmittal; determine and verify field measurements, field construction criteria, manufacturer's catalog numbers, and conformance of submittal with requirements of Contract Documents.
- 2. Coordinate submittals with requirements of Work and of Contract Documents.
- 3. Sign or initial each sheet of Shop Drawings and product data, and each sample label to certify compliance with requirements of Contract Documents. Notify DEPARTMENT in writing at time of submittal, of any deviations from requirements of Contract Documents.
- 4. Do not fabricate products or begin Work that requires submittals until return of submittal with DEPARTMENT acceptance.

F. SUBMITTAL REQUIREMENTS

- Each submittal to be numbered by Specification Section and Paragraph. Revisions shall be identified by a hyphen after the paragraph, with a letter designator. Example: 1st submittal "01010 1.08A" 2nd submittal 01010 1.08A -A".
- 2. Transmit submittals in accordance with the required submittal schedule and in such sequence to avoid delay in the Work.
- 3. Provide 8 1/2" x 5 1/2" blank space on each submittal for CONTRACTOR and Consultant stamps.
- 4. Apply CONTRACTOR'S stamp, signed or initialed, certifying to review, verification of products, field dimensions and field construction criteria, and coordination of information with requirements of Work and Contract Documents.
- 5. Coordinate submittals into logical groupings to facilitate interrelation of the several items:

- a. Finishes which involve DEPARTMENT selection of colors, textures, or patterns.
- b. Associated items that require correlation for efficient function or for installation.
- 6. Submit number of opaque reproductions of shop drawings CONTRACTOR requires, plus six that will be retained by DEPARTMENT.
- 7. Submit number of copies of product data and manufacturer's instructions CONTRACTOR requires, <u>plus three copies</u>, <u>which will be retained by DEPARTMENT</u>.
- 8. Submit number of samples specified in individual Specifications sections.
- 9. Submit under DEPARTMENT accepted transmittal form letter. Identify Project by title and DEPARTMENT Project number; identify Contract by DEPARTMENT contract number. Identify Work and product by Specification section and Article number.
- 10. Each submittal shall have as its face document a completed DEPARTMENT furnished Submittal Summary form.
- 11. Each submittal shall include the manufacturer's name and address, and supplier's name, address and telephone number.
- G. RESUBMITTALS
 - After DEPARTMENT review of submittal, revise and resubmit as required, identifying changes made since previous submittal. Provide total number of submittals as required for the first submission, if 6 are required and 4 were returned for revisions, submit 6 again. The DEPARTMENT and Consultants will not return the first or revised copies of rejected submittals for re-use. DO NOT submit partial copies of submittals for incorporation into rejected submittal packages which have been kept by the DEPARTMENT and/or Consultants. Provide COMPLETE copies for each review.
- H. DEPARTMENT REVIEW
 - 1. DEPARTMENT or authorized agent will review Shop Drawings, product data, and samples and return submittals within (14) working days.
 - 2. DEPARTMENT or authorized agent will examine shop drawings for general arrangement, overall dimensions and suitability, and will return to the CONTRACTOR marked as follows;
 - "No Exceptions Taken" denotes that the submittal generally meets the requirements of the Contract Documents. "No Exceptions Taken" does not indicate a review of the CONTRACTOR's design except for general compliance with the requirements of the Contract Documents.
 - "Make Corrections Noted" denotes review is conditional on compliance with notes made on the submittal.
 - "Revise and Resubmit" denotes that revisions are required in the submittal in order for the submittal to be generally consistent with the requirements of the Contract Documents. Required revisions will be identified to the CONTRACTOR.

- "Rejected" denotes that the submittal does not meet the requirements of the Contract Documents and shall not be used in the Work. Reasons for rejection will be identified to the CONTRACTOR.
- 3. Review by the DEPARTMENT of shop and erection drawings shall not be construed as a complete check, but will indicate only that the general method of construction and detailing is consistent with the requirements of the Contract Documents. Review of such drawings shall not relieve the CONTRACTOR of the responsibility for errors, dimensions, and detail design.
- 4. DEPARTMENT will require submittal of all required color and finish samples in order to approve any on color or finish.
- I. DISTRIBUTION
 - 1. Duplicate and distribute reproductions of Shop Drawings, copies of product data, and samples, which bear Consultant's stamp, to job site file, record documents file, Subcontractors, Suppliers, and other entities requiring information.
- J. SCHEDULE OF SUBMITTALS
 - 1. Submittal Register Form to be completed by CONTRACTOR and approved by DEPARTMENT prior to submittal of any items.
 - 2. Submit shop drawings, product data and samples as required for each specification section.
 - 3. Format.
 - a. Submittal schedule form as provided by DEPARTMENT.
- 1.07 FIELD SAMPLES
 - A. Provide field samples of finishes at Project as required by individual Specifications section. Install sample complete and finished. Acceptable samples in place may be retained in completed Work.
- PART 2 PRODUCTS Not Used
- PART 3 EXECUTION Not Used

SECTION 01340

PROJECT DATA SUBMITTALS

1.01 GENERAL

The Contractor shall assemble and submit, to the DHSS Project Manager, project data and samples as specified in each specification section. The project data and samples shall be submitted to the DHSS Project Manager for review and checking to determine conformance with the intent of the plans and specifications. The review and checking by the DHSS Project Manager will be specifically limited to the project data and samples specified in these specifications.

1.02 PROJECT DATA

Project data and samples shall be approved by the DHSS Project Manager prior to placement of purchase orders for equipment and materials. Equipment and materials for which project data and samples are specified, which are constructed, installed or incorporated prior to review, check and approval by the DHSS Project Manager may not be accepted.

The review by the DHSS Project Manager of product data or other submittals is only for conformance with the general design concept of the project and does not extend to consideration of structural integrity, safety, detailed compliance with contract requirements or any other obligation of the Contractor. Any action shown is subject to the requirements of the plans and specifications.

The Contractor is responsible for preparation and review of all shop drawings confirming and correlating all dimensions; fabricating and construction techniques; coordinating his or her work with that of all other trades; and the satisfactory performance of his or her entire work in strict accordance with the contract documents. The review of project data by the DHSS Project Manager shall not relieve the Contractor from his or her obligation fully to perform all contract requirements, nor shall such review give rise to any right of action or suit in favor of the Contractor or third persons, against the DHSS Project Manager or the Owner.

1.03 MINIMUM REQUIREMENTS

- A. Shop and supplemental drawings shall be assembled, labeled with reference to specification section and/or drawing number, detail number and location with the delivery date and all pertinent data needed to fully describe the element or item of the work.
- B. Shop and supplemental drawings shall indicate all rough-in, backing or blocking, space requirements and that field measurements have been verified for conformity to the contract documents, code requirements, where applicable, and necessary coordination with any other parts of the work.
- C. The Contractor shall sign the drawings or project data transmittal to certify that he or she has reviewed the shop and supplemental drawings submittal, verified all field

measurements and complied with all applicable provisions of the contract documents.

1.04 DISTRIBUTION

The Contractor shall provide copies of project data and shop and supplemental drawings, as provided in the General Conditions, or three copies, whichever is greater. The DHSS Project Manager shall return one marked copy to the Contractor.

1.05 LIMITATION OF SUBMITTALS AND REVIEWS

The Contractor shall submit project data and samples for equipment and materials which meet or exceed the requirements of the specifications. Accordingly, it is considered reasonable that the Contractor provide project data and samples which are complete and acceptable, in the judgment of the DHSS Project Manager, by the second submission of specific project data and samples. The Owner reserves the right to and will withhold such amount from payments due to the Contractor to cover the cost of review by the DHSS Project Manager of third and subsequent submissions of specific project data and samples.

The Contractor's progress schedule shall include time for the submittal of project data and samples and for the resubmittal of project data and samples rejected by the DHSS Project Manager.

1.06 PAYMENT

No separate or additional payment will be made for the work and/or materials specified herein. All costs of such work and/or materials shall be considered as incidental to the project and shall be included in the appropriate lump sum or unit price bid.

SECTION 01400

QUALITY CONTROL

1.01 GENERAL SAMPLING AND TESTING REQUIREMENTS

All of the work, under this contract, shall be fully tested in accordance with the specifications. The Contractor shall furnish all labor and materials for the testing of the materials he or she proposes to employ.

It shall be the Contractor's responsibility to obtain and pay for the services of an approved testing laboratory which shall take all samples and perform all tests as stipulated, necessary for initial verification that the materials to be utilized in the construction do conform to the various specifications. The Contractor shall furnish two certified copies of the results of all tests to the DHSS Project Manager.

1.02 INITIAL TESTING

All sampling and testing necessary to determine results of construction techniques and procedures shall be performed by the qualified laboratory retained by the Contractor. Such sampling and testing shall be as necessary to provide compliance with the requirements of the specifications and shall include the tests listed in the specifications and any and all additional tests which may be required or requested by the DHSS Project Manager and/or Owner.

1.03 SUBSEQUENT TESTING

All sampling and testing necessary to determine results of construction and procedures shall be performed by the qualified laboratory retained by the Contractor. Such sampling and testing shall be as necessary to determine compliance with the requirements of the specifications and shall specifically include the tests listed in the specifications and any and all additional tests which may be necessary to properly identify components and control the work.

1.04 OPERATIONAL TESTING

It is the intent of the Owner to have a complete and operable system. All of the work shall be fully tested and inspected in accordance with the specifications.

1.05 PAYMENT

No separate or additional payment will be made for the work and/or materials specified herein. All costs of such work and/or materials shall be considered as incidental to the project and shall be included in the appropriate lump sum or unit price bid.

SECTION 01410

TESTING LABORATORY SERVICES

Part 1 - GENERAL

1.01 RELATED REQUIREMENTS SPECIFIED ELSEWHERE

- A. Quality Control: Section 01400.
- B. Testing Requirements: Various Sections.

1.02 BIOLOGICAL TESTING

A. The Contractor will pay for biological tests required for disinfection of domestic water systems. The tests shall be performed by a laboratory approved by the Alaska Department of Environmental Conservation.

1.03 SOILS AND OTHER TESTING

- A. The Contractor will pay for an independent testing laboratory to perform the following tests:
- B. Soils gradation, moisture density standards determination, and in place density and compaction tests per Sections 02200 and 02221, Division 2.
- C. Concrete: Mix design, consistency, air content, yield, compressive test cylinder casting and compression testing per Section 03300.
- D. Mortar: Consistency, mix design, compressive test cylinder casting and compression testing, per Section 03600.
- E. Asbestos testing in demolition building products.
- F. Other materials and/or workmanship tests where specified in Divisions 2 through 15.

1.04 LIMITATION

Employment of a testing laboratory shall in no way relieve the Contractor of his or her obligation to perform Work in accordance with the Contract.

Part 2 - QUALIFICATION OF LABORATORY

2.01 STANDARDS

A. Meet basic requirements of ASTM E329, "Standards of Recommended Practice for Inspection and Testing Agencies for Concrete and Steel as Used in Construction."

- B. Submit copy of report of inspection of facilities made by Materials Reference Laboratory of National Bureau of Standards during most recent tour of inspection; with memorandum of remedies of any deficiencies reported by inspection.
- C. Testing Equipment:
 - 1. Calibrated at maximum 12-month intervals by devices of accuracy traceable to National Bureau of Standards.
 - 2. Submit copy of certificate of calibration, made by accredited calibration agency.

Part 3 - LABORATORY DUTIES

3.01 AUTHORITY AND LIMITATION

- A. Cooperate with DHSS Project Manager, Owner, Engineer and Contractor.
- B. Provide qualified personnel promptly on notice.
- C. Perform specified inspections, sampling and testing of materials and methods of construction:
 - 1. Comply with specified standards; ASTM, other recognized authorities, and as specified.
 - 2. Ascertain compliance with requirements of Contract Documents.
- D. Promptly notify DHSS Project Manager, and Contractor, of irregularities or deficiencies of Work which are observed during performance of services.
- E. Promptly submit copies of report of inspections and tests to DHSS Project Manager, in addition to those required by the Contractor including:
 - 1. Date issued.
 - 2. Project title and number.
 - 3. Testing Laboratory name and address.
 - 4. Name and signature of Inspector.
 - 5. Date of inspection of sampling.
 - 6. Record of temperature and weather.
 - 7. Date of test.
- 8. Identification of product and specification section.
- 9. Location in project.
- 10. Type of inspection or test.
- 11. Results of Test.
- 12. Observations regarding compliance with Contract Documents.
- F. Perform additional services as required.
- G. Laboratory is not authorized to:
 - 1. Release, revoke, alter, or enlarge on, requirements of Contract Documents.
 - 2. Approve or accept any portion of work.

Part 4 - RESPONSIBILITIES

4.01 CONTRACTOR

- A. Cooperate with laboratory personnel, provide access to Work, and comply with Manufacturer's requirements.
- B. Provide laboratory with representative samples of materials to be tested in required quantities.
- C. Furnish copies of mill test reports.
- D. Furnish casual labor and facilities:
 - 1. To provide access to work to be tested.
 - 2. To obtain and handle samples at the site.
 - 3. To facilitate inspections and tests.
 - 4. For laboratory's exclusive use for storage and curing of test samples.
- E. Notify Laboratory sufficiently in advance of operations to allow for his or her assignment of personal and scheduling of tests.

F. Laboratory Tests: Where such inspection and testing are to be conducted by an independent laboratory or agency, the sample or samples of materials to be tested shall be selected by such laboratory or agency, or DHSS Project Manager, and shipped to the laboratory by the Contractor at his or her expense.

END OF SECTION 01410

SECTION 02050 DEMOLITION [SITE PREPARATION]

PART 1 - GENERAL

1.01 WORK INCLUDED

A. This Section specifies demolition and/or removal as a part of new construction or renovation. Included are demolition and removal of curb and gutter, sidewalks, concrete retaining walls, concrete foundations, and signs and posts,.

1.02 RELATED SECTIONS

- A. Sections of Division 1
- B. Section 31200 Excavation, Backfilling and Grading

1.03 SUBMITTALS

- A. Demolition Plan: Submit proposed salvage, demolition and removal procedures to the DHSS Project Manager for approval before work is started. Procedure shall provide for careful removal and disposition of materials specified to be salvaged, coordination with other work in progress, a disconnection schedule of utility services, a detailed description of methods and equipment to be used for each operation, and sequence of operations.
- B. Permits and Notices: Submit appropriate demolition permits and notices authorizing demolition and removal.

1.04 PROJECT CONDITIONS

- A. Existing Conditions
 - 1. Obtain all utility locates prior to beginning work.
 - 2. Aside from the project drawings, there are no available reports describing existing conditions.
 - 3. Protect all utilities not designated for removal. Damage occurring during construction and for 60 days after substantial completion of work shall be rectified by the Contractor and at the Contractor's expense.
 - 4. Traffic control measures, including, but not limited to, flagging, required for the benefit of the Contractor during staging and construction shall be the responsibility of the Contractor and shall be at the Contractor's expense.

B. Protection

1. Erect barriers, fences, guard rails, enclosures, chutes, and shoring to protect personnel, structures and utilities remaining intact.

- 2. Reference and protect property corners and other survey monuments shown on the Drawings. Any disturbed corners or monuments shall be reset by an Alaska-licensed professional land surveyor.
- 3. Where pedestrian and driver safety is endangered in the area of removal work, use traffic barricades with flashing lights.
- C. Maintaining Traffic
 - 1. Ensure minimum interference with roads, streets, driveways, sidewalks, and adjacent facilities.
 - 2. Do not close or obstruct streets, sidewalks, alleys or passageways without permission from authorities having jurisdiction.
 - 3. If required by governing authorities, provide alternate routes around closed or obstructed traffic ways.

PART 2 - PRODUCTS

Not Applicable.

PART 3 - EXECUTION

3.01 GENERAL

- A. Notification
 - 1. Notify Owner, DHSS Project Manager, Police and Fire Departments in advance of street closures. Place public notices with local radio and television stations. Make notifications at least 48 hours prior to closure.
- B. Verify Locations
 - 1. Verify locations of manholes, valves and valve boxes, catch basins, survey monuments, and all other surface features prior to beginning work.
 - 2. Verify locations of storm drain piping and lighting cable with Building Maintenance prior to beginning work.

3.02 DEMOLITION

- A. Concrete Sidewalks and Ramps
 - 1. Remove/Reinstall concrete sidewalks and ramps within and extending one foot beyond excavation limits. Use sawcuts or remove to nearest expansion joint.
- B. Signs, Benches and other Apparatuses

1. Remove/Reinstall and salvage signs, sign posts, benches and other apparatuses within the limits shown on the Drawings.

3.03 DISPOSITION OF MATERIAL

- A. Title to Materials
 - 1. Title to all materials and equipment to be removed, except as specified otherwise, is vested in the Contractor upon receipt of Notice to Proceed. The Owner will not be responsible for the condition or loss of, or damage to, such property after Notice to Proceed. Materials and equipment shall not be viewed by prospective purchasers or sold on the site.

B. Disposal

1. Materials not designated for salvage to be disposed of by the Contractor at a disposal site provided by the Contractor.

3.04 CLEANUP

- A. Debris and Rubbish
 - 1. Remove and transport debris and rubbish in a manner that will prevent spillage on streets or adjacent areas. Clean up spillage from streets and adjacent areas.

END OF SECTION 02050

SECTION 02200

EARTHWORK

Part 1 - GENERAL

1.01 SCOPE

Work covered in this section includes excavation and construction of embankments for structures. All excavation and construction of embankments shall be in conformance with the requirements of DOT&PF Standard Specifications unless otherwise specified herein.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Section 02221 Trenching Backfilling and Compacting

1.03 PAYMENT

No separate or additional payment will be made for the work and/or materials specified herein, except for rock excavation and borrow as authorized below. All costs of such work and/or materials shall be considered as incidental to the project and shall be included in the appropriate unit or lump sum price bid.

Part 2 - PRODUCTS

2.01 MATERIALS

A. Foundation Fill: Foundation fill shall conform to Alaska Department of Transportation and Public Facilities Aggregate Base Course, Grading D-1.

B. Borrow Backfill: Granular soils from the excavation shall be stockpiled and used for backfill provided the moisture content and gradation are suitable for compaction. Stockpiled materials shall be covered to prevent accumulation of excessive moisture.

C. Where borrow material is required for backfill, material shall conform to DOT&PF Standard Specification 703-2.07 for selected material, Type A.

Part 3 - EXECUTION

3.01 SAFEGUARDING OF EXCAVATIONS

The Contractor shall provide such safeguards and protections around and in the vicinity of excavations as may be necessary to prevent and avoid the occurrence of damage, loss, injury and death to property and persons because of such excavations. Liability for any such damage, loss, injury or death shall rest with the Contractor.

3.02 EXCAVATION

Excavation Below Grade: If the bottom of excavation is of unsuitable material, as determined by the Engineer, the unsuitable material shall be excavated below grade elevations indicated or established and refilled to grade with foundation fill. Inadvertent excavation below established elevations without authority shall be restored to grade with foundation fill by and at the expense of the Contractor. Compaction of foundation fill shall be at least 96 percent of maximum density.

3.03 EMBANKMENTS

During grading operations, the surface of embankments and excavations shall be shaped to a uniform cross section. All ruts and depressions capable of ponding water shall be eliminated. Embankment layers shall be constructed with the intersection with the original ground as the high point of the layer and shall uniformly slope to the outer side with a slope not to exceed one foot in 20 feet. Embankments shall be constructed of 12-inch minus shot rock base in accordance with these specifications.

3.04 FINISH GRADING

Uniformly grade all areas covered by the project, including excavated and filled sections, adjacent transition areas, and all areas disturbed by the Contractor during construction of the project. The finished surface shall be smooth, compacted, and free from irregular surface changes.

The surface of embankments on which a 1-1/2-inch-minus base course is to be placed shall not vary more than 0.05 foot from the grade and cross section shown on the Drawings. 1-1/2-minus base course shall be placed where shown on the Drawings and compacted to 95 percent of maximum density.

3.05 BACKFILL

Backfill of structures shall proceed uniformly around the structure to prevent unbalanced soil loadings. Backfill of concrete walls shall not proceed until walls have reached at least 80 percent of design strength. Backfill shall be placed in lifts not greater than ten inches deep and shall be hand-compacted within a distance equal to half the depth of the backfill to avoid excessive wall pressures from compaction equipment. Compact to 95 percent of maximum dry density.

3.06 COMPACTION TESTING

Maximum dry density shall be determined using ASTM D-1557 for moisture-dependent material, and ASTM D-4253 for crushed rock materials.

END OF SECTION 02200

SECTION 02221

TRENCHING, BACKFILLING, AND COMPACTING

Part 1 - GENERAL

1.01 SCOPE

Work covered in this section includes pavement removal, trench excavation, foundation preparation, bedding, backfilling, compaction, and other earthwork incidental to the conconstruction of concrete retaining walls, and sidewalks,.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 02050 Demolition
- B. Section 02200 Earthwork

1.03 STANDARDS

Compaction and field density testing shall be in accordance with ASTM standard specification D1557 and D1556 or D2922. Maximum dry density shall be determined using ASTM D1557 for moisture-dependent material, and ASTM D4253 for crushed rock materials.

1.04 **DEFINITIONS**

- A. Finished grade shall mean the final grade elevations indicated on the Drawings. Spot elevations indicated on the Drawings shall govern over elevation contours in case of conflict.
- B. Non-Frost Susceptible (NFS) Soil: Granular self-draining soils free of organic material and containing less, by weight, than ten percent finer than a No. 200 sieve and three percent finer than 0.02 millimeters that can be compacted to a tight, unyielding surface.
- C. Contaminated soil shall mean soil containing organic material and/or deleterious substances as defined in 2.02 of this Section.

1.04 EXISTING UTILITIES

- A. There are no known utilities in the project work area, but the contractor shall review the project area with Pioneers Home maintenance staff to assure no utilities will be encounter during excavation and demolition work.
- B. In the area of the underground fuel tanks near the bus parking spaces, the contractor shall take due care to avoid conflicts with buried fuel piping, vent piping, conduits and other appurtenances.

1.05 TESTING

- A. The Contractor shall provide soil testing and inspection service by an independent geotechnical-civil engineering firm experienced in performing soil analysis. The testing firm shall be approved by code enforcement authorities and the DHSS Project Manager/Owner prior to commencing work.
- B. The testing firm shall inspect and report on imported fill material, backfill compaction, and existing bearing soil for compliance with the Drawings and Specifications.

1.06 TEST AND INSPECTION REPORTS REQUIRED

- A. Imported Fill Materials: One sieve particle size test for every different borrow source and one for every 1,000 cubic yards of fill, including sand for play areas.
- B. Fill Compaction: One test for each lift layer placed and not less than one test per 2,500 square feet at locations designated by the DHSS Project Manager.
- C. Existing Bearing Soils: One inspection for loose or contaminated soil is required of existing soils under planned foundations after the existing has been over-excavated to a depth of 2'-0".
- D. Reports shall be signed by a civil engineer registered to practice in the State of Alaska.

1.07 ENVIRONMENTAL REQUIREMENTS

- A. Do no earthwork when outside temperature is, or is expected to be below 35 degrees F or when the subgrade has standing water or snow.
- B. Do not place frozen fill materials.

1.08 **PROTECTION**

- A. Protect existing structures, sidewalks, paving, and curbs from equipment and vehicular traffic by timber cribbing, screens or other appropriate shielding.
- B. Protect above and below grade utilities which are to remain.
- C. Protect excavations by shoring, bracing, sheet piling, underpinning, or other methods required to prevent cave-in or loose soil from falling into excavation.
- D. Underpin adjacent structures which may be damaged by excavation work, including service utilities and pipe chases.

1.09 SUBMITTALS

Project data submitted in accordance with Section 01340 shall include gradation analysis reports for bedding, foundation gravel, and drain rock.

Part 2 - PRODUCTS

2.01 MATERIALS

A. Pipe bedding: Bedding material shall conform to DOT&PF standard specification 703-2.03 for untreated aggregate base course, grading D-1. Other materials may only be substituted with the express written permission of the DHSS Project Manager.

B. Foundation material: Foundation material shall be clean, well graded natural sand and gravel or crushed rock conforming to DOT&PF standard specification 703-2.10 for porous backfill material.

C. Imported backfill: Imported backfill shall meet the requirements of DOT&PF standard specification 703-2.09 for subbase, grading A, except the portion passing the #200 sieve shall not exceed five percent.

D. Drain rock: Drain rock shall be washed crushed rock meeting the following gradations:

SIEVE SIZE	PERCENT PASSING
8"	100
3"	40 MAX
3/4"	10 MAX
#100	0

2.02 NATIVE MATERIAL

Excavated native material utilized for backfill shall be granular soils free from mud, muck, organic matter, broken pavement, stones larger than 4 inches in dimension, brush and wood material, with moisture content suitable for compaction.

2.03 DELETERIOUS SUBSTANCES

A. Substances such as sod, organic water, peat, wood chips, frozen material or construction debris will not be allowed in fill material.

Part 3 - EXECUTION

3.01 TRENCHING FOR PIPELINES

A. In all cases, trenches must be of sufficient width to permit proper jointing of the pipe and backfilling of material along the sides of the pipe. Trench width at the surface of the ground shall be kept to the minimum amount necessary to install the pipe in a safe manner.

B. The normal maximum permissible trench width for pipelines, at the bottom of the trench up to a point at the crown of the pipe, shall be 30 inches or 1.5 times the outside diameter plus 18 inches, whichever is greater.

C. The length of trench excavated in advance of the pipe laying shall be kept to a minimum, and in no case shall it exceed one hundred and fifty feet (150').

D. Trenches shall be excavated below the barrel of the pipe a sufficient distance to provide for bedding material specified.

E. Pipe or structures placed below the water table shall be kept from floating by placing an adequate amount of backfill material upon it, or by maintaining the water level at or below the bottom of the trench.

3.02 EXCAVATION

The Contractor shall inform and satisfy himself or herself as to the character, quantity and distribution of all materials to be excavated. Should the Contractor excavate below the designated lines and grades without prior approval, he or she shall replace such excavation with approved materials, in an approved manner and condition, at his or her own expense.

Excavation of every description, classification and of whatever substances encountered within the limits of the project shall be performed to the lines and grades necessary for pipe, conduit, foundation, bedding and backfill as indicated on the drawings.

Owner shall determine the suitability of excavated material to be used as backfill. Excavated material which is unsuitable for backfill, as determined by Owner, and all excavated material in excess of that required for backfill shall be removed from the construction area and disposed on suitable site(s) secured by the Contractor.

The Contractor shall properly manipulate and protect excavated material as may be required to achieve the compacted densities specified herein. Native material that has been placed or is stockpiled for use shall be properly protected from degradation by other materials or unsuitable excavation materials and by moisture from precipitation, surface runoff or groundwater. Protection from moisture shall include, but not be limited to, covering of the stockpiled material with waterproof sheeting. Excavated material which is appropriate for use as backfill and is not properly protected shall be removed from the site and replaced with Imported Backfill Material at no cost to Owner.

Excavation for manholes, vaults, and overflow outlet structures shall be sufficient to provide a minimum of twelve (12) inches between their surfaces and the sides of the excavation.

All material excavated from trenches and piled adjacent to the trench or in a roadway or public thoroughfare shall be piled and maintained so that the toe of the slope of the material is at least four (4) feet from the edge of the trench. It shall be piled in such manner as will cause a minimum

of inconvenience to public travel, and provision shall be made for merging traffic where such is necessary. Free access shall be provided to all fire hydrants, water valves and meters, and clearance shall be left to enable free flow of storm water in all gutters, other conduits, and natural water courses.

3.03 CONTROL OF WATER

Trenches may be subject to groundwater and surface runoff due to high rainfall which is common in the Ketchikan area. The Contractor shall ascertain, to his or her own satisfaction, the extent to which water may occur, the nature of the material in which water may appear and the extent to which such occurrence of water shall affect the work.

The Contractor shall install and maintain temporary drains and drainage ditches, as required, to intercept or control and direct surface water which may affect the execution or condition of the work.

The Contractor, at all times, shall use his or her best efforts to keep the trench free from water to facilitate fine grading, the proper laying and jointing of pipe, and prevention of damage to completed joints. Contractor must be prepared to provide adequate equipment and/or well point systems to handle and dispose of the water without damage to adjacent property. Water in the trench shall not be allowed to flow into the pipe at any time. An adequate cover shall be provided to prevent the entrance of objectionable material into the pipelines.

Dewatering shall be performed so as to prevent bottom heave of the trench, instability of the pipe bedding or foundation, collapse of trench walls and/or similar detrimental occurrences. Groundwater will not be allowed to drain out through the pipe and shall be pumped from within the trench excavation or by wellpoint systems as required by the groundwater and soils conditions and characteristics. The Contractor shall determine the size, capacity, and configuration of all piping and equipment required for dewatering system and shall furnish, install and maintain in operation all such piping and equipment until all construction is completed.

All surface or groundwater controlled and/or directed by the Contractor shall be considered to be waste water.

No separate or additional payment will be made for the work and/or materials required to adequately dewater the trench. All costs of such work and/or materials shall be considered as incidental to the project and shall be included in the appropriate lump sum or unit bid price.

3.04 CRIBBING AND SHORING

The Contractor shall determine requirements for and place sheeting, shoring and other trench restraints to preclude any and all trench bottom heave and to provide a stable trench bottom which will not settle after placement of backfill. Removal of any cribbing and sheeting from the trench shall be accomplished in such a manner as to fulfill the above requirements. Damages resulting from the improper cribbing or from failure to crib shall be the sole responsibility of the Contractor.

That portion of cribbing or of sheeting extending below the crown of the pipe shall be left in place unless satisfactory means of reconsolidating bedding or side support, disturbed by cribbing or

sheeting removal can be demonstrated. If a movable box is used in lieu of cribbing or sheeting, and the bottom cannot be kept above the crown of the pipe, the bedding or side support shall be carefully reconsolidated behind the moveable box, prior to placing backfill.

The use of horizontal strutting below the barrel of pipe or the use of the pipe as support for trench bracing will not be permitted.

3.05 PROTECTION OF EXISTING PIPELINES

The Contractor shall perform such work and furnish and install such materials as required to protect and maintain in continuous service all existing pipelines. Excavations shall be controlled by maintenance of slopes, dewatering, installation of steel sheet piling and/or other means, as may be required, to preclude sloughing of soil from under pipelines and to maintain proper support of pipelines. At locations where maintenance of proper soil support is not feasible or appropriate, the Contractor shall furnish and install such temporary structural bracing, supports and beams as may be required to restrain and support the existing pipelines.

3.06 FOUNDATION MATERIAL

Where organic and/or soft materials or other unsatisfactory conditions are found to be present, Owner may require overexcavation below pipe bedding to suitable soil and placement of Foundation Material as a foundation. Such overexcavation shall be carried to the depth required by Owner.

Foundation Material shall be placed in lifts, not exceeding eight inches in loose depth, and each lift shall be mechanically compacted to at least 95 percent of maximum dry density.

3.07 PIPE BEDDING

Prior to installation of bedding and pipe, the trench bottom shall be cleaned of all roots, loose stones, and debris. Bedding shall be placed only upon firm, undisturbed soil and any soil at the bottom of the trench which is disturbed or loosened by the trenching operations or any muddy soils, shall be removed and additional bedding material shall be placed as a foundation.

All pipe shall be bedded with Pipe Bedding Material as specified in paragraph 2.01 above and per the typical section shown on the plans.

Bedding shall consist of leveling of the bottom of the trench or top of the foundation material and placement of Pipe Bedding material under and along the sides of the pipe. Bedding shall be placed in separate lifts. The first lift, to provide at least 4 inches thickness under any portion of the pipe, shall be placed before the pipe is installed, and shall be spread smoothly so that the pipe is uniformly supported along the barrel. The first lift of bedding shall be compacted to at least 95 percent of maximum density prior to placement of pipe. After installation of the pipe, separate lifts of Pipe Bedding material shall be placed to the limits shown in the plans and compacted to 95 percent of maximum density. Lifts shall be placed in layers not exceeding six inches in thickness.

3.08 BACKFILLING FOR PIPE AND COPPER TUBING

A. General: Trench Backfill, except as specified in paragraphs below, shall be the native material excavated from the trench provided it meets the requirements of 2.02.

B. Imported Backfill: Imported Backfill shall be used for trench backfill when the native material is unsuitable. Owner shall determine the suitability of the native material.

C. Backfilling: Backfill shall be placed in horizontal lifts not exceeding 12 inches unless directed otherwise by Owner in loose depth, and each lift shall be compacted to 95 percent of maximum dry density at optimum moisture content.

Compaction shall be by hand methods or approved plate compactors to a point 2 feet over the crown of the pipe, above which machine compaction shall be used. Machine-mounted compactors shall be used to the maximum extent feasible to minimize the amount of time workers must spend in the trench. Backfill above the bedding layer shall be in maximum 12-inch lifts unless otherwise directed by Owner.

In backfilling the trench, the Contractor shall take all necessary precautions to protect the pipe from any damage or shifting. Backfilling shall be performed by pushing the material from the end of the trench into, along and directly over the pipe so that the material is deposited in the form of a rolling slope rather than by side filling.

E. Depth of Cover: Depth of cover above water pipe, drain pipe and copper tubing shall be 48 inches minimum unless otherwise noted on the plans or in these specifications. Depth of cover above electrical conduit shall be 36 inches minimum unless otherwise noted in the plans or these specifications. In case of conflict, the more restrictive requirements shall apply.

3.10 COMPACTION CONTROL

Compaction shall be obtained by means of mechanical tamper, vibratory compactor or other means approved by the Owner. Water settling shall not be permitted or approved.

Placement and compaction of backfill material shall be conducted and accomplished in conjunction with and under the control of continuous, in-place density testing. Density testing of in-place backfill material shall be made in accordance with ASTM D1556, D1557, D2922, or other procedures approved by the Owner. The moisture content of the backfill materials, the method of placement and distribution of the backfill materials in the trench and around the pipe, the type and method of operation of compaction equipment and all other work and materials associated with and required for placement of compaction of backfill material shall be determined and controlled by the in-place density testing which may be required. All testing shall be performed by a qualified laboratory retained by the Contractor.

The Contractor shall plan and execute his or her operations to include, as an integral element, continuous in-place density testing. Any and all pipe which is installed with backfill, placed without appropriate and continuous in-place density testing, will not be accepted by Owner.

The frequency and location of samples for testing shall be determined by the Owner. As backfilling commences with each material of different characteristics, samples shall be taken at random

locations as directed by the Owner along the pipe alignment and shall be obtained from each lift of the backfill at no more than 50-foot intervals. Test method D2922 may be used provided calibration tests are provided at not less than 500-foot intervals along the trench using method D1556 or D1557. After methods, procedures and equipment required to achieve the specified compaction are determined and established, the frequency and location of samples may be decreased at the discretion of the Owner. In-place density testing shall be continued as the work progresses to monitor and control the methods, procedures and equipment utilized.

Copies of all test reports shall be provided to Owner. Should any tests indicate that the specified compaction is not achieved; the Contractor shall remove all backfill material from the trench and shall determine and utilize new and/or revised methods of placement and compaction of the backfill material until specified levels of compaction are achieved.

New and/or revised methods of placement and compaction shall be determined and utilized as the characteristics of the backfill materials change. As backfill material of different characteristics is placed, the frequency and location shall be increased to determine and control the new and/or revised methods of placement and compaction.

3.11 COMPACTION INSPECTION

In addition to the in-place density testing performed by the Contractor, Owner may elect to perform independent in-place density testing and the Contractor shall, at the option of Owner, either excavate test pits in the completed backfill to accommodate testing or allow testing to be performed on a specific lift of compacted backfill prior to placement of the next lift. All costs of excavation of test pits and of modifying or curtailing the progress of the work to allow testing as specific lifts are completed shall be considered as incidental to the project.

3.12 BUILDING AND OTHER FOUNDATIONS

- A. Over-excavate existing soils to one foot below bottom of footing.
- B. Furnish, place, and compact classified fill.

3.13 BUILDING AND EXTERIOR FLOOR SLABS

- A. Remove organic topsoil.
- B. Scarify and compact upper 6 inches of soil.
- C. Furnish and place compacted classified fill as necessary to attain grades.

3.14 GRADING

- A. Grade top of compacted fill to allow for paving and landscaping topsoil elevations indicated.
- B. Slope finished grades adjacent to the building to prevent ponding of water and to convey water away from foundations.

- C. Bring top of fill to a firm unyielding layer. Correct soft spots or depressions that develop under compaction by removing and replacing material until the surface is smooth and uniform.
- D. Provide adequate water supply for compaction.

3.15 WASTE DISPOSAL

A. Any excess soil shall be removed and legally disposed of off site. Coordinate landscaping topsoil reuse and remove excess.

3.16 MAINTENANCE

- A. Keep fills in satisfactory condition for pavement and building construction following final grading. Provide drainage and erosion control until completion of covering work.
- B. Where completed compacted areas are disturbed by subsequent construction operation or adverse weather, scarify, compact and grade prior to further construction.
- C. Should subsurface bearing surfaces of natural soil previously approved become softened by frost or moisture before final covering, re-excavate to firm bearing and extend backfill to suit, or dry and re-compact subsurface if approved by the DHSS Project Manager.

3.17 CLEAN UP

- A. Smooth grade transition to existing soils grade at any depressions or disturbed areas adjacent to the backfilled areas. Repair any damage to existing structure or roadways which results from earthwork.
- B. Remove excess soil, and construction debris.

3.18 TOLERANCES

- A. Surface grades uniform to elevations indicated within plus or minus 0.02 foot in ten feet.
- B. Where sidewalks meet doorway openings, sidewalk surface shall match the grade of the door threshold

END OF SECTION 02221

SECTION 2720

STORM DRAINAGE SYSTEM

PART 1 - GENERAL

1.01 RELATED WORK

A. Section 02221, Trenching, Backfilling and Compacting

1.02 SYSTEM DESCRIPTION

- A. Storm drainage system from site to point of municipal connection.
- B. Obtain and pay for as part of Contract price all necessary permits.

1.03 TESTING

- A. The Contractor shall provide soil testing and inspection service by an independent geotechnical-civil engineering firm experienced in performing soil analysis. The testing firm shall be approved by code enforcement authorities and the Owner prior to commencing work.
- B. The testing firm shall inspect and report on imported fill material, backfill compaction, and existing bearing soil for compliance with the Drawings and Specifications.

1.04 TEST AND INSPECTION REPORTS REQUIRED

- A. Imported Fill Materials: One sieve particle size test for every different borrow source and one for every 1,000 cubic yards of fill.
- B. Fill Compaction: One test for each 300 L.F. of trench at the pipe spring line, midtrench and surface at locations designated by the Owner.
- C. Reports shall be signed by a civil engineer registered to practice in the State of Alaska.

PART 2 – PRODUCTS

2.01 CORRUGATED POLYETHYLENE PIPE

A. Conform to AASHTO M 294, Type S

PART 3 - EXECUTION

3.01 INSPECTION OF SITE

- A. Examine site surfaces and elevations, subsurface soils report, existing site survey and details on Drawings for defects that will adversely affect the work.
- B. Start of work shall mean acceptance of existing conditions as capable of producing an acceptable job.

3.02 DEWATERING

A. Do not allow water to accumulate in excavations. Remove and convey standing water from excavations by pumping if necessary.

3.03 INSTALLATION

- A. Install where indicated on the Drawings.
- B. Begin the pipe laying at the downstream end of the pipe. Keep the lower segment of the pipe in contact with the shaped bedding throughout its full length. Place outside circumferential laps of flexible pipe facing upstream.
- C. Ensure couplings are corrugated to match the pipe corrugations and that their width is not less than one half the nominal pipe diameter.

END OF SECTION 02720

SECTION 03100

CONCRETE FORMWORK

GENERAL

RELATED WORK SPECIFIED ELSEWHERE

Concrete Reinforcement: Section 03200

Anchors and Inserts: Section 03251

Expansion and Contraction Joints: Section 03252

Waterstops: Section 03253

Cast In Place Concrete: Section 03300

QUALITY ASSURANCE

Standards:

"Building Code Requirements for Structural Concrete", ACI 318-02, Chapter 6.

"Chapter 19", International Building Code 2003.

U.S. Product Standard PS 1 for Plywood.

Standard Grading and Dressing Rules No. 16 of the West Coast Lumber Inspection Bureau.

SUBMITTALS

A description of the forming system with complete details. Illustrate the proposed location of all construction joints, method of securing embedded items and blockout procedures.

PRODUCT DELIVERY, STORAGE, AND HANDLING

On delivery to job site, place materials in area protected from weather.

Store materials above ground on framework or blocking and cover with protective waterproof covering providing for adequate air circulation or ventilation.

Handle materials to prevent damage.

PRODUCTS

MATERIALS

- Plywood: New or in new condition "B-B Plyform Class 1 Exterior" grade plywood, 5/8 inch minimum thickness.
- Steel Panels: Flat steel sheet or plate of sufficient thickness, or braced sufficiently, to prevent noticeable deflection from pressure of concrete. Steel forms galvanized and/or coated to prevent rust and staining.
- Framing, Studding, and Bracing: "Standard" or "Construction" grade West Coast species lumber.
- Form Ties: Prefabricated rod of the cone-type snap-tie configuration; or approved threaded internal disconnecting type to resist all imposed loads of freshly placed concrete, and permit tightening and spreading of forms. Plastic cone snap-ties shall break back 1 to 1-1/2 inches.

Form Coating:

- Lacquer, plastic or epoxy coating or non-staining form oil that will not impair the bonding quality for final finish of the painting or protective coating.
- Coatings containing mineral oils or other non-drying ingredients will not be permitted.
- Shores and Falsework: Standard patented, manufactured shores, or sound commercial construction lumber.
- Chamfer Strips: Chamfer strips (for all exposed edges) 3/4 inch, 45° bevel wood strips or reusable plastic triangular strips.

EXECUTION

DESIGN OF FORMWORK

- Design formwork to safely support vertical and lateral loads which might be applied until such loads can be supported by the concrete structure. Carry vertical and lateral loads by formwork system to ground or to in-place construction which has attained adequate strength for that purpose.
- Design forms and falsework to include assumed values of live load, dead load, weight of moving equipment operated on formwork, concrete mix, height of concrete drop, vibrator frequency, ambient temperature, foundation pressures, stresses, lateral stability, and other factors pertinent to safety of structure during construction.
- Provide shores and struts with positive means of adjustment capable of taking up formwork settlement during concrete placing operations, using wedges or jacks or a

combination thereof. Provide trussed supports when adequate foundations for shores and struts cannot be secured.

- Form facing materials shall be supported by structural members spaced to prevent deflection. Design camber in formwork as required for anticipated deflections.
- Design formwork to be readily removable without impact, shock, or damage to cast-inplace concrete surfaces and adjacent material.
- Keep oil or other agents from getting on reinforcing steel, embedded items, or other surfaces requiring bond with concrete.

LAYOUT OF FORMWORK

Locate and stake out all forms and establish all lines and levels and elevations.

CONSTRUCTION OF FORMS

Formwork - General:

- Before concrete is placed in any form, verify horizontal and vertical form position and correct all inaccuracies. Complete all wedging and bracing in advance of placing of concrete.
- When setting form ties, leave no metal to remain in wall closer than one inch from surface. Ties shall fit tight to prevent mortar leakage at holes in forms. Ties shall be protected from rusting at all times. No wire ties or wood spreaders will be permitted. Cutting ties back from concrete face will not be permitted.
- At construction joints, anchor forms by using an adequate number of form ties in the new pour a few inches from the construction joints. Do not rely on ties adjacent to the joint used in previous placements. All joints horizontal and vertical.
- For exposed concrete, forms shall be of new plywood, metal panel, or approved panel materials, smooth, and continuous.
- For unexposed concrete, forms shall be plywood, metal, boards, or approved material. Boards: nominal one inch minimum thickness, sound and tight, commercial construction lumber, shiplapped or tongue-and-grooved, dressed on at least one side and both edges for tight fit. Plywood, metal, or approved material equal to or better than board surface.

Camber: Forms for girders and slabs cambered unless otherwise noted.

Chamfered Corners: All corners chamfered 3/4 inch, unless shown otherwise on drawings. Provide 45-degree triangular moldings in forms for all chamfering required.

- Inspection and Cleanout Openings: Provide inspection and cleanout openings at the bottom of all forms for columns, pilasters, walls over 8 feet in height, and for forms for irregularly shaped placement where cleaning and inspection from the top would be impractical.
- Coordination: Coordinate the installation of all items to be inserted or embedded in concrete. Support all items to maintain accurate alignment and prevent distortion during concrete placement.
- Cleaning: All dirt, chips, sawdust, mud, water and other foreign matter shall be removed from within the forms or within the excavated areas before any concrete is deposited therein.

NOTIFICATION AND INSPECTION

Prior to placing of any concrete, and after placement of reinforcing steel in the forms, notify the DHSS Project Manager at least 48 hours in advance of placing concrete to permit inspection.

DEFECTIVE WORK

Any form movement or deflection during construction or finished surface variations in excess of the tolerances specified will be basis for rejection of cast-in-place product and requirement for replacement of same.

REMOVAL OF FORMS

- Do not remove forms and supports until concrete has attained sufficient strength to support anticipated loads.
- The listing below serves only as a guide in determining the minimum length of time required before removal of forms and is based on the use of Type I Portland Cement. When high early strength Portland Cement is used, the length of time listed below may be reduced to not less than one-third time listed, but not less than 1 day.

- Use methods of form removal which will not cause overstressing of the concrete. Remove supports to permit the concrete to uniformly and gradually take the stress due to its own weight. Do not use high impact methods to remove supports.
- Break back ties after concrete has cured sufficiently to maintain unbroken bond with steel rod.

REUSE OF FORMS

Any reused form for exposed concrete work shall be reconditioned to "like new" condition. Any reused form shall be cleaned, repaired, and recoated before each reuse.

BLOCKOUTS

Where pipes, castings, or conduits pass through the walls, place such pipes or castings in the forms before pouring the concrete, or in special cases, with the express consent of the Engineer or as specified, build accepted boxes in the forms to make cored openings for subsequent insertion of such pipes, castings or conduits. Provide boxes or cores with continuous keyways and waterstop all the way around, and with slight flare to facilitate grouting and the escape of entrained air during grouting.

END OF SECTION 03100

SECTION 03200

CONCRETE REINFORCEMENT

PART 1 - GENERAL

RELATED WORK SPECIFIED ELSEWHERE

Concrete Formwork: Section 03100

QUALITY ASSURANCE CONTROL

- Manual of Standard Practice for Detailing Reinforced Concrete Structures, ACI 315 (latest edition).
- Manual of Standard Practice, Concrete Reinforcing Steel Institute (latest edition).

SUBMITTALS

Placing drawings, bending and cutsheet schedules.

Mill test reports for each shipment of reinforcement shall be submitted to the DHSS Project Manager for review.

PRODUCT DELIVERY, STORAGE, AND HANDLING

- Deliver reinforcement to project site in bundles marked to coordinate with placement drawings.
- Handle and store to prevent contamination from dirt, oil and other materials which will affect bond.
- Store a minimum of 6" above ground and in locations where the materials will not be subject to abuse.

- PRODUCTS

MATERIALS

- Reinforcing Bars: Unless specified otherwise, deformed bars meeting requirements of ASTM A615, Grade 60. Supplementary Requirements S1 shall apply.
- Welded Wire Fabric: Wire mesh shall meet requirements ASTM A185, "Welded Steel Wire Fabric for Concrete Reinforcement".

Tie Wire: Steel, black annealed, 16-gauge minimum.

Reinforcing Bar Supports: Per CRSI Manual Chapter 3, pregalvanized or plastic-coated.

EXECUTION

INSTALLATION

Placement and Tolerances: Conform to CRSI "Manual of Standard Practice", and ACI 318 (latest edition).

Splices:

- Do not splice bars except at locations shown or noted on the drawings or as otherwise approved.
- Tie lap slices securely with wire to prevent displacement of splice during placement of concrete.
- Welded splices shall not be used unless approved by DHSS Project Manager prior to construction.

Lap wire fabric one full mesh minimum and tie with wire.

- Cleaning: Remove dirt, grease, oil, loose mill scale, excessive rust, and foreign matter that may reduce bond with concrete.
- Protection During Concreting: Keep reinforcing in proper position during concrete placement.
- Concrete Cover: Maintain minimum concrete cover over reinforcement as specified in ACI 318 or as noted on the Drawings.

END OF SECTION 03200

SECTION 03300

CAST IN PLACE CONCRETE

PART 1 - GENERAL

RELATED WORK SPECIFIED ELSEWHERE

Testing Laboratory Services: Section 01410

QUALITY ASSURANCE

Delivery: Furnish a certificate with each truckload of concrete product delivered to the site, indicating the composition and quality of the mix. Include size and weight of each aggregate, amount of cement, amount of water and amount and kind of any additives included in the concrete, grout fill, or mortar.

Standards: All applicable standards (latest editions) of the following:

American Concrete Institute - ACI

Concrete Reinforcing Steel Institute - CRSI

International Building Code - IBC

Other local codes or criteria noted on drawings.

Concrete Consistency:

Test each truckload of concrete for slump. Calibrate each mixer or haul unit to be used by measuring slump near the beginning and near the end of the discharge cycle. Mix units determined by the DHSS Project Manager to be deficient in mixing capability shall not be used in subsequent deliveries. Slump testing procedures per ASTM C143.

Concrete Test Cylinders:

Prepare a minimum of three test cylinders for each location for each day's placement or each 50 cu. yd. whichever is greater.

Test set of 3 cylinders as follows:

One at 7 days.

Two at 28 days.

Prepare and test cylinders per ASTM C31 and C39.

- Prior to placement have available at placement location all tools, cylinder molds, slump cone, rod, curing containers and all other apparatus required for sampling and testing.
- Air Entrained: One test for each mix design.

SUBMITTALS

- Concrete mix design by independent laboratory, including strength tests of 3 cylinders proportioned to mix design formula.
- Certification of quality of all concrete, mortar, and grout mix design ingredients including admixtures with supporting test data, mill quality control results and all information specified and requested by the Engineer.
- Qualifications of Quality Assurance Control personnel responsible for concrete consistency, strength, air content and all testing.
- Curing materials and methods proposed with certification statements of materials quality.
- Test results, in approved format, at specified intervals for all field sampling and specimens.
- Certification of quality and type of epoxy bonding materials.
- Trip tickets for each load of concrete, grout or mortar indicating weights of all materials and additives used in the batch.
- Location of construction joints not shown on the plans.
- Detectable Warning Mat Materials and location
- Cold weather placement procedures, if used.

STORAGE OF MATERIALS

- Maintain in continuously clean environment and in manner required to maintain homogeneity.
- Cements, grouts, and mortar containerized and kept in dry humidity environment. Engineer shall reject materials which have hardened or show any evidence of initial hydration.

PRODUCTS

CONCRETE

ASTM C94 and mix design approved by DHSS Project Manager.

Compression strength and water cement ratio: The minimum compressive strength and cement content of concrete shall be not less than that shown in the tabulation that follows. The Engineer may order the cement content for any class of concrete to be increased over the quantity specified in the tabulation if it is determined that such increase is necessary to attain the required strength. Such increased quantities of cement, if so ordered, shall be furnished by the Contractor at no additional cost to the Owner.

Class of Concrete Min. 28-day		Max. Size	Min. Cement Pounds	Max W/C
Compr. Strength		Aggregate	Per	Max. W/C
(psi)	Type of Work	(in.)	cu. yd.	Ratio
4,000	Walls, Retaining Walls and slabs on grade	3/4	564	0.45
4,000	Footings, cradles, thrust blocks, encasements and all other uses.	3/4	564	0.45

Cement ASTM C150:

Type I/II for all structures.

Aggregates:

Conform to ASTM C33.

Maximum wear 50% at 500 revolutions, AASHTO T96.

Water:

Potable water free from injurious amounts of oil, acid, salt, alkali, organic matter, or other deleterious substances.

Admixtures:

Use only those specified in approved mix design.

Air entrain all concrete unless elsewhere excepted, with agent conforming to ASTM C260. Freshwater concrete air content between 4% and 6% by volume.

Apply in strict accordance with manufacturer's printed instructions.

No chloride contents permitted.

Compatible with coatings specified elsewhere.

AGGREGATE FOR MORTAR

Conform to 2.1 except gradation as follows:

Sieve Size Square Opening	Percent Passing <u>By Weight</u>
No. 4	95 - 100
No. 8	80 - 90
No. 16	55 - 97
No. 30	30 - 60
No. 50	12 - 30
No. 100	0 - 10

GROUT

- For equipment and column bases and drilled in anchors use nonshrink, nonstaining, premixed grout, Masterflow 713 by Master Builders; or equivalent. Mix in accordance with the manufacturer's directions.
- For Fill: Driest consistency practical composed of 1 part Portland Cement 3 parts sand (by volume). Aggregate proportions may be varied slightly to give the most workable mix.
- For placement at base of walls, one part fine aggregate, one part cement. In a thick cream consistency.

Cure in accordance with manufacturer's recommendations.

CURING MATERIALS

Polyethylene Sheeting 0.004 inch thick.

Waterproof Paper: Polyethylene-coated, Fed. Spec. UU-B-790 Type I, Grades A, B, C, Style 4. Define lap control lines clearly by printed markings.

DETECTABLE WARNING MAT

Apply UV Stable Composite or Polyurethane detectable warning mat (approximate size-2' x4') at New ADA ramp to Bryant Street.

Submit manufacturer's literature describing products, installation procedures and manufacturer's specified maintenance procedures. Color shall be "Caution-<u>Yellow"</u>

Provide tactile warning surfaces which comply with the detectable warnings on walking surfaces section of the Americans with Disabilities Act (Title 49 CFR TRANSPOTATION, Part 37.9 STANDARD FOR ACCESSIBLE TRANSPORTATION FACILITIES, Appendix A, Section 4.29.2 DETECTABLE WARNINGS ON WALKING SURFACES. Manufacturers offering products that may be incorporated in the work include, <u>but are not limited to</u>, the following:

- o Detectable Warning Systems, Inc. (866-999-7452)
- Armor Tile Engineered Plastics, Inc. (800-682-2525)
- o ADA Solutions, Inc. (888-501-9699)

Detectable warning mat shall be warranted in writing for a period of five years from date of final completion.

FLOOR HARDENERS

Dusted on type troweled into fresh concrete floor at rate specified by manufacturer.

Roll on cure sealer at rate specified by manufacturer.

Master Builders Master Cron, or Colortron where color is specified and sealed with Master Seal, or Castle Chemical Corporation Durundum, sealed with Duro-Kure, or equivalent.

VAPOR BARRIER (UNDER INTERIOR SLABS)

- Polyethylene sheeting 6 mil (0.006 inch) thickness. Define lap control lines clearly by continuously marking material edges.
- Glass fiber reinforced waterproof paper coated with polyethylene (both sides). Fed. Spec. UU-B-790 Type I grades A, B, C Style 4. Define lap control lines clearly by printed markings.

EXECUTION

MIXING AND TRANSPORTATION

Ready-Mixed Concrete: Conform to ASTM C94 Alternate No. 3.

PLACING

- Deliver only in sufficient quantities required for specified time interval use and placement. Discard concrete having initial set before placement. No remixing with water or supplementing with other materials will be permitted once initial set has occurred. Initial set as evidenced by typical hydration characteristics to be determined by DHSS Project Manager and Contractor quality assurance representative.
- Place as nearly as possible to final position to avoid segregation of the materials and displacement of reinforcement. Placement shall be completed within 30 minutes after water is first added to the mix. However, at the DHSS Project Manager discretion if climatic and temperature conditions are suitable and when the concrete is continually agitated, the time may be extended to 1-1/2 hours.
- Place no concrete until reinforcing has been inspected as to placement and size per contract documents and approved shop drawing submittals.

Place no concrete in the absence of the Contractor quality assurance representative.

- Do not change consistency (slump) for a given placement without the DHSS Project Manager written permission.
- Keep open trough and chutes of steel or steel lined, clean and free from coatings of hardened concrete.
- Do not drop concrete a distance of more than 5 feet unless approved in writing by the DHSS Project Manager.
- Layout and sequence the placing of concrete in monolithic structures as shown on the drawings or approved by the DHSS Project Manager.
- Within a placement, deposit concrete in horizontal layers not to exceed 18 inches in depth. Place at rate such that: (1) no concrete surface shall obtain initial set before additional concrete is placed on it and (2) yielding of forms is not so great as to cause the concrete surfaces to exceed the tolerances specified.
- Unless specified otherwise, place all slabs to finish elevation in one continuous operation. Slab and section thicknesses shall be as shown on the contract documents. Slopes on floors shall increase, rather than decrease, slab thicknesses.

Construction Joints:

Locate construction joints so as not to impair the strength of the structure. Locations not shown on the drawings shall be approved by the DHSS Project Manager.

Construct to neatly fit reinforcement and waterstops and prevent concrete leakage.

Provide waterstops or sealants in construction joints where required.

Unless shown otherwise, key all construction joints.

- Continue reinforcement through construction joint unless otherwise shown or noted.
- Before placing concrete against previously placed concrete, thoroughly roughen and clean by wet sandblasting or green cutting with an air-water jet.
 - Use air-water cutting at the proper time after the initial set. Use a high pressure air-water jet to expose clean, sound aggregate without undercutting the edges of the larger aggregate. Protect adjacent subgrade when cutting is used on slab edges.
 - After cutting or sandblasting, rinse the surface until wash water contains no cloudiness. Dispose of wastes from cutting, washing and rinsing so they do not stain or abrade exposed surfaces.

Place concrete continuously to a predetermined construction joint.

Care shall be taken in placing concrete through reinforcement so that no segregation of the coarse aggregate occurs. On the bottom of slabs where the congestion of steel

near the forms makes placing difficult, a layer of mortar, of the same strength as used in concrete, shall first be deposited in the forms, followed immediately by the concrete. The thickness and use of this mortar layer shall be as approved by the DHSS Project Manager.

- Special care shall be taken to prevent splashing forms or reinforcement with concrete. Any hardened concrete or partially hardened concrete on the forms or reinforcements above the level of the concrete already in place shall be removed before proceeding with the work.
- Cold Weather Placement:
 - Concrete shall be placed only when the temperature is at least 40°F., and rising, unless permission to pour is obtained from the DHSS Project Manager.
 - Material shall be heated and otherwise prepared so that batching and mixing can proceed in full accord with the provisions of this Specification.
 - Suitable means shall be provided for maintaining the concrete at a temperature of at least 50°F for a period of at least the first five (5) days and at a temperature above freezing for the remainder of the specified curing period, except that where high-early-strength cement is used, this period may be reduced to 72 hours. The methods proposed for heating the materials and protecting the concrete shall be approved by the DHSS Project Manager.
 - Salt, chemicals, or other materials shall not be mixed with the concrete for the purpose of preventing freezing. Accelerating agents shall not be used.

Hot Weather Placement:

- The temperature of fresh concrete at the time of placement during hot weather shall be a maximum of 90°F to prevent an accelerated setting of the concrete.
- A retarding densifier admixture shall be used when the high expected atmospheric temperature for the day is 85°F or above. Admixture shall be used in accordance with the manufacturer's recommendations.

Placing Concrete Against Earth:

- Unless otherwise called for on the drawings, earth cuts shall not be used as forms for vertical surfaces without the prior approval of the DHSS Project Manager.
- Concrete placed on or against earth shall be placed only upon or against firm, damp surfaces free from frost, ice and standing or running water. Concrete shall not be placed upon mud, or upon fills until the required compaction has been obtained.

Placing Concrete Slabs:

- Smooth subgrade surface irregularity with thin film of masonry sand prior to placing vapor barrier.
- Place vapor barrier on subgrade in maximum widths commercially available. Longitudinal laps 6 inch minimum. End laps 2 feet minimum.
- Edge and side laps to be in continuous contact. Place materials to maintain tight lap contact.

Repair any tears in the vapor barrier material.

Place concrete without displacing vapor barrier.

Depositing Concrete in Water:

Concrete may be deposited in water only when specifically authorized.

Methods and equipment used shall be acceptable to the DHSS Project Manager.

When deposited by the tremie method, the tremie shall be watertight and sufficiently large to permit a free flow of concrete. The discharge end shall be kept submerged continuously in the concrete and the shaft kept full of concrete to a point well above the water surface. Placing shall proceed without interruption until the top of the concrete has been brought to the required height.

COMPACTING

Compact all concrete with high frequency internal vibrators immediately after placing.

- Use external vibrators for compacting concrete where the concrete is inaccessible for adequate compaction by internal vibrators; construct forms sufficiently rigid to resist displacement or damage from external vibration.
- Penetrate concrete with a sufficient number of vibrations immediately after it is deposited. Move vibrator throughout the mass so as to thoroughly work the concrete around reinforcement and embedded fixtures and into corners and form recesses. Vibrate the minimum time required to compact the concrete in place and not cause separation of the materials. Concrete shall be compacted to maximum density as determined by tests for yield. Select vibrator size to efficiently accommodate reinforcement clearances.

CURING AND PROTECTION

General:

Maintain at site ready to install, before actual concrete placing begins, all equipment and materials needed for optimum concrete curing and protection; maintain extra vibrators on standby in case of malfunction of any unit.

- Protect finished surfaces or edges from stains, abrasions and breakage during the entire construction period.
- Protect all concrete from accelerated drying and excessive heat at all times. Close all galleries, conduits and other formed openings through the concrete during the entire curing period and as long thereafter as practicable to prevent drying of concrete by air circulation.
- Install slab curing covers immediately after initial set or as soon as free water has disappeared from the surface of the concrete after finishing or surfacing.

Water Curing:

- Use water curing specified herein for all walls and slabs where watertight construction is required.
- Keep concrete continuously wet by covering with an approved material or by a system of perforated pipes or mechanical sprinklers or other approved methods. (Periodic wetting acceptable.)
- Keep forms wet at all times to prevent opening of joints and the drying out of the concrete.
- Water for curing shall be clean and free from any elements which might cause objectionable staining or discoloration of the concrete.
- Cover surfaces completely with sheeting. Where a single sheet does not cover the entire surface, lap ends and edges at least 4 inches and continuously seal with tape or other suitable means recommended by the manufacturer.
- Continue waterproof sheet curing for 7 days. Maintain sheeting and edge and end seals intact for entire period. Repair immediately any breaks in the sheeting envelope.
- Curing Compounds: Use only when specifically approved and for optimum climatic conditions.
- Do not use curing compounds unless their use is authorized in writing by the Engineer. Curing compounds unacceptable where concrete is exposed to the direct rays of the sun or accelerated drying conditions.
- Curing compounds shall not be used unless their use is face membrane type and shall be applied in accordance with the manufacturer's recommendations. They shall be of such composition and characteristics as will spread readily on moist concrete and deposit a hard, tenacious film without permanently coloring the concrete surfaces that will be exposed. The resultant film shall adhere to the concrete surface without chemical reaction therewith, and shall not peel. Maintain coverage for 28 days to prevent detrimental loss of water from the concrete.

- Prior to applying curing compounds to formed surfaces, the surfaces shall be moistened with a spray of water immediately after forms are removed. Moistening shall be continued until the surfaces will not readily absorb more water. The compound shall be applied as soon as the moisture film has disappeared and while the surface is still damp.
- On unformed surfaces, the compounds shall be applied immediately after finishing and after bleeding water and "shine" has disappeared.
- Curing compounds shall not be used on surfaces where future bonding, painting or protective coating is required. In cold weather, curing compounds shall not be used on concrete surfaces that are kept at curing temperature by the use of steam.

REPAIRING CONCRETE

- Immediately after removal of forms, break back all form ties and inspect concrete surfaces for defects. Complete repair of defects within 48 hours after removal of forms. No repairs shall be made until the defects have been reviewed and method of repair approved by the DHSS Project Manager.
- Remove all defective or damaged concrete, including honeycombed, sand streaked, or fractured material from the area to be repaired. Chip out areas to one inch minimum depth. Edge shall be squared with the surface to eliminate feather edges.
- Before placing the repair material obtain DHSS Project Manager inspection. Clean area free of chipping dust, dried mortar, and all other foreign materials.
- Keep surfaces to be repaired continuously wet for at least three hours prior to placing new concrete or mortar. No free water on the surface when the repair material is placed.
- Apply a bonding agent to the area to be repaired before placing repair material. Apply the bonding agent per manufacturer's published instructions attached to container.
- For all repair surfaces permanently exposed to atmosphere use white cement in proportions found by trial to be effective in producing a color that, in the hardened patch, will match the surrounding concrete surface.
- Make repairs or patch form tie holes by (1) dry-packing, (2) filling with concrete, or (3) plastering with mortar or a combination of all 3 in conformance with the following:
 - Use the dry-pack method for holes at least one inch deep where the depth is equal to, or greater than the smallest surface dimension of the defect, such as conebolt or form tie holes, and for narrow slots cut for the repair of cracks. Do not use the dry-pack method where lateral restraint cannot be obtained. Place and pack dry-pack mortar in layers having a compacted thickness of approximately 3/8 inch. Solidly compact each layer over its entire surface by use of a hardwood stick and hammer. Do not use metal tools for compacting. Compact

surface just flush with adjacent area. Do not use steel finishing tools or water to facilitate finishing.

- Use concrete replacement for (1) holes extending entirely through concrete sections; (2) for holes larger than one square foot and deeper than four inches in which no reinforcement is encountered; (3) for holes larger than 1/2 of one square foot where reinforcement is exposed. Concrete used for replacement shall be of the same strength and mixture as used in the structure except for color matching as specified above.
- Use mortar replacement for holes too wide to dry-pack and too shallow for concrete replacement and when approved by the Engineer for other conditions not covered above.

Cure all repairs with the same methods as new concrete.

CONCRETE FINISHES AND TOLERANCE

- Rough-Formed Finish: As-cast concrete texture imparted by form-facing material with tie holes and defective areas repaired and patched. Remove fins and other projections exceeding ACI 347R limits for class of surface specified. Use rough-formed finish where concrete is not exposed to view or in contact with waterproof membrane or PVC liner.
 - a. Apply to surfaces not indicated on the Drawings or in this section to achieve a smooth formed finish.
- Smooth-Formed Finish: As-cast concrete texture imparted by form-facing material, arranged in an orderly and symmetrical manner with a minimum of seams. Repair and patch tie holes and defective areas. Remove fins and other projections exceeding 1/8 inch in height.
 - Apply to concrete surfaces exposed to view, contact with water or sewage or to be covered with a coating or covering material applied directly to concrete, such as waterproofing, damp proofing, veneer plaster, or painting.
- Rubbed Finish: Apply the following to smooth-formed finished concrete except for surfaces receiving waterproofing or PVC liner or in contact with sewage:
 - a. Select one rubbed finish from subparagraphs below as indicated.
- Smooth-Rubbed Finish: Not later than one day after form removal, moisten concrete surfaces and rub with carborundum brick or another abrasive until producing a uniform color and texture. Do not apply cement grout other than that created by the rubbing process.
- Related Unformed Surfaces: At tops of walls, horizontal offsets, and similar unformed surfaces adjacent to formed surfaces, strike off smooth and finish with a texture matching adjacent formed surfaces. Continue final surface
treatment of formed surfaces uniformly across adjacent unformed surfaces, unless otherwise indicated.

FINISHING FLOORS AND SLABS

- General: Comply with recommendations in ACI 302.1R for screeding, restraightening, and finishing operations for concrete surfaces. Do not wet concrete surfaces.
 - 1. Select types of slab finishes indicated.
- Scratch Finish: While still plastic, texture concrete surface that has been screeded and bull-floated or darbied. Use stiff brushes, brooms, or rakes.
 - Apply scratch finish to surfaces indicated and to surfaces to receive concrete floor topping or mortar setting beds for ceramic or quarry tile, Portland Cement terrazzo, and other bonded cementitious floor finishes.
- Float Finish: Consolidate surface with power-driven floats or by hand floating if area is small or inaccessible to power driven floats. Restraighten, cut down high spots, and fill low spots. Repeat float passes and restraightening until surface is left with a uniform, smooth, granular texture.
 - Apply float finish to surfaces indicated, to surfaces to receive trowel finish, and to floor and slab surfaces to be covered with fluid-applied or sheet waterproofing, built-up or membrane roofing, or sand-bed terrazzo.
- Trowel Finish: After applying float finish, apply first trowel finish and consolidate concrete by hand or power-driven trowel. Continue troweling passes and restraighten until surface is free of trowel marks and uniform in texture and appearance. Grind smooth any surface defects that would telegraph through applied coatings or floor coverings.
 - Apply a trowel finish to surfaces indicated and to floor and slab surfaces exposed to view, in contact with liquids or to be covered with resilient flooring, carpet, ceramic or quarry tile set over a cleavage membrane, paint, or another thin film-finish coating system and to slabs in structures containing water, sewage or other liquids.
- Revise surface plane tolerances to suit Project. ACI 301 suggests that all residential floors and nonresidential floors less than 10,000 sq. ft. (929 sq. m) be measured by straightedge method and that other nonresidential floors be measured by F-number system.
- Finish and measure surface so gap at any point between concrete surface and an unleveled freestanding 10-foot- long straightedge, resting on two high spots and placed anywhere on the surface, does not exceed the following:

3/16 inch.

Immediately after float finishing, slightly roughen trafficked surface by brooming with fiber-bristle broom perpendicular to main traffic route. Coordinate required final finish with OAR before application.

TESTING AND REPAIRING CONCRETE STRUCTURES

Testing:

- Separately test each individual chamber that will contain liquid by filling to the overflow with water after the 28-day design strength of the concrete has been obtained. Repair any visible leakage. Damp spots that do not run may be acceptable if below ground or not on walls common with pump rooms or passageways.
- Allowable leakage not to exceed 0.1% of the volume contained in the chamber in a 24 hour period. Leakage in excess of the allowable amount requires repair to reduce leakage and will be considered to lack watertightness.

Repairs:

- In the event that the structure is not watertight, outline a procedure for repair prior to proceeding with the repair work. Complete any repairs to new work as per specifications at Contractor expense.
- Approved repairs can include, but not necessarily be limited to one or a combination of the repairs listed below. Use of these techniques is not to be construed as a warranty that the methods outlined will satisfy leakage repair requirements:

Replace defective concrete.

- Grouting of the joint by drilling grout holes to the center of the structural unit and forcing grout into the joint under pressure.
- Cutting of a bevel groove on the pressure side of the joint. Groove 1/2 to 3/4 inch in width and depth caulked with epoxy joint sealer in accordance with the manufacturer's instructions.

UNSATISFACTORY CONCRETE

- Any concrete placed which fails to meet or exceed the specified strength requirements as determined from molded cylinders or cores, or to meet the density or surface requirements, or which has been frozen during placing or curing, shall be removed and replaced with satisfactory materials at the Contractor's expense.
- Method of determining unsatisfactory concrete: Visual appearance characteristic of rain or freeze damage to concrete which is apparent to the DHSS Project Manager.

SECTION 03313

PORTLAND CEMENT CONCRETE CURBS & SIDEWALK

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Prepare sub-grade to receive base course.
- B. Place stabilizing base courses, work and compact.
- C. Place Portland Cement Concrete (PCC) sidewalk.
- D. Place PCC Curb and Gutter.

1.02 RELATED WORK

- A. Section 01050, Field Engineering
- B. Section 01410, Testing Laboratory Services
- C. Section 02215, Excavating, Backfilling and Grading
- D. Section 03200, Concrete Reinforcement
- E. Section 03300, Concrete

1.03 TESTING

- A. The Contractor shall provide concrete testing and inspection service by an independent, experienced concrete testing laboratory. The testing firm shall be approved by code enforcement authorities and the Owner prior to commencing work.
- B. The testing firm shall inspect and report on strength and thickness for compliance with the Drawings and Specifications.

1.04 TEST AND INSPECTION REPORTS REQUIRED

A. Shall conform to the requirements of Section 03300.

1.05 ENVIRONMENTAL REQUIREMENTS

A. Place no concrete when outside temperature is, or is expected to be, below 40 degrees F, or when the subgrade has standing water or snow.

B. Do not place on frozen materials.

Part 2 - PRODUCTS

2.01 PORTLAND CEMENT CONCRETE

- A. Concrete for exterior sidewalks and slabs shall meet the following requirements:
 - a. 28-day compressive strength 6,000 psi
 - b. Slump Range 5 to 10 inches after addition of high-range water reducer
 - c. Water-Cement Ratio Approx. 0.41
 - d. Cement Type I-II Low Alkali
 - e. Admixtures as follows:
 - i. Master Builders MB-AE 90 Air-Entraining Admixture
 - ii. BASF PS 1466 High-Range Water-Reducing Admixture
 - iii. Rheomax SF 100 Densified Silica Fume Mineral Admixture
- B. Other concrete shall be as specified in Sections 03300 "Concrete" and 03200 "Concrete Reinforcement".

Part 3 - EXECUTION

3.01 INSPECTION OF SITE

- A. Examine site surfaces and elevations, subsurface soils report, existing site survey and details of Drawings for defects that will adversely affect the work.
- B. Start of work shall mean acceptance of existing grades as capable of producing an acceptable job.

3.02 TOLERANCES

A. 1/8 inch in ten feet (non-cumulative) smooth surface alignment to elevations indicated on Drawings, without any local depressions.

SECTION 05521 PIPE AND TUBE RAILINGS

<u> PART 1 – GENERAL</u>

1.01 WORK INCLUDED

A. Handrails.

1.02 RELATED SECTIONS

- A. Sections of Division 1
- B. Section 03313 PCC Curb and Sidewalk

1.03 REFERENCES

- A. Americans with Disabilities Act Accessibility Guidelines (ADA).
- B. American National Standards Institute (ANSI) A58.I Minimum Design Loads in Buildings and Other Structures.
- C. American National Standards Institute (ANSI) AI 17.1 Accessible and Usable Buildings and Facilities.
- D. American Society of Testing and Materials (ASTM) A47 Standard Specification for Ferritic Malleable Iron Castings.
- E. American Society of Testing and Materials (ASTM) A53 Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless.
- F. American Society of Testing and Materials (ASTM) A153 Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware.

1.04 SUBMITTALS

- A. Product Data
- B. Shop Drawings
- C. Selection Samples

1.05 QUALITY ASSURANCE

A. Railings Structural Requirements:

- 2. Handrail, wall rail and guardrail assemblies and attachments shall withstand a minimum concentrated load of 200 pounds applied horizontally or vertically down at any point on the top rail.
- 3. Handrail assemblies and guards shall be designed to resist a load of 50 pounds per linear foot applied in any direction at the top and to transfer this load through the supports to the structure.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Materials to be delivered to the job site in good condition and adequately protected against damage as handrails are a finished product.
- B. Store products in manufacturer's unopened packaging until ready for installation.

PART 2 - PRODUCTS

2.01 MANUFACTURER

- A. Kee Safety, Inc., 100 Stradtman St., Buffalo, NY 14206 Available from: Simplified Building Concepts Phone: 888-527-2278 Fax: 585-672-7313 Email: <u>info@simplifiedbuilding.com</u> Web: www.simplifiedbuilding.com;
- B. Or approved equal.

2.02 SYSTEM

- A. Handrails and Guardrails: Provide pipe, fittings, and accessories as indicated or required to match design indicated on the Drawings.
 - 1. Fittings: Aluminum.
 - 2. Pipe: Aluminum. (Steel at Egress Improvements)
 - 3. Handrail Pipe Size:
 - a. 1-1/4 inches industry standard 1.90 inches OD
 - b. 1-1/2 inches OD

2.03 MATERIALS

- A. Pipe:
 - 1. Aluminum pipe.
 - 2. Steel pipe. (Match Existing at Egress Improvements)
- B. Fittings, Including Elbows, Crossovers, Tees, Couplings:
 - 1. Aluminum Alloy: High grade aluminum silicon magnesium alloy.
- C. Finish:
 - 1. (Main Sidewalk- KPH Entrance to Bryant St.) Pipe and Fittings are to be

unfinished.

- 2. (Egress Improvements 3rd floor Sky-bridge to Bryant St.) Pipe and Joints to be welded, smoothed and painted to match existing.
- D. Fasteners:
 - 1. (Main Sidewalk- KPH Entrance to Bryant St.) Type 304 or 305 stainless steel.
 - 2. (Egress Improvements 3rd floor Sky-bridge to Bryant St.) Pipe and Joints to be welded, smoothed and painted to match existing.

2.04 FABRICATION

- A. Fit and shop assemble components in largest practical sizes for delivery to site.
- B. Upright tops shall be plugged with weather and light resistant material.
- C. Assemble components with joints tightly fitted and secured. Accurately form components to suit installation.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Do not begin installation until mounting surfaces have been properly prepared.
- B. If mounting surface preparation is the responsibility of another installer, notify DHSS Project Manager of unsatisfactory preparation before proceeding.

3.02 PREPARATION

- A. Coordinate post setting drawings, diagrams, templates, instructions, and directions for installation of anchorages, such as sleeves, concrete inserts, anchor bolts, and miscellaneous items having integral anchors that are to be embedded in concrete and masonry construction.
 - 1. Coordinate delivery of anchorages to project site.
 - 2. Coordinate that blocking is in place for all mounting fasteners.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.03 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Fit exposed connections accurately together to form tight joints.

- C. Perform cutting, drilling, welding and fitting required for installation of handrails. Set handrails accurately in location, alignment, and elevation, measured from established lines and levels.
- D. Set posts plumb within a tolerance of 1/8 inch.

3.04 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

SECTION 01400

QUALITY CONTROL

1.01 GENERAL SAMPLING AND TESTING REQUIREMENTS

All of the work, under this contract, shall be fully tested in accordance with the specifications. The Contractor shall furnish all labor and materials for the testing of the materials he or she proposes to employ.

It shall be the Contractor's responsibility to obtain and pay for the services of an approved testing laboratory which shall take all samples and perform all tests as stipulated, necessary for initial verification that the materials to be utilized in the construction do conform to the various specifications. The Contractor shall furnish two certified copies of the results of all tests to the DHSS Project Manager.

1.02 INITIAL TESTING

All sampling and testing necessary to determine results of construction techniques and procedures shall be performed by the qualified laboratory retained by the Contractor. Such sampling and testing shall be as necessary to provide compliance with the requirements of the specifications and shall include the tests listed in the specifications and any and all additional tests which may be required or requested by the DHSS Project Manager and/or Owner.

1.03 SUBSEQUENT TESTING

All sampling and testing necessary to determine results of construction and procedures shall be performed by the qualified laboratory retained by the Contractor. Such sampling and testing shall be as necessary to determine compliance with the requirements of the specifications and shall specifically include the tests listed in the specifications and any and all additional tests which may be necessary to properly identify components and control the work.

1.04 OPERATIONAL TESTING

It is the intent of the Owner to have a complete and operable system. All of the work shall be fully tested and inspected in accordance with the specifications.

1.05 PAYMENT

No separate or additional payment will be made for the work and/or materials specified herein. All costs of such work and/or materials shall be considered as incidental to the project and shall be included in the appropriate lump sum or unit price bid.

SECTION 01410

TESTING LABORATORY SERVICES

Part 1 - GENERAL

1.01 RELATED REQUIREMENTS SPECIFIED ELSEWHERE

- A. Quality Control: Section 01400.
- B. Testing Requirements: Various Sections.

1.02 BIOLOGICAL TESTING

A. The Contractor will pay for biological tests required for disinfection of domestic water systems. The tests shall be performed by a laboratory approved by the Alaska Department of Environmental Conservation.

1.03 SOILS AND OTHER TESTING

- A. The Contractor will pay for an independent testing laboratory to perform the following tests:
- B. Soils gradation, moisture density standards determination, and in place density and compaction tests per Sections 02200 and 02221, Division 2.
- C. Concrete: Mix design, consistency, air content, yield, compressive test cylinder casting and compression testing per Section 03300.
- D. Mortar: Consistency, mix design, compressive test cylinder casting and compression testing, per Section 03600.
- E. Asbestos testing in demolition building products.
- F. Other materials and/or workmanship tests where specified in Divisions 2 through 15.

1.04 LIMITATION

Employment of a testing laboratory shall in no way relieve the Contractor of his or her obligation to perform Work in accordance with the Contract.

Part 2 - QUALIFICATION OF LABORATORY

2.01 STANDARDS

A. Meet basic requirements of ASTM E329, "Standards of Recommended Practice for Inspection and Testing Agencies for Concrete and Steel as Used in Construction."

- B. Submit copy of report of inspection of facilities made by Materials Reference Laboratory of National Bureau of Standards during most recent tour of inspection; with memorandum of remedies of any deficiencies reported by inspection.
- C. Testing Equipment:
 - 1. Calibrated at maximum 12-month intervals by devices of accuracy traceable to National Bureau of Standards.
 - 2. Submit copy of certificate of calibration, made by accredited calibration agency.

Part 3 - LABORATORY DUTIES

3.01 AUTHORITY AND LIMITATION

- A. Cooperate with DHSS Project Manager, Owner, Engineer and Contractor.
- B. Provide qualified personnel promptly on notice.
- C. Perform specified inspections, sampling and testing of materials and methods of construction:
 - 1. Comply with specified standards; ASTM, other recognized authorities, and as specified.
 - 2. Ascertain compliance with requirements of Contract Documents.
- D. Promptly notify DHSS Project Manager, and Contractor, of irregularities or deficiencies of Work which are observed during performance of services.
- E. Promptly submit copies of report of inspections and tests to DHSS Project Manager, in addition to those required by the Contractor including:
 - 1. Date issued.
 - 2. Project title and number.
 - 3. Testing Laboratory name and address.
 - 4. Name and signature of Inspector.
 - 5. Date of inspection of sampling.
 - 6. Record of temperature and weather.
 - 7. Date of test.

- 8. Identification of product and specification section.
- 9. Location in project.
- 10. Type of inspection or test.
- 11. Results of Test.
- 12. Observations regarding compliance with Contract Documents.
- F. Perform additional services as required.
- G. Laboratory is not authorized to:
 - 1. Release, revoke, alter, or enlarge on, requirements of Contract Documents.
 - 2. Approve or accept any portion of work.

Part 4 - RESPONSIBILITIES

4.01 CONTRACTOR

- A. Cooperate with laboratory personnel, provide access to Work, and comply with Manufacturer's requirements.
- B. Provide laboratory with representative samples of materials to be tested in required quantities.
- C. Furnish copies of mill test reports.
- D. Furnish casual labor and facilities:
 - 1. To provide access to work to be tested.
 - 2. To obtain and handle samples at the site.
 - 3. To facilitate inspections and tests.
 - 4. For laboratory's exclusive use for storage and curing of test samples.
- E. Notify Laboratory sufficiently in advance of operations to allow for his or her assignment of personal and scheduling of tests.

F. Laboratory Tests: Where such inspection and testing are to be conducted by an independent laboratory or agency, the sample or samples of materials to be tested shall be selected by such laboratory or agency, or DHSS Project Manager, and shipped to the laboratory by the Contractor at his or her expense.

SECTION 01500

CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Electricity, Lighting.
- B. Heat, Ventilation.
- C. Telephone Service.
- D. Water.
- E. Sanitary Facilities.
- F. Dust Control (Exterior).
- G. Construction Enclosures.
- H. Barriers.
- I. Barricades, Warnings, and Markings (Airport Operations).
- J. Protection of Installed Work.
- K. Security.
- L. Water Control.
- M. Cleaning During Construction.
- N. Removal.
- O. Waste Storage Equipment.
- P. Cleaning of the Project Area.
- Q. Disposal.
- R. Tool Control
- 1.02 RELATED REQUIREMENTS
 - A. Section 01010 Summary of Work: Use of Premises.
 - B. Section 01010 Summary of Work: Shutoffs and Disruptions to Service.
 - C. Section 01010 Summary of Work: Security
 - D. Section 01700 Contract Closeout: Final cleaning.

1.03 ELECTRICITY, LIGHTING

- A. Connect to existing service; provide branch wiring and distribution boxes located to allow service and lighting by means of construction-type power cords. DEPARTMENT will pay costs of energy used.
- B. Provide lighting for construction operations.
- C. Take precautions to conserve energy. Wasteful use of power will be back charged to the CONTRACTOR.

1.04 HEAT, VENTILATION

- A. Provide as required to maintain specified conditions for construction operations, to protect materials and finishes from damage due to temperature or humidity.
- B. Do not use permanent facilities for temporary purposes.
- C. Fully exhaust to the outside welding fumes generated from operations related to performance of the Work.
- D. Provide ventilation of enclosed areas to cure materials, to disperse humidity, and to prevent accumulations of dust, fumes, vapors, or gases.

1.05 TELEPHONE SERVICE

A. Provide telephone service if required for construction operations.

1.06 WATER

- A. Provide service required for construction operations. Extend branch piping with outlets located so that water is available by use of hoses.
- B. The DEPARTMENT will pay for water used.
- C. Hoses or temporary piping will not be permitted in public areas where a hazard to the public may be created.
- 1.07 SANITARY FACILITIES
 - A. Designated existing facilities may be used during construction operation; maintain in clean sanitary condition. Do not use facilities for construction for cleaning of construction equipment.
- 1.08 DUST CONTROL
 - A. Execute Work by methods that minimize raising of dust or airborne debris from construction or demolition operations
 - B. Provide positive means to prevent air-borne dust from dispersing into the atmosphere

1.09 CONSTRUCTION ENCLOSURES

- A. Provide temporary enclosures/partitions around areas inside the facility that are affected by the construction. Enclosures/partitions shall:
 - 1. Isolate construction from Using Agency and residents. Enclosure/partitions must be secured with a padlock.
 - 2. Prevent the penetration of dust and/or moisture into occupied areas. Partitions must be sealed at ceiling and floor.
 - 3. Prevent damage to existing materials, finishes, and equipment or other existing building components and contents.
 - 4. Be designed and stamped by an engineer licensed by the State of Alaska if over 12 feet high.
 - 5. Be constructed of metal studs, painted GWB, 10 mil polyethylene, and sound attenuation insulation. Enclosures/Partitions shall extend from floor to ceiling with complete closure at adjoining walls.

B. The CONTRACTOR shall include his plan for construction enclosures in the work plan prepared under Section 01010.

1.10 BARRIERS

- A. Provide as required to prevent public entry to construction areas and to protect existing facilities and adjacent properties from damage from construction operations.
- B. Provide barriers to provide both separation and safety to adjacent building occupants..

1.11 PROTECTION OF INSTALLED WORK

- A. Provide temporary protection for installed products. Control traffic in immediate area to minimize damage.
- B. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings. Protect finished floors and stairs from traffic, movement of heavy objects, and storage.

1.12 SECURITY.

A. Provide security program and facilities to protect Work, existing facilities, and Using Agency's operations from unauthorized entry, vandalism, and theft. Coordinate with DEPARTMENT security program.

1.13 WATER CONTROL

A. Protect the interior of the facility from water and/or moisture infiltration

1.14 CLEANING DURING CONSTRUCTION

- A. In accordance with Part 2 and Part 3 of this specification.
- 1.15 REMOVAL
 - A. Remove temporary materials, equipment, services, and construction prior to Substantial Completion inspection.
 - B. Clean and repair damage caused by installation or use of temporary facilities.
 - C. Restore existing facilities used during construction to specified, or to original, condition.

PART 2 PRODUCTS

- 2.01 WASTE STORAGE EQUIPMENT
 - A. Provide covered containers for deposit of materials, waste materials, debris, and rubbish.

PART 3 EXECUTION

3.01 CLEANING OF THE PROJECT AREA

- A. Maintain all areas under CONTRACTOR's control free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
- B. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to closing the space.
- C. Immediately clean interior areas after completion of the work to provide suitable conditions for building occupants and residents. All resident occupied areas and areas used by the general public require cleanup at the end of each shift.

- D. Broom clean interior areas prior to start of surface finishing, and continue cleaning on an as needed basis.
- E. Control cleaning operations so that dust and other particulates will not adhere to wet or newly-coated surfaces.
- 3.02 DISPOSAL
 - A. Promptly remove waste materials, debris, and rubbish from site periodically and dispose of in accordance with all Federal, State and local regulations.

SECTION 01541 FACILITY KEYS

PART 1 GENERAL Not Us

PART 2 PRODUCTS Not Used

PART 3 EXECUTION Not Used

3.01 FACILITY KEY REQUEST

- A. Submit written key request on CONTRACTOR company letterhead to the DEPARTMENT a minimum of 5 working days prior to the time key(s) will be needed.
 - 1. Include the following information in the written key request:
 - a. List all sub-tier subcontractors between CONTRACTOR and the subcontractor needing access.
 - b. Name the person who will carry key on his/her person.
 - c. List all door numbers where their access is requested.
 - e. Signature of person authorized by Contractor Authorities form to request keys for this project.

3.02 KEY ISSUANCE

- A. Keys shall be picked up by the CONTRACTOR authorized representative from the Engineer.
- 3.03 KEY CONTROL
 - A. The CONTRACTOR shall maintain a Key Control Log for all requests/issuances/returns of keys for the project.
- 3.04 KEY RETURNS
 - A. Return all keys directly to the Engineer.
- 3.05 LOST KEYS
 - A. Report all missing keys immediately to the Engineer.
- 3.06 LOST KEY FEES
 - A. The fee for changing each lock operated by the lost key shall be \$50 per lock.

SECTION 01600 MATERIAL AND EQUIPMENT

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Products.
- B. Transportation and Handling.
- C. Storage and Protection.
- D. Product Options.
- E. Products List.
- F. Substitutions.

1.02 RELATED REQUIREMENTS

- A. Section 01005 Administrative Provisions.
- B. Section 01010 Summary of Work.
- C. Section 01090 Reference Standards.
- D. Section 01400 Quality Control: Manufacturers' Certificates.
- E. Section 01700 Contract Closeout: Closeout Procedures, Operation and Maintenance Data, Warranties, Spare Parts and Maintenance Materials.

1.03 PRODUCTS

- A. Products include material, equipment, and systems.
- B. Comply with Specifications and referenced standards as minimum requirements.
- C. Components required to be supplied in quantity within a Specification section shall be the same, and shall be interchangeable.
- D. Do not use materials and equipment removed from existing structure, except as specifically required, or allowed, by Contract Documents.
- 1.04 TRANSPORTATION AND HANDLING
 - A. Transport products by methods to avoid product damage; deliver in undamaged condition in manufacturer's unopened containers or packaging, dry.
 - B. Provide equipment and personnel to handle products by methods to prevent soiling or damage.
 - C. Immediately on delivery, inspect shipment to assure:
 - 1. Product complies with requirements of Contract Documents and reviewed submittals.
 - 2. Quantities are correct.
 - 3. Accessories and installation hardware are correct.
 - 4. Containers and packages are intact and labels legible.
 - 5. Products are protected and undamaged.

1.05 STORAGE AND PROTECTION

A. <u>HANDLE AND STORE MATERIALS FOR CONSTRUCTION, PRODUCTS OF</u> <u>DEMOLITION, AND OTHER ITEMS TO AVOID DAMAGE TO BUILDING.</u>

- B. Store products in accordance with manufacturer's instructions, with seals and labels intact and legible. Store sensitive products in weather-tight enclosures; maintain within temperature and humidity ranges required by manufacturer's instructions.
- C. Arrange storage to provide access for inspection. Periodically inspect to assure products are undamaged, and are maintained under required conditions.
- D. Provide Material Safety Data Sheets (MSDS) for all products which may produce unpleasant or noxious odors. CONTRACTOR shall provide for adequate venting if needed.

1.06 OPTIONS

- A. Products Specified by Reference Standards or by Description Only: Use any product meeting those standards.
- B. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions by meeting product description: Submit a request for substitution for any manufacturer not specifically named that meets the product description specifications.
- C. Products Specified by Naming One or More Manufacturers followed by the term "No Substitutions": Use only specified manufacturers, no substitutions allowed.

1.07 PRODUCTS LIST

- A. Within 7 days after date of Notice to Proceed, transmit four copies of a list of products, which are proposed for installation, including name of manufacturer.
- B. Tabulate products by Specifications section number, title, and Article number
- C. For products specified only by reference standards, give manufacturer, trade name, model or catalog designation, and reference standards.
- D. DEPARTMENT will reply in writing within five days stating whether there is reasonable objection to listed items. Failure to object to a listed item shall not constitute a waiver of requirements of Contract Documents.

1.08 SUBSTITUTIONS

- A. SUBSTITUTION SUBMITTAL PERIOD
 - 1. Product substitution requests will be considered only within 7 days after date established in Notice to Proceed. Subsequent requests will be considered only in case of product unavailability or other conditions beyond control of CONTRACTOR. (Submit on Substitution Request Form "B")
- B. LIMITATIONS ON SUBSTITUTIONS
 - 1. **Only one request for substitution will be considered for each product** from each Prime Bidder/CONTRACTOR. When substitution is not accepted, Prime Bidder/CONTRACTOR shall provide specified product.
 - 2. Substitutions will not be considered when indicated on Shop Drawings or product data submittals.
 - 3. Substitute products shall not be ordered or installed without written acceptance.
 - 4. DEPARTMENT will determine acceptability of substitutions.
- C. REQUESTS FOR SUBSTITUTIONS
 - 1. Submit separate request for each substitution. Document each request with

Material and Equipment

complete data substantiating compliance of proposed substitution with requirements of Contract Documents.

- 2. Identify product by Specification section and Article numbers. Provide manufacturer's name and address, trade name of product, and model or catalog number. List fabricators and Suppliers as appropriate.
- 3. Attach product data as specified in Section 01340.
- 4. List similar projects using product, dates of installation, and names of design Consultant(s) and owner.
- 5. Give itemized comparison of proposed substitution with specified product, listing variations, and reference to Specification sections and Article numbers.
- 6. Give quality and performance comparison between proposed substitution and the specified product.
- 7. Give cost data comparing proposed substitution with specified product, and amount of net change to Contract Price.
- 8. List availability of maintenance services and replacement materials.
- 9. State effect of substitution on construction schedule, and changes required in other Work or products.

D. CONTRACTOR REPRESENTATION

- 1. Request for substitution constitutes a representation that CONTRACTOR has investigated proposed product and has determined that it is equal to or superior in all respects to specified product.
- 2. CONTRACTOR will provide same warranty for substitution as for specified product.
- 3. CONTRACTOR will coordinate installation of accepted substitute, making such changes as may be required for Work to be complete in all respects.
- 4. CONTRACTOR certifies that cost data presented is complete and includes all related costs under this Contract.
- 5. CONTRACTOR waives claims for additional costs related to substitution which may later become apparent.
- E. SUBMITTAL PROCEDURES
 - 1. Submit five copies of <u>complete</u> request for Substitution Request Form. Request to include complete product information and data, color swatch board, and certification that proposed product meets or exceeds all requirements for the specified product.
 - 2. DEPARTMENT will review CONTRACTOR's requests for substitutions within 5 days of receipt.
 - 3. After receipt of submittal, DEPARTMENT will notify CONTRACTOR, in writing, of decision to accept or reject requested substitution within 5 days.
 - 4. For accepted products, submit Shop Drawings, product data, and samples under provisions of Section 01300.

PART 2 PRODUCTS	
PART 3 EXECUTION	

Not Used Not Used

SECTION 01700 CONTRACT CLOSEOUT

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Closeout Procedures.
- B. Final Cleaning.
- C. Project Record Documents.
- D. Operation and Maintenance Data.
- E. Warranties.
- F. Spare Parts and Maintenance Materials.
- G. Maintenance Service.

1.02 RELATED REQUIREMENTS

- A. Document 00700 General Conditions: Fiscal provisions, legal submittals, and other administrative requirements.
- B. Section 01010 Summary of Work: Using Agency Occupancy.
- C. Section 01400 Quality Control: Departmental Inspection Services.
- D. Section 01500 Construction Facilities and Temporary Controls: Cleaning during construction.

1.03 CLOSEOUT PROCEDURES

- A. Substantial Completion and Final Completion:
 - 1. Substantial Completion:
 - a. Submit the following prior to requesting a Substantial Completion Inspection:
 - 1. Evidence of Compliance with Requirements of Governing Authorities:
 - I. Certificate of Occupancy.
 - II. Required Certificates of Inspection.
 - 2. Project Record Documents in accordance with sub section 1700-1.05
 - 3. Operation and Maintenance Data in accordance with sub section 1700-1.06
 - 4. Spare Parts and Maintenance Materials in accordance with sub section 1700-1.08
 - b. Substantial Completion shall be considered by the DEPARTMENT when:
 - 1. Written notice is provided 7 days in advance of inspection date.
 - 2. List of items to be completed or corrected is submitted.
 - 3. Operation and Maintenance Manuals are submitted and approved by the DEPARTMENT.
 - 4. Equipment and systems have been tested, adjusted, balanced and are fully operational.
 - 5. Automated and manual controls are fully operational.
 - 6. Operation of system has been demonstrated to DEPARTMENT Personnel.

- 7. Certificate of Occupancy is submitted.
- 8. Certificates of Inspection for required inspections have been submitted.
- 9. Project Record Documents for the Work or the portion of the Work being accepted are submitted and approved.
- 10. Spare parts and maintenance materials are turned over to DEPARTMENT.
- 11. All keys are turned over to the DEPARTMENT.
- c. Should the DEPARTMENT inspection find Work is not substantially complete, the Department will promptly notify CONTRACTOR in writing, listing observed deficiencies.
- d. The CONTRACTOR shall remedy deficiencies and send a second written notice of Substantial Completion.
- e. When the DEPARTMENT finds Work is substantially complete the DEPARTMENT will prepare a certificate of Substantial Completion in accordance with provisions of General Conditions

B. FINAL COMPLETION:

- 1. When CONTRACTOR considers Work is complete, submit written certification that:
 - a. Contract Documents have been reviewed.
 - b. Work has been inspected for compliance with Contract Documents.
 - c. Work has been completed in accordance with Contract Documents, and deficiencies listed with certificate of Substantial Completion have been corrected.
 - d. Work is complete and ready for final inspection.
- 2. Should the DEPARTMENT inspection find Work incomplete, DEPARTMENT will promptly notify CONTRACTOR in writing listing observed deficiencies.
- 3. CONTRACTOR shall remedy deficiencies and send a second certification of Final Completion.
- 4. When DEPARTMENT finds Work is complete, DEPARTMENT will consider closeout submittals.
- C. REINSPECTION FEES
 - Should status of completion of Work require more than two re-inspections by the DEPARTMENT due to failure of Work to comply with CONTRACTOR's responsibility, the DEPARTMENT will deduct the cost of re-inspection from final payment to CONTRACTOR as provided in the Contract Documents.
 - 2. Re-inspection fees shall not exceed \$5,000 for any one re-inspection.

D. CLOSEOUT SUBMITTALS

- 1. Warranties and Bonds: Under provisions of Section 01700.
- 2. Evidence of Payment: In accordance with Conditions of the Contract.
- 3. Consent of Surety to Final Payment.
- 4. Certificates of Insurance for Products and Completed Operations: In accordance with Supplementary Conditions.
- 5. Certificate of Release.

E. APPLICATION FOR FINAL PAYMENT

- 1. Submit application for final payment in accordance with provisions of the General Conditions of the Contract.
- F. Using Agency will occupy Facility for the purpose of conduct of business, under provision stated in certificate of Substantial Completion.
- G. DEPARTMENT will issue a summary Change Order reflecting final adjustments to Contract Price not previously made by Change Order.

1.04 FINAL CLEANING

- A. Execute final cleaning prior to Substantial Completion inspection.
- B. Clean interior and exterior surfaces exposed to view; remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces, vacuum carpeted and soft surfaces. Clean equipment and fixtures to a sanitary condition, clean or replace filters of mechanical equipment. Clean roofs, gutters, downspouts, and drainage systems.
- C. Clean site; sweep paved areas, rake clean other surfaces.
- D. Use materials which will not create hazards to health or property, and which will not damage surfaces. Follow manufacturers' recommendations.
- E. Maintain cleaning until the DEPARTMENT issues certificate of substantial Completion.
- F. Remove waste, debris, and surplus materials from the site. Clean grounds; remove stains, spills, and foreign substances from paved areas and sweep clean. Rake clean other exterior surfaces.

1.05 PROJECT RECORD DOCUMENTS

- A. Maintain on site, one set of the following Record Documents; record actual revisions to the Work:
 - 1. Drawings.
 - 2. Specifications.
 - 3. Addenda.
 - 4. Change Orders and other modifications to the Contract.
 - 5. Reviewed shop drawings, product data, and samples.
 - 6. Manufacturers instructions for assembly, installation, and adjusting.
- B. Ensure entries are complete and accurate, enabling future reference by DEPARTMENT.
- C. Store Record Documents separate from documents used for construction.
- D. Record information concurrent with construction progress.
- E. SPECIFICATIONS: Legibly mark and record at each product section description of actual products installed, including the following:
 - 1. Manufacturer's name and product model and number.
 - 2. Product substitutions or alternates utilized.
 - 3. Changes made by Addenda and Modifications.
- F. Record Drawings and Shop Drawings: Legibly mark each item to record actual construction graphically to scale including:
 - 1. Measured depths of foundations in relation to finish first floor datum.
 - 2. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.

- 3. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work.
- 4. Field changes of dimension and detail.
- 5. Details not on original Contract drawings.

1.06 OPERATION AND MAINTENANCE INSTRUCTIONS

- A. Submit data bound in 8-1/2 by 11 inch (A4) text pages, 3-D side ring binders with durable plastic covers.
- B. Prepare binder covers with printed title "OPERATION AND MAINTENANCE INSTRUCTIONS", title of project, and subject matter of binder when multiple binders are requested.
- C. Internally subdivide the binder contents with permanent page dividers, logically organized as described below; with the tab titling clearly printed under reinforced laminated plastic tabs.
- D. Contents: Prepare a Table of Contents for each volume, with each product or system description identified, typed on 24 pound white paper, in 3 parts as follows:
 - 1. Part 1: Directory, listing names, addresses, and telephone numbers of Architect/Engineer, CONTRACTOR, subcontractors, and major equipment suppliers.
 - 2. Part 2: Operations and maintenance instructions, arranged by system and subdivided by Specification Section. For each category, identify names, addresses, and telephone numbers of subcontractors and suppliers. Identify the following:
 - a. Significant design criteria.
 - b. List of equipment.
 - c. Parts list for each component.
 - d. Operating instructions.
 - e. Maintenance instructions for equipment and systems.
 - f. Maintenance instructions for [special] finishes, including recommended cleaning methods and materials and special precautions identifying detrimental agents.
 - 3. Part 3: Project Documents and Certificates, including the following:
 - a. Shop drawings and product data.
 - b. Certificates.
 - c. Originals of warranties and bonds.
- E. Submit one draft copy of completed volumes five working days prior to Substantial Completion inspection. This copy will be reviewed and returned, with DEPARTMENT comments. Revise content of all document sets as required prior to final submission.
- F. Submit two sets of revised final volumes and a digital copy on a CD Rom disc within ten days after Substantial Completion Inspection.

1.07 WARRANTIES

- A. As a condition precedent to Final Payment, all guaranties and warranties as specified under various sections of the Contract Documents shall be obtained by the CONTRACTOR and delivered to the OWNER, in duplicate giving a summary of guarantees attached and stating the following in respect to each:
 - 1. Character of Work affected.
 - 2. Name of Subcontractors.

- 3. Period of Guarantee.
- 4. Conditions of Guarantee.
- B. Delivery of said guarantees and/or warrantees shall not relieve the CONTRACTOR from any obligations assumed under any other provision of the Contract.
- C. If, within any guarantee period, repairs or changes are required in connection with the guaranteed Work, which in the opinion of the OWNER is rendered necessary as the result of the use of materials, equipment or workmanship, which are defective, or inferior, or not in accordance with the terms of the Contract, the CONTRACTOR shall, upon receipt of notice from the OWNER, and without expense to the OWNER, proceed within seven (7) calendar days to:
 - 1. Place in satisfactory conditions in every particular all of such guaranteed Work, correct all defects therein, and make good all damages to the structure or site.
 - 2. Make good all Work or materials, or the equipment and contents of structures or site disturbed in fulfilling any such guarantee.
- D. If the CONTRACTOR, after notice, fails to comply without the terms of the guarantee, the OWNER may have the defects corrected and the CONTRACTOR and CONTRACTOR's Surety shall be liable for all expenses incurred in connection therewith, including Engineer's fees.

1.08 SPARE PARTS AND MAINTENANCE MATERIALS

- A. Provide products, spare parts, maintenance and extra materials in quantities specified in individual Specification Sections.
- B. Deliver to project site and place in location as directed, obtain receipt prior to final payment.

PART 2	PRODUCTS	Not Used
PART 3	EXECUTION	Not Used

SECTION 02050 DEMOLITION [SITE PREPARATION]

PART 1 - GENERAL

1.01 WORK INCLUDED

A. This Section specifies demolition and/or removal as a part of new construction or renovation. Included are demolition and removal of curb and gutter, sidewalks, concrete retaining walls, concrete foundations, and signs and posts,.

1.02 RELATED SECTIONS

- A. Sections of Division 1
- B. Section 31200 Excavation, Backfilling and Grading

1.03 SUBMITTALS

- A. Demolition Plan: Submit proposed salvage, demolition and removal procedures to the DHSS Project Manager for approval before work is started. Procedure shall provide for careful removal and disposition of materials specified to be salvaged, coordination with other work in progress, a disconnection schedule of utility services, a detailed description of methods and equipment to be used for each operation, and sequence of operations.
- B. Permits and Notices: Submit appropriate demolition permits and notices authorizing demolition and removal.

1.04 PROJECT CONDITIONS

- A. Existing Conditions
 - 1. Obtain all utility locates prior to beginning work.
 - 2. Aside from the project drawings, there are no available reports describing existing conditions.
 - 3. Protect all utilities not designated for removal. Damage occurring during construction and for 60 days after substantial completion of work shall be rectified by the Contractor and at the Contractor's expense.
 - 4. Traffic control measures, including, but not limited to, flagging, required for the benefit of the Contractor during staging and construction shall be the responsibility of the Contractor and shall be at the Contractor's expense.

B. Protection

1. Erect barriers, fences, guard rails, enclosures, chutes, and shoring to protect personnel, structures and utilities remaining intact.

- 2. Reference and protect property corners and other survey monuments shown on the Drawings. Any disturbed corners or monuments shall be reset by an Alaska-licensed professional land surveyor.
- 3. Where pedestrian and driver safety is endangered in the area of removal work, use traffic barricades with flashing lights.
- C. Maintaining Traffic
 - 1. Ensure minimum interference with roads, streets, driveways, sidewalks, and adjacent facilities.
 - 2. Do not close or obstruct streets, sidewalks, alleys or passageways without permission from authorities having jurisdiction.
 - 3. If required by governing authorities, provide alternate routes around closed or obstructed traffic ways.

PART 2 - PRODUCTS

Not Applicable.

PART 3 - EXECUTION

3.01 GENERAL

- A. Notification
 - 1. Notify Owner, DHSS Project Manager, Police and Fire Departments in advance of street closures. Place public notices with local radio and television stations. Make notifications at least 48 hours prior to closure.
- B. Verify Locations
 - 1. Verify locations of manholes, valves and valve boxes, catch basins, survey monuments, and all other surface features prior to beginning work.
 - 2. Verify locations of storm drain piping and lighting cable with Building Maintenance prior to beginning work.

3.02 DEMOLITION

- A. Concrete Sidewalks and Ramps
 - 1. Remove/Reinstall concrete sidewalks and ramps within and extending one foot beyond excavation limits. Use sawcuts or remove to nearest expansion joint.
- B. Signs, Benches and other Apparatuses

1. Remove/Reinstall and salvage signs, sign posts, benches and other apparatuses within the limits shown on the Drawings.

3.03 DISPOSITION OF MATERIAL

- A. Title to Materials
 - 1. Title to all materials and equipment to be removed, except as specified otherwise, is vested in the Contractor upon receipt of Notice to Proceed. The Owner will not be responsible for the condition or loss of, or damage to, such property after Notice to Proceed. Materials and equipment shall not be viewed by prospective purchasers or sold on the site.

B. Disposal

1. Materials not designated for salvage to be disposed of by the Contractor at a disposal site provided by the Contractor.

3.04 CLEANUP

- A. Debris and Rubbish
 - 1. Remove and transport debris and rubbish in a manner that will prevent spillage on streets or adjacent areas. Clean up spillage from streets and adjacent areas.

SECTION 02200

EARTHWORK

Part 1 - GENERAL

1.01 SCOPE

Work covered in this section includes excavation and construction of embankments for structures. All excavation and construction of embankments shall be in conformance with the requirements of DOT&PF Standard Specifications unless otherwise specified herein.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Section 02221 Trenching Backfilling and Compacting

1.03 PAYMENT

No separate or additional payment will be made for the work and/or materials specified herein, except for rock excavation and borrow as authorized below. All costs of such work and/or materials shall be considered as incidental to the project and shall be included in the appropriate unit or lump sum price bid.

Part 2 - PRODUCTS

2.01 MATERIALS

A. Foundation Fill: Foundation fill shall conform to Alaska Department of Transportation and Public Facilities Aggregate Base Course, Grading D-1.

B. Borrow Backfill: Granular soils from the excavation shall be stockpiled and used for backfill provided the moisture content and gradation are suitable for compaction. Stockpiled materials shall be covered to prevent accumulation of excessive moisture.

C. Where borrow material is required for backfill, material shall conform to DOT&PF Standard Specification 703-2.07 for selected material, Type A.

Part 3 - EXECUTION

3.01 SAFEGUARDING OF EXCAVATIONS

The Contractor shall provide such safeguards and protections around and in the vicinity of excavations as may be necessary to prevent and avoid the occurrence of damage, loss, injury and death to property and persons because of such excavations. Liability for any such damage, loss, injury or death shall rest with the Contractor.

3.02 EXCAVATION

Excavation Below Grade: If the bottom of excavation is of unsuitable material, as determined by the Engineer, the unsuitable material shall be excavated below grade elevations indicated or established and refilled to grade with foundation fill. Inadvertent excavation below established elevations without authority shall be restored to grade with foundation fill by and at the expense of the Contractor. Compaction of foundation fill shall be at least 96 percent of maximum density.

3.03 EMBANKMENTS

During grading operations, the surface of embankments and excavations shall be shaped to a uniform cross section. All ruts and depressions capable of ponding water shall be eliminated. Embankment layers shall be constructed with the intersection with the original ground as the high point of the layer and shall uniformly slope to the outer side with a slope not to exceed one foot in 20 feet. Embankments shall be constructed of 12-inch minus shot rock base in accordance with these specifications.

3.04 FINISH GRADING

Uniformly grade all areas covered by the project, including excavated and filled sections, adjacent transition areas, and all areas disturbed by the Contractor during construction of the project. The finished surface shall be smooth, compacted, and free from irregular surface changes.

The surface of embankments on which a 1-1/2-inch-minus base course is to be placed shall not vary more than 0.05 foot from the grade and cross section shown on the Drawings. 1-1/2-minus base course shall be placed where shown on the Drawings and compacted to 95 percent of maximum density.

3.05 BACKFILL

Backfill of structures shall proceed uniformly around the structure to prevent unbalanced soil loadings. Backfill of concrete walls shall not proceed until walls have reached at least 80 percent of design strength. Backfill shall be placed in lifts not greater than ten inches deep and shall be hand-compacted within a distance equal to half the depth of the backfill to avoid excessive wall pressures from compaction equipment. Compact to 95 percent of maximum dry density.

3.06 COMPACTION TESTING

Maximum dry density shall be determined using ASTM D-1557 for moisture-dependent material, and ASTM D-4253 for crushed rock materials.

SECTION 02221

TRENCHING, BACKFILLING, AND COMPACTING

Part 1 - GENERAL

1.01 SCOPE

Work covered in this section includes pavement removal, trench excavation, foundation preparation, bedding, backfilling, compaction, and other earthwork incidental to the conconstruction of concrete retaining walls, and sidewalks,.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 02050 Demolition
- B. Section 02200 Earthwork

1.03 STANDARDS

Compaction and field density testing shall be in accordance with ASTM standard specification D1557 and D1556 or D2922. Maximum dry density shall be determined using ASTM D1557 for moisture-dependent material, and ASTM D4253 for crushed rock materials.

1.04 **DEFINITIONS**

- A. Finished grade shall mean the final grade elevations indicated on the Drawings. Spot elevations indicated on the Drawings shall govern over elevation contours in case of conflict.
- B. Non-Frost Susceptible (NFS) Soil: Granular self-draining soils free of organic material and containing less, by weight, than ten percent finer than a No. 200 sieve and three percent finer than 0.02 millimeters that can be compacted to a tight, unyielding surface.
- C. Contaminated soil shall mean soil containing organic material and/or deleterious substances as defined in 2.02 of this Section.

1.04 EXISTING UTILITIES

- A. There are no known utilities in the project work area, but the contractor shall review the project area with Pioneers Home maintenance staff to assure no utilities will be encounter during excavation and demolition work.
- B. In the area of the underground fuel tanks near the bus parking spaces, the contractor shall take due care to avoid conflicts with buried fuel piping, vent piping, conduits and other appurtenances.

1.05 TESTING

- A. The Contractor shall provide soil testing and inspection service by an independent geotechnical-civil engineering firm experienced in performing soil analysis. The testing firm shall be approved by code enforcement authorities and the DHSS Project Manager/Owner prior to commencing work.
- B. The testing firm shall inspect and report on imported fill material, backfill compaction, and existing bearing soil for compliance with the Drawings and Specifications.

1.06 TEST AND INSPECTION REPORTS REQUIRED

- A. Imported Fill Materials: One sieve particle size test for every different borrow source and one for every 1,000 cubic yards of fill, including sand for play areas.
- B. Fill Compaction: One test for each lift layer placed and not less than one test per 2,500 square feet at locations designated by the DHSS Project Manager.
- C. Existing Bearing Soils: One inspection for loose or contaminated soil is required of existing soils under planned foundations after the existing has been over-excavated to a depth of 2'-0".
- D. Reports shall be signed by a civil engineer registered to practice in the State of Alaska.

1.07 ENVIRONMENTAL REQUIREMENTS

- A. Do no earthwork when outside temperature is, or is expected to be below 35 degrees F or when the subgrade has standing water or snow.
- B. Do not place frozen fill materials.

1.08 PROTECTION

- A. Protect existing structures, sidewalks, paving, and curbs from equipment and vehicular traffic by timber cribbing, screens or other appropriate shielding.
- B. Protect above and below grade utilities which are to remain.
- C. Protect excavations by shoring, bracing, sheet piling, underpinning, or other methods required to prevent cave-in or loose soil from falling into excavation.
- D. Underpin adjacent structures which may be damaged by excavation work, including service utilities and pipe chases.

1.09 SUBMITTALS

Project data submitted in accordance with Section 01340 shall include gradation analysis reports for bedding, foundation gravel, and drain rock.

Part 2 - PRODUCTS

2.01 MATERIALS

A. Pipe bedding: Bedding material shall conform to DOT&PF standard specification 703-2.03 for untreated aggregate base course, grading D-1. Other materials may only be substituted with the express written permission of the DHSS Project Manager.

B. Foundation material: Foundation material shall be clean, well graded natural sand and gravel or crushed rock conforming to DOT&PF standard specification 703-2.10 for porous backfill material.

C. Imported backfill: Imported backfill shall meet the requirements of DOT&PF standard specification 703-2.09 for subbase, grading A, except the portion passing the #200 sieve shall not exceed five percent.

D. Drain rock: Drain rock shall be washed crushed rock meeting the following gradations:

SIEVE SIZE	PERCENT PASSING
8"	100
3"	40 MAX
3/4"	10 MAX
#100	0

2.02 NATIVE MATERIAL

Excavated native material utilized for backfill shall be granular soils free from mud, muck, organic matter, broken pavement, stones larger than 4 inches in dimension, brush and wood material, with moisture content suitable for compaction.

2.03 DELETERIOUS SUBSTANCES

A. Substances such as sod, organic water, peat, wood chips, frozen material or construction debris will not be allowed in fill material.

Part 3 - EXECUTION

3.01 TRENCHING FOR PIPELINES

A. In all cases, trenches must be of sufficient width to permit proper jointing of the pipe and backfilling of material along the sides of the pipe. Trench width at the surface of the ground shall be kept to the minimum amount necessary to install the pipe in a safe manner.

B. The normal maximum permissible trench width for pipelines, at the bottom of the trench up to a point at the crown of the pipe, shall be 30 inches or 1.5 times the outside diameter plus 18 inches, whichever is greater.

C. The length of trench excavated in advance of the pipe laying shall be kept to a minimum, and in no case shall it exceed one hundred and fifty feet (150').

D. Trenches shall be excavated below the barrel of the pipe a sufficient distance to provide for bedding material specified.

E. Pipe or structures placed below the water table shall be kept from floating by placing an adequate amount of backfill material upon it, or by maintaining the water level at or below the bottom of the trench.

3.02 EXCAVATION

The Contractor shall inform and satisfy himself or herself as to the character, quantity and distribution of all materials to be excavated. Should the Contractor excavate below the designated lines and grades without prior approval, he or she shall replace such excavation with approved materials, in an approved manner and condition, at his or her own expense.

Excavation of every description, classification and of whatever substances encountered within the limits of the project shall be performed to the lines and grades necessary for pipe, conduit, foundation, bedding and backfill as indicated on the drawings.

Owner shall determine the suitability of excavated material to be used as backfill. Excavated material which is unsuitable for backfill, as determined by Owner, and all excavated material in excess of that required for backfill shall be removed from the construction area and disposed on suitable site(s) secured by the Contractor.

The Contractor shall properly manipulate and protect excavated material as may be required to achieve the compacted densities specified herein. Native material that has been placed or is stockpiled for use shall be properly protected from degradation by other materials or unsuitable excavation materials and by moisture from precipitation, surface runoff or groundwater. Protection from moisture shall include, but not be limited to, covering of the stockpiled material with waterproof sheeting. Excavated material which is appropriate for use as backfill and is not properly protected shall be removed from the site and replaced with Imported Backfill Material at no cost to Owner.

Excavation for manholes, vaults, and overflow outlet structures shall be sufficient to provide a minimum of twelve (12) inches between their surfaces and the sides of the excavation.

All material excavated from trenches and piled adjacent to the trench or in a roadway or public thoroughfare shall be piled and maintained so that the toe of the slope of the material is at least four (4) feet from the edge of the trench. It shall be piled in such manner as will cause a minimum
of inconvenience to public travel, and provision shall be made for merging traffic where such is necessary. Free access shall be provided to all fire hydrants, water valves and meters, and clearance shall be left to enable free flow of storm water in all gutters, other conduits, and natural water courses.

3.03 CONTROL OF WATER

Trenches may be subject to groundwater and surface runoff due to high rainfall which is common in the Ketchikan area. The Contractor shall ascertain, to his or her own satisfaction, the extent to which water may occur, the nature of the material in which water may appear and the extent to which such occurrence of water shall affect the work.

The Contractor shall install and maintain temporary drains and drainage ditches, as required, to intercept or control and direct surface water which may affect the execution or condition of the work.

The Contractor, at all times, shall use his or her best efforts to keep the trench free from water to facilitate fine grading, the proper laying and jointing of pipe, and prevention of damage to completed joints. Contractor must be prepared to provide adequate equipment and/or well point systems to handle and dispose of the water without damage to adjacent property. Water in the trench shall not be allowed to flow into the pipe at any time. An adequate cover shall be provided to prevent the entrance of objectionable material into the pipelines.

Dewatering shall be performed so as to prevent bottom heave of the trench, instability of the pipe bedding or foundation, collapse of trench walls and/or similar detrimental occurrences. Groundwater will not be allowed to drain out through the pipe and shall be pumped from within the trench excavation or by wellpoint systems as required by the groundwater and soils conditions and characteristics. The Contractor shall determine the size, capacity, and configuration of all piping and equipment required for dewatering system and shall furnish, install and maintain in operation all such piping and equipment until all construction is completed.

All surface or groundwater controlled and/or directed by the Contractor shall be considered to be waste water.

No separate or additional payment will be made for the work and/or materials required to adequately dewater the trench. All costs of such work and/or materials shall be considered as incidental to the project and shall be included in the appropriate lump sum or unit bid price.

3.04 CRIBBING AND SHORING

The Contractor shall determine requirements for and place sheeting, shoring and other trench restraints to preclude any and all trench bottom heave and to provide a stable trench bottom which will not settle after placement of backfill. Removal of any cribbing and sheeting from the trench shall be accomplished in such a manner as to fulfill the above requirements. Damages resulting from the improper cribbing or from failure to crib shall be the sole responsibility of the Contractor.

That portion of cribbing or of sheeting extending below the crown of the pipe shall be left in place unless satisfactory means of reconsolidating bedding or side support, disturbed by cribbing or

sheeting removal can be demonstrated. If a movable box is used in lieu of cribbing or sheeting, and the bottom cannot be kept above the crown of the pipe, the bedding or side support shall be carefully reconsolidated behind the moveable box, prior to placing backfill.

The use of horizontal strutting below the barrel of pipe or the use of the pipe as support for trench bracing will not be permitted.

3.05 PROTECTION OF EXISTING PIPELINES

The Contractor shall perform such work and furnish and install such materials as required to protect and maintain in continuous service all existing pipelines. Excavations shall be controlled by maintenance of slopes, dewatering, installation of steel sheet piling and/or other means, as may be required, to preclude sloughing of soil from under pipelines and to maintain proper support of pipelines. At locations where maintenance of proper soil support is not feasible or appropriate, the Contractor shall furnish and install such temporary structural bracing, supports and beams as may be required to restrain and support the existing pipelines.

3.06 FOUNDATION MATERIAL

Where organic and/or soft materials or other unsatisfactory conditions are found to be present, Owner may require overexcavation below pipe bedding to suitable soil and placement of Foundation Material as a foundation. Such overexcavation shall be carried to the depth required by Owner.

Foundation Material shall be placed in lifts, not exceeding eight inches in loose depth, and each lift shall be mechanically compacted to at least 95 percent of maximum dry density.

3.07 PIPE BEDDING

Prior to installation of bedding and pipe, the trench bottom shall be cleaned of all roots, loose stones, and debris. Bedding shall be placed only upon firm, undisturbed soil and any soil at the bottom of the trench which is disturbed or loosened by the trenching operations or any muddy soils, shall be removed and additional bedding material shall be placed as a foundation.

All pipe shall be bedded with Pipe Bedding Material as specified in paragraph 2.01 above and per the typical section shown on the plans.

Bedding shall consist of leveling of the bottom of the trench or top of the foundation material and placement of Pipe Bedding material under and along the sides of the pipe. Bedding shall be placed in separate lifts. The first lift, to provide at least 4 inches thickness under any portion of the pipe, shall be placed before the pipe is installed, and shall be spread smoothly so that the pipe is uniformly supported along the barrel. The first lift of bedding shall be compacted to at least 95 percent of maximum density prior to placement of pipe. After installation of the pipe, separate lifts of Pipe Bedding material shall be placed to the limits shown in the plans and compacted to 95 percent of maximum density. Lifts shall be placed in layers not exceeding six inches in thickness.

3.08 BACKFILLING FOR PIPE AND COPPER TUBING

A. General: Trench Backfill, except as specified in paragraphs below, shall be the native material excavated from the trench provided it meets the requirements of 2.02.

B. Imported Backfill: Imported Backfill shall be used for trench backfill when the native material is unsuitable. Owner shall determine the suitability of the native material.

C. Backfilling: Backfill shall be placed in horizontal lifts not exceeding 12 inches unless directed otherwise by Owner in loose depth, and each lift shall be compacted to 95 percent of maximum dry density at optimum moisture content.

Compaction shall be by hand methods or approved plate compactors to a point 2 feet over the crown of the pipe, above which machine compaction shall be used. Machine-mounted compactors shall be used to the maximum extent feasible to minimize the amount of time workers must spend in the trench. Backfill above the bedding layer shall be in maximum 12-inch lifts unless otherwise directed by Owner.

In backfilling the trench, the Contractor shall take all necessary precautions to protect the pipe from any damage or shifting. Backfilling shall be performed by pushing the material from the end of the trench into, along and directly over the pipe so that the material is deposited in the form of a rolling slope rather than by side filling.

E. Depth of Cover: Depth of cover above water pipe, drain pipe and copper tubing shall be 48 inches minimum unless otherwise noted on the plans or in these specifications. Depth of cover above electrical conduit shall be 36 inches minimum unless otherwise noted in the plans or these specifications. In case of conflict, the more restrictive requirements shall apply.

3.10 COMPACTION CONTROL

Compaction shall be obtained by means of mechanical tamper, vibratory compactor or other means approved by the Owner. Water settling shall not be permitted or approved.

Placement and compaction of backfill material shall be conducted and accomplished in conjunction with and under the control of continuous, in-place density testing. Density testing of in-place backfill material shall be made in accordance with ASTM D1556, D1557, D2922, or other procedures approved by the Owner. The moisture content of the backfill materials, the method of placement and distribution of the backfill materials in the trench and around the pipe, the type and method of operation of compaction equipment and all other work and materials associated with and required for placement of compaction of backfill material shall be determined and controlled by the in-place density testing which may be required. All testing shall be performed by a qualified laboratory retained by the Contractor.

The Contractor shall plan and execute his or her operations to include, as an integral element, continuous in-place density testing. Any and all pipe which is installed with backfill, placed without appropriate and continuous in-place density testing, will not be accepted by Owner.

The frequency and location of samples for testing shall be determined by the Owner. As backfilling commences with each material of different characteristics, samples shall be taken at random

locations as directed by the Owner along the pipe alignment and shall be obtained from each lift of the backfill at no more than 50-foot intervals. Test method D2922 may be used provided calibration tests are provided at not less than 500-foot intervals along the trench using method D1556 or D1557. After methods, procedures and equipment required to achieve the specified compaction are determined and established, the frequency and location of samples may be decreased at the discretion of the Owner. In-place density testing shall be continued as the work progresses to monitor and control the methods, procedures and equipment utilized.

Copies of all test reports shall be provided to Owner. Should any tests indicate that the specified compaction is not achieved; the Contractor shall remove all backfill material from the trench and shall determine and utilize new and/or revised methods of placement and compaction of the backfill material until specified levels of compaction are achieved.

New and/or revised methods of placement and compaction shall be determined and utilized as the characteristics of the backfill materials change. As backfill material of different characteristics is placed, the frequency and location shall be increased to determine and control the new and/or revised methods of placement and compaction.

3.11 COMPACTION INSPECTION

In addition to the in-place density testing performed by the Contractor, Owner may elect to perform independent in-place density testing and the Contractor shall, at the option of Owner, either excavate test pits in the completed backfill to accommodate testing or allow testing to be performed on a specific lift of compacted backfill prior to placement of the next lift. All costs of excavation of test pits and of modifying or curtailing the progress of the work to allow testing as specific lifts are completed shall be considered as incidental to the project.

3.12 BUILDING AND OTHER FOUNDATIONS

- A. Over-excavate existing soils to one foot below bottom of footing.
- B. Furnish, place, and compact classified fill.

3.13 BUILDING AND EXTERIOR FLOOR SLABS

- A. Remove organic topsoil.
- B. Scarify and compact upper 6 inches of soil.
- C. Furnish and place compacted classified fill as necessary to attain grades.

3.14 GRADING

- A. Grade top of compacted fill to allow for paving and landscaping topsoil elevations indicated.
- B. Slope finished grades adjacent to the building to prevent ponding of water and to convey water away from foundations.

- C. Bring top of fill to a firm unyielding layer. Correct soft spots or depressions that develop under compaction by removing and replacing material until the surface is smooth and uniform.
- D. Provide adequate water supply for compaction.

3.15 WASTE DISPOSAL

A. Any excess soil shall be removed and legally disposed of off site. Coordinate landscaping topsoil reuse and remove excess.

3.16 MAINTENANCE

- A. Keep fills in satisfactory condition for pavement and building construction following final grading. Provide drainage and erosion control until completion of covering work.
- B. Where completed compacted areas are disturbed by subsequent construction operation or adverse weather, scarify, compact and grade prior to further construction.
- C. Should subsurface bearing surfaces of natural soil previously approved become softened by frost or moisture before final covering, re-excavate to firm bearing and extend backfill to suit, or dry and re-compact subsurface if approved by the DHSS Project Manager.

3.17 CLEAN UP

- A. Smooth grade transition to existing soils grade at any depressions or disturbed areas adjacent to the backfilled areas. Repair any damage to existing structure or roadways which results from earthwork.
- B. Remove excess soil, and construction debris.

3.18 TOLERANCES

- A. Surface grades uniform to elevations indicated within plus or minus 0.02 foot in ten feet.
- B. Where sidewalks meet doorway openings, sidewalk surface shall match the grade of the door threshold

END OF SECTION 02221

SECTION 2720

STORM DRAINAGE SYSTEM

PART 1 - GENERAL

1.01 RELATED WORK

A. Section 02221, Trenching, Backfilling and Compacting

1.02 SYSTEM DESCRIPTION

- A. Storm drainage system from site to point of municipal connection.
- B. Obtain and pay for as part of Contract price all necessary permits.

1.03 TESTING

- A. The Contractor shall provide soil testing and inspection service by an independent geotechnical-civil engineering firm experienced in performing soil analysis. The testing firm shall be approved by code enforcement authorities and the Owner prior to commencing work.
- B. The testing firm shall inspect and report on imported fill material, backfill compaction, and existing bearing soil for compliance with the Drawings and Specifications.

1.04 TEST AND INSPECTION REPORTS REQUIRED

- A. Imported Fill Materials: One sieve particle size test for every different borrow source and one for every 1,000 cubic yards of fill.
- B. Fill Compaction: One test for each 300 L.F. of trench at the pipe spring line, midtrench and surface at locations designated by the Owner.
- C. Reports shall be signed by a civil engineer registered to practice in the State of Alaska.

PART 2 – PRODUCTS

2.01 CORRUGATED POLYETHYLENE PIPE

A. Conform to AASHTO M 294, Type S

PART 3 - EXECUTION

3.01 INSPECTION OF SITE

- A. Examine site surfaces and elevations, subsurface soils report, existing site survey and details on Drawings for defects that will adversely affect the work.
- B. Start of work shall mean acceptance of existing conditions as capable of producing an acceptable job.

3.02 DEWATERING

A. Do not allow water to accumulate in excavations. Remove and convey standing water from excavations by pumping if necessary.

3.03 INSTALLATION

- A. Install where indicated on the Drawings.
- B. Begin the pipe laying at the downstream end of the pipe. Keep the lower segment of the pipe in contact with the shaped bedding throughout its full length. Place outside circumferential laps of flexible pipe facing upstream.
- C. Ensure couplings are corrugated to match the pipe corrugations and that their width is not less than one half the nominal pipe diameter.

END OF SECTION 02720

SECTION 03100

CONCRETE FORMWORK

GENERAL

RELATED WORK SPECIFIED ELSEWHERE

Concrete Reinforcement: Section 03200

Anchors and Inserts: Section 03251

Expansion and Contraction Joints: Section 03252

Waterstops: Section 03253

Cast In Place Concrete: Section 03300

QUALITY ASSURANCE

Standards:

"Building Code Requirements for Structural Concrete", ACI 318-02, Chapter 6.

"Chapter 19", International Building Code 2003.

U.S. Product Standard PS 1 for Plywood.

Standard Grading and Dressing Rules No. 16 of the West Coast Lumber Inspection Bureau.

SUBMITTALS

A description of the forming system with complete details. Illustrate the proposed location of all construction joints, method of securing embedded items and blockout procedures.

PRODUCT DELIVERY, STORAGE, AND HANDLING

On delivery to job site, place materials in area protected from weather.

Store materials above ground on framework or blocking and cover with protective waterproof covering providing for adequate air circulation or ventilation.

Handle materials to prevent damage.

PRODUCTS

MATERIALS

- Plywood: New or in new condition "B-B Plyform Class 1 Exterior" grade plywood, 5/8 inch minimum thickness.
- Steel Panels: Flat steel sheet or plate of sufficient thickness, or braced sufficiently, to prevent noticeable deflection from pressure of concrete. Steel forms galvanized and/or coated to prevent rust and staining.
- Framing, Studding, and Bracing: "Standard" or "Construction" grade West Coast species lumber.
- Form Ties: Prefabricated rod of the cone-type snap-tie configuration; or approved threaded internal disconnecting type to resist all imposed loads of freshly placed concrete, and permit tightening and spreading of forms. Plastic cone snap-ties shall break back 1 to 1-1/2 inches.

Form Coating:

- Lacquer, plastic or epoxy coating or non-staining form oil that will not impair the bonding quality for final finish of the painting or protective coating.
- Coatings containing mineral oils or other non-drying ingredients will not be permitted.
- Shores and Falsework: Standard patented, manufactured shores, or sound commercial construction lumber.
- Chamfer Strips: Chamfer strips (for all exposed edges) 3/4 inch, 45° bevel wood strips or reusable plastic triangular strips.

EXECUTION

DESIGN OF FORMWORK

- Design formwork to safely support vertical and lateral loads which might be applied until such loads can be supported by the concrete structure. Carry vertical and lateral loads by formwork system to ground or to in-place construction which has attained adequate strength for that purpose.
- Design forms and falsework to include assumed values of live load, dead load, weight of moving equipment operated on formwork, concrete mix, height of concrete drop, vibrator frequency, ambient temperature, foundation pressures, stresses, lateral stability, and other factors pertinent to safety of structure during construction.
- Provide shores and struts with positive means of adjustment capable of taking up formwork settlement during concrete placing operations, using wedges or jacks or a

combination thereof. Provide trussed supports when adequate foundations for shores and struts cannot be secured.

- Form facing materials shall be supported by structural members spaced to prevent deflection. Design camber in formwork as required for anticipated deflections.
- Design formwork to be readily removable without impact, shock, or damage to cast-inplace concrete surfaces and adjacent material.
- Keep oil or other agents from getting on reinforcing steel, embedded items, or other surfaces requiring bond with concrete.

LAYOUT OF FORMWORK

Locate and stake out all forms and establish all lines and levels and elevations.

CONSTRUCTION OF FORMS

Formwork - General:

- Before concrete is placed in any form, verify horizontal and vertical form position and correct all inaccuracies. Complete all wedging and bracing in advance of placing of concrete.
- When setting form ties, leave no metal to remain in wall closer than one inch from surface. Ties shall fit tight to prevent mortar leakage at holes in forms. Ties shall be protected from rusting at all times. No wire ties or wood spreaders will be permitted. Cutting ties back from concrete face will not be permitted.
- At construction joints, anchor forms by using an adequate number of form ties in the new pour a few inches from the construction joints. Do not rely on ties adjacent to the joint used in previous placements. All joints horizontal and vertical.
- For exposed concrete, forms shall be of new plywood, metal panel, or approved panel materials, smooth, and continuous.
- For unexposed concrete, forms shall be plywood, metal, boards, or approved material. Boards: nominal one inch minimum thickness, sound and tight, commercial construction lumber, shiplapped or tongue-and-grooved, dressed on at least one side and both edges for tight fit. Plywood, metal, or approved material equal to or better than board surface.
- Camber: Forms for girders and slabs cambered unless otherwise noted.
- Chamfered Corners: All corners chamfered 3/4 inch, unless shown otherwise on drawings. Provide 45-degree triangular moldings in forms for all chamfering required.

- Inspection and Cleanout Openings: Provide inspection and cleanout openings at the bottom of all forms for columns, pilasters, walls over 8 feet in height, and for forms for irregularly shaped placement where cleaning and inspection from the top would be impractical.
- Coordination: Coordinate the installation of all items to be inserted or embedded in concrete. Support all items to maintain accurate alignment and prevent distortion during concrete placement.
- Cleaning: All dirt, chips, sawdust, mud, water and other foreign matter shall be removed from within the forms or within the excavated areas before any concrete is deposited therein.

NOTIFICATION AND INSPECTION

Prior to placing of any concrete, and after placement of reinforcing steel in the forms, notify the DHSS Project Manager at least 48 hours in advance of placing concrete to permit inspection.

DEFECTIVE WORK

Any form movement or deflection during construction or finished surface variations in excess of the tolerances specified will be basis for rejection of cast-in-place product and requirement for replacement of same.

REMOVAL OF FORMS

- Do not remove forms and supports until concrete has attained sufficient strength to support anticipated loads.
- The listing below serves only as a guide in determining the minimum length of time required before removal of forms and is based on the use of Type I Portland Cement. When high early strength Portland Cement is used, the length of time listed below may be reduced to not less than one-third time listed, but not less than 1 day.

- Use methods of form removal which will not cause overstressing of the concrete. Remove supports to permit the concrete to uniformly and gradually take the stress due to its own weight. Do not use high impact methods to remove supports.
- Break back ties after concrete has cured sufficiently to maintain unbroken bond with steel rod.

REUSE OF FORMS

Any reused form for exposed concrete work shall be reconditioned to "like new" condition. Any reused form shall be cleaned, repaired, and recoated before each reuse.

BLOCKOUTS

Where pipes, castings, or conduits pass through the walls, place such pipes or castings in the forms before pouring the concrete, or in special cases, with the express consent of the Engineer or as specified, build accepted boxes in the forms to make cored openings for subsequent insertion of such pipes, castings or conduits. Provide boxes or cores with continuous keyways and waterstop all the way around, and with slight flare to facilitate grouting and the escape of entrained air during grouting.

END OF SECTION 03100

SECTION 03200

CONCRETE REINFORCEMENT

PART 1 - GENERAL

RELATED WORK SPECIFIED ELSEWHERE

Concrete Formwork: Section 03100

QUALITY ASSURANCE CONTROL

- Manual of Standard Practice for Detailing Reinforced Concrete Structures, ACI 315 (latest edition).
- Manual of Standard Practice, Concrete Reinforcing Steel Institute (latest edition).

SUBMITTALS

Placing drawings, bending and cutsheet schedules.

Mill test reports for each shipment of reinforcement shall be submitted to the DHSS Project Manager for review.

PRODUCT DELIVERY, STORAGE, AND HANDLING

- Deliver reinforcement to project site in bundles marked to coordinate with placement drawings.
- Handle and store to prevent contamination from dirt, oil and other materials which will affect bond.
- Store a minimum of 6" above ground and in locations where the materials will not be subject to abuse.

- PRODUCTS

MATERIALS

- Reinforcing Bars: Unless specified otherwise, deformed bars meeting requirements of ASTM A615, Grade 60. Supplementary Requirements S1 shall apply.
- Welded Wire Fabric: Wire mesh shall meet requirements ASTM A185, "Welded Steel Wire Fabric for Concrete Reinforcement".

Tie Wire: Steel, black annealed, 16-gauge minimum.

Reinforcing Bar Supports: Per CRSI Manual Chapter 3, pregalvanized or plastic-coated.

EXECUTION

INSTALLATION

Placement and Tolerances: Conform to CRSI "Manual of Standard Practice", and ACI 318 (latest edition).

Splices:

- Do not splice bars except at locations shown or noted on the drawings or as otherwise approved.
- Tie lap slices securely with wire to prevent displacement of splice during placement of concrete.
- Welded splices shall not be used unless approved by DHSS Project Manager prior to construction.

Lap wire fabric one full mesh minimum and tie with wire.

- Cleaning: Remove dirt, grease, oil, loose mill scale, excessive rust, and foreign matter that may reduce bond with concrete.
- Protection During Concreting: Keep reinforcing in proper position during concrete placement.
- Concrete Cover: Maintain minimum concrete cover over reinforcement as specified in ACI 318 or as noted on the Drawings.

END OF SECTION 03200

SECTION 03300

CAST IN PLACE CONCRETE

PART 1 - GENERAL

RELATED WORK SPECIFIED ELSEWHERE

Testing Laboratory Services: Section 01410

QUALITY ASSURANCE

Delivery: Furnish a certificate with each truckload of concrete product delivered to the site, indicating the composition and quality of the mix. Include size and weight of each aggregate, amount of cement, amount of water and amount and kind of any additives included in the concrete, grout fill, or mortar.

Standards: All applicable standards (latest editions) of the following:

American Concrete Institute - ACI

Concrete Reinforcing Steel Institute - CRSI

International Building Code - IBC

Other local codes or criteria noted on drawings.

Concrete Consistency:

Test each truckload of concrete for slump. Calibrate each mixer or haul unit to be used by measuring slump near the beginning and near the end of the discharge cycle. Mix units determined by the DHSS Project Manager to be deficient in mixing capability shall not be used in subsequent deliveries. Slump testing procedures per ASTM C143.

Concrete Test Cylinders:

Prepare a minimum of three test cylinders for each location for each day's placement or each 50 cu. yd. whichever is greater.

Test set of 3 cylinders as follows:

One at 7 days.

Two at 28 days.

Prepare and test cylinders per ASTM C31 and C39.

- Prior to placement have available at placement location all tools, cylinder molds, slump cone, rod, curing containers and all other apparatus required for sampling and testing.
- Air Entrained: One test for each mix design.

SUBMITTALS

- Concrete mix design by independent laboratory, including strength tests of 3 cylinders proportioned to mix design formula.
- Certification of quality of all concrete, mortar, and grout mix design ingredients including admixtures with supporting test data, mill quality control results and all information specified and requested by the Engineer.
- Qualifications of Quality Assurance Control personnel responsible for concrete consistency, strength, air content and all testing.
- Curing materials and methods proposed with certification statements of materials quality.
- Test results, in approved format, at specified intervals for all field sampling and specimens.
- Certification of quality and type of epoxy bonding materials.
- Trip tickets for each load of concrete, grout or mortar indicating weights of all materials and additives used in the batch.
- Location of construction joints not shown on the plans.
- Detectable Warning Mat Materials and location
- Cold weather placement procedures, if used.

STORAGE OF MATERIALS

- Maintain in continuously clean environment and in manner required to maintain homogeneity.
- Cements, grouts, and mortar containerized and kept in dry humidity environment. Engineer shall reject materials which have hardened or show any evidence of initial hydration.

PRODUCTS

CONCRETE

ASTM C94 and mix design approved by DHSS Project Manager.

Compression strength and water cement ratio: The minimum compressive strength and cement content of concrete shall be not less than that shown in the tabulation that follows. The Engineer may order the cement content for any class of concrete to be increased over the quantity specified in the tabulation if it is determined that such increase is necessary to attain the required strength. Such increased quantities of cement, if so ordered, shall be furnished by the Contractor at no additional cost to the Owner.

Class of Concrete Min. 28-day		Max. Size	Min. Cement Pounds	Max W/C
Compr. Strength		Aggregate	Per	Max. W/C
(psi)	Type of Work	(in.)	cu. yd.	Ratio
4,000	Walls, Retaining Walls and slabs on grade	3/4	564	0.45
4,000	Footings, cradles, thrust blocks, encasements and all other uses.	3/4	564	0.45

Cement ASTM C150:

Type I/II for all structures.

Aggregates:

Conform to ASTM C33.

Maximum wear 50% at 500 revolutions, AASHTO T96.

Water:

Potable water free from injurious amounts of oil, acid, salt, alkali, organic matter, or other deleterious substances.

Admixtures:

Use only those specified in approved mix design.

Air entrain all concrete unless elsewhere excepted, with agent conforming to ASTM C260. Freshwater concrete air content between 4% and 6% by volume.

Apply in strict accordance with manufacturer's printed instructions.

No chloride contents permitted.

Compatible with coatings specified elsewhere.

AGGREGATE FOR MORTAR

Conform to 2.1 except gradation as follows:

Sieve Size Square Opening	Percent Passing <u>By Weight</u>
No. 4	95 - 100
No. 8	80 - 90
No. 16	55 - 97
No. 30	30 - 60
No. 50	12 - 30
No. 100	0 - 10

GROUT

- For equipment and column bases and drilled in anchors use nonshrink, nonstaining, premixed grout, Masterflow 713 by Master Builders; or equivalent. Mix in accordance with the manufacturer's directions.
- For Fill: Driest consistency practical composed of 1 part Portland Cement 3 parts sand (by volume). Aggregate proportions may be varied slightly to give the most workable mix.
- For placement at base of walls, one part fine aggregate, one part cement. In a thick cream consistency.

Cure in accordance with manufacturer's recommendations.

CURING MATERIALS

Polyethylene Sheeting 0.004 inch thick.

Waterproof Paper: Polyethylene-coated, Fed. Spec. UU-B-790 Type I, Grades A, B, C, Style 4. Define lap control lines clearly by printed markings.

DETECTABLE WARNING MAT

Apply UV Stable Composite or Polyurethane detectable warning mat (approximate size-2' x4') at New ADA ramp to Bryant Street.

Submit manufacturer's literature describing products, installation procedures and manufacturer's specified maintenance procedures. Color shall be "Caution-<u>Yellow"</u>

Provide tactile warning surfaces which comply with the detectable warnings on walking surfaces section of the Americans with Disabilities Act (Title 49 CFR TRANSPOTATION, Part 37.9 STANDARD FOR ACCESSIBLE TRANSPORTATION FACILITIES, Appendix A, Section 4.29.2 DETECTABLE WARNINGS ON WALKING SURFACES. Manufacturers offering products that may be incorporated in the work include, <u>but are not limited to</u>, the following:

- o Detectable Warning Systems, Inc. (866-999-7452)
- Armor Tile Engineered Plastics, Inc. (800-682-2525)
- o ADA Solutions, Inc. (888-501-9699)

Detectable warning mat shall be warranted in writing for a period of five years from date of final completion.

FLOOR HARDENERS

Dusted on type troweled into fresh concrete floor at rate specified by manufacturer.

Roll on cure sealer at rate specified by manufacturer.

Master Builders Master Cron, or Colortron where color is specified and sealed with Master Seal, or Castle Chemical Corporation Durundum, sealed with Duro-Kure, or equivalent.

VAPOR BARRIER (UNDER INTERIOR SLABS)

- Polyethylene sheeting 6 mil (0.006 inch) thickness. Define lap control lines clearly by continuously marking material edges.
- Glass fiber reinforced waterproof paper coated with polyethylene (both sides). Fed. Spec. UU-B-790 Type I grades A, B, C Style 4. Define lap control lines clearly by printed markings.

EXECUTION

MIXING AND TRANSPORTATION

Ready-Mixed Concrete: Conform to ASTM C94 Alternate No. 3.

PLACING

- Deliver only in sufficient quantities required for specified time interval use and placement. Discard concrete having initial set before placement. No remixing with water or supplementing with other materials will be permitted once initial set has occurred. Initial set as evidenced by typical hydration characteristics to be determined by DHSS Project Manager and Contractor quality assurance representative.
- Place as nearly as possible to final position to avoid segregation of the materials and displacement of reinforcement. Placement shall be completed within 30 minutes after water is first added to the mix. However, at the DHSS Project Manager discretion if climatic and temperature conditions are suitable and when the concrete is continually agitated, the time may be extended to 1-1/2 hours.
- Place no concrete until reinforcing has been inspected as to placement and size per contract documents and approved shop drawing submittals.

Place no concrete in the absence of the Contractor quality assurance representative.

- Do not change consistency (slump) for a given placement without the DHSS Project Manager written permission.
- Keep open trough and chutes of steel or steel lined, clean and free from coatings of hardened concrete.
- Do not drop concrete a distance of more than 5 feet unless approved in writing by the DHSS Project Manager.
- Layout and sequence the placing of concrete in monolithic structures as shown on the drawings or approved by the DHSS Project Manager.
- Within a placement, deposit concrete in horizontal layers not to exceed 18 inches in depth. Place at rate such that: (1) no concrete surface shall obtain initial set before additional concrete is placed on it and (2) yielding of forms is not so great as to cause the concrete surfaces to exceed the tolerances specified.
- Unless specified otherwise, place all slabs to finish elevation in one continuous operation. Slab and section thicknesses shall be as shown on the contract documents. Slopes on floors shall increase, rather than decrease, slab thicknesses.

Construction Joints:

Locate construction joints so as not to impair the strength of the structure. Locations not shown on the drawings shall be approved by the DHSS Project Manager.

Construct to neatly fit reinforcement and waterstops and prevent concrete leakage.

Provide waterstops or sealants in construction joints where required.

Unless shown otherwise, key all construction joints.

- Continue reinforcement through construction joint unless otherwise shown or noted.
- Before placing concrete against previously placed concrete, thoroughly roughen and clean by wet sandblasting or green cutting with an air-water jet.
 - Use air-water cutting at the proper time after the initial set. Use a high pressure air-water jet to expose clean, sound aggregate without undercutting the edges of the larger aggregate. Protect adjacent subgrade when cutting is used on slab edges.
 - After cutting or sandblasting, rinse the surface until wash water contains no cloudiness. Dispose of wastes from cutting, washing and rinsing so they do not stain or abrade exposed surfaces.

Place concrete continuously to a predetermined construction joint.

Care shall be taken in placing concrete through reinforcement so that no segregation of the coarse aggregate occurs. On the bottom of slabs where the congestion of steel

near the forms makes placing difficult, a layer of mortar, of the same strength as used in concrete, shall first be deposited in the forms, followed immediately by the concrete. The thickness and use of this mortar layer shall be as approved by the DHSS Project Manager.

- Special care shall be taken to prevent splashing forms or reinforcement with concrete. Any hardened concrete or partially hardened concrete on the forms or reinforcements above the level of the concrete already in place shall be removed before proceeding with the work.
- Cold Weather Placement:
 - Concrete shall be placed only when the temperature is at least 40°F., and rising, unless permission to pour is obtained from the DHSS Project Manager.
 - Material shall be heated and otherwise prepared so that batching and mixing can proceed in full accord with the provisions of this Specification.
 - Suitable means shall be provided for maintaining the concrete at a temperature of at least 50°F for a period of at least the first five (5) days and at a temperature above freezing for the remainder of the specified curing period, except that where high-early-strength cement is used, this period may be reduced to 72 hours. The methods proposed for heating the materials and protecting the concrete shall be approved by the DHSS Project Manager.
 - Salt, chemicals, or other materials shall not be mixed with the concrete for the purpose of preventing freezing. Accelerating agents shall not be used.

Hot Weather Placement:

- The temperature of fresh concrete at the time of placement during hot weather shall be a maximum of 90°F to prevent an accelerated setting of the concrete.
- A retarding densifier admixture shall be used when the high expected atmospheric temperature for the day is 85°F or above. Admixture shall be used in accordance with the manufacturer's recommendations.

Placing Concrete Against Earth:

- Unless otherwise called for on the drawings, earth cuts shall not be used as forms for vertical surfaces without the prior approval of the DHSS Project Manager.
- Concrete placed on or against earth shall be placed only upon or against firm, damp surfaces free from frost, ice and standing or running water. Concrete shall not be placed upon mud, or upon fills until the required compaction has been obtained.

Placing Concrete Slabs:

- Smooth subgrade surface irregularity with thin film of masonry sand prior to placing vapor barrier.
- Place vapor barrier on subgrade in maximum widths commercially available. Longitudinal laps 6 inch minimum. End laps 2 feet minimum.
- Edge and side laps to be in continuous contact. Place materials to maintain tight lap contact.

Repair any tears in the vapor barrier material.

Place concrete without displacing vapor barrier.

Depositing Concrete in Water:

Concrete may be deposited in water only when specifically authorized.

Methods and equipment used shall be acceptable to the DHSS Project Manager.

When deposited by the tremie method, the tremie shall be watertight and sufficiently large to permit a free flow of concrete. The discharge end shall be kept submerged continuously in the concrete and the shaft kept full of concrete to a point well above the water surface. Placing shall proceed without interruption until the top of the concrete has been brought to the required height.

COMPACTING

Compact all concrete with high frequency internal vibrators immediately after placing.

- Use external vibrators for compacting concrete where the concrete is inaccessible for adequate compaction by internal vibrators; construct forms sufficiently rigid to resist displacement or damage from external vibration.
- Penetrate concrete with a sufficient number of vibrations immediately after it is deposited. Move vibrator throughout the mass so as to thoroughly work the concrete around reinforcement and embedded fixtures and into corners and form recesses. Vibrate the minimum time required to compact the concrete in place and not cause separation of the materials. Concrete shall be compacted to maximum density as determined by tests for yield. Select vibrator size to efficiently accommodate reinforcement clearances.

CURING AND PROTECTION

General:

Maintain at site ready to install, before actual concrete placing begins, all equipment and materials needed for optimum concrete curing and protection; maintain extra vibrators on standby in case of malfunction of any unit.

- Protect finished surfaces or edges from stains, abrasions and breakage during the entire construction period.
- Protect all concrete from accelerated drying and excessive heat at all times. Close all galleries, conduits and other formed openings through the concrete during the entire curing period and as long thereafter as practicable to prevent drying of concrete by air circulation.
- Install slab curing covers immediately after initial set or as soon as free water has disappeared from the surface of the concrete after finishing or surfacing.

Water Curing:

- Use water curing specified herein for all walls and slabs where watertight construction is required.
- Keep concrete continuously wet by covering with an approved material or by a system of perforated pipes or mechanical sprinklers or other approved methods. (Periodic wetting acceptable.)
- Keep forms wet at all times to prevent opening of joints and the drying out of the concrete.
- Water for curing shall be clean and free from any elements which might cause objectionable staining or discoloration of the concrete.
- Cover surfaces completely with sheeting. Where a single sheet does not cover the entire surface, lap ends and edges at least 4 inches and continuously seal with tape or other suitable means recommended by the manufacturer.
- Continue waterproof sheet curing for 7 days. Maintain sheeting and edge and end seals intact for entire period. Repair immediately any breaks in the sheeting envelope.
- Curing Compounds: Use only when specifically approved and for optimum climatic conditions.
- Do not use curing compounds unless their use is authorized in writing by the Engineer. Curing compounds unacceptable where concrete is exposed to the direct rays of the sun or accelerated drying conditions.
- Curing compounds shall not be used unless their use is face membrane type and shall be applied in accordance with the manufacturer's recommendations. They shall be of such composition and characteristics as will spread readily on moist concrete and deposit a hard, tenacious film without permanently coloring the concrete surfaces that will be exposed. The resultant film shall adhere to the concrete surface without chemical reaction therewith, and shall not peel. Maintain coverage for 28 days to prevent detrimental loss of water from the concrete.

- Prior to applying curing compounds to formed surfaces, the surfaces shall be moistened with a spray of water immediately after forms are removed. Moistening shall be continued until the surfaces will not readily absorb more water. The compound shall be applied as soon as the moisture film has disappeared and while the surface is still damp.
- On unformed surfaces, the compounds shall be applied immediately after finishing and after bleeding water and "shine" has disappeared.
- Curing compounds shall not be used on surfaces where future bonding, painting or protective coating is required. In cold weather, curing compounds shall not be used on concrete surfaces that are kept at curing temperature by the use of steam.

REPAIRING CONCRETE

- Immediately after removal of forms, break back all form ties and inspect concrete surfaces for defects. Complete repair of defects within 48 hours after removal of forms. No repairs shall be made until the defects have been reviewed and method of repair approved by the DHSS Project Manager.
- Remove all defective or damaged concrete, including honeycombed, sand streaked, or fractured material from the area to be repaired. Chip out areas to one inch minimum depth. Edge shall be squared with the surface to eliminate feather edges.
- Before placing the repair material obtain DHSS Project Manager inspection. Clean area free of chipping dust, dried mortar, and all other foreign materials.
- Keep surfaces to be repaired continuously wet for at least three hours prior to placing new concrete or mortar. No free water on the surface when the repair material is placed.
- Apply a bonding agent to the area to be repaired before placing repair material. Apply the bonding agent per manufacturer's published instructions attached to container.
- For all repair surfaces permanently exposed to atmosphere use white cement in proportions found by trial to be effective in producing a color that, in the hardened patch, will match the surrounding concrete surface.
- Make repairs or patch form tie holes by (1) dry-packing, (2) filling with concrete, or (3) plastering with mortar or a combination of all 3 in conformance with the following:
 - Use the dry-pack method for holes at least one inch deep where the depth is equal to, or greater than the smallest surface dimension of the defect, such as conebolt or form tie holes, and for narrow slots cut for the repair of cracks. Do not use the dry-pack method where lateral restraint cannot be obtained. Place and pack dry-pack mortar in layers having a compacted thickness of approximately 3/8 inch. Solidly compact each layer over its entire surface by use of a hardwood stick and hammer. Do not use metal tools for compacting. Compact

surface just flush with adjacent area. Do not use steel finishing tools or water to facilitate finishing.

- Use concrete replacement for (1) holes extending entirely through concrete sections; (2) for holes larger than one square foot and deeper than four inches in which no reinforcement is encountered; (3) for holes larger than 1/2 of one square foot where reinforcement is exposed. Concrete used for replacement shall be of the same strength and mixture as used in the structure except for color matching as specified above.
- Use mortar replacement for holes too wide to dry-pack and too shallow for concrete replacement and when approved by the Engineer for other conditions not covered above.

Cure all repairs with the same methods as new concrete.

CONCRETE FINISHES AND TOLERANCE

- Rough-Formed Finish: As-cast concrete texture imparted by form-facing material with tie holes and defective areas repaired and patched. Remove fins and other projections exceeding ACI 347R limits for class of surface specified. Use rough-formed finish where concrete is not exposed to view or in contact with waterproof membrane or PVC liner.
 - a. Apply to surfaces not indicated on the Drawings or in this section to achieve a smooth formed finish.
- Smooth-Formed Finish: As-cast concrete texture imparted by form-facing material, arranged in an orderly and symmetrical manner with a minimum of seams. Repair and patch tie holes and defective areas. Remove fins and other projections exceeding 1/8 inch in height.
 - Apply to concrete surfaces exposed to view, contact with water or sewage or to be covered with a coating or covering material applied directly to concrete, such as waterproofing, damp proofing, veneer plaster, or painting.
- Rubbed Finish: Apply the following to smooth-formed finished concrete except for surfaces receiving waterproofing or PVC liner or in contact with sewage:
 - a. Select one rubbed finish from subparagraphs below as indicated.
- Smooth-Rubbed Finish: Not later than one day after form removal, moisten concrete surfaces and rub with carborundum brick or another abrasive until producing a uniform color and texture. Do not apply cement grout other than that created by the rubbing process.
- Related Unformed Surfaces: At tops of walls, horizontal offsets, and similar unformed surfaces adjacent to formed surfaces, strike off smooth and finish with a texture matching adjacent formed surfaces. Continue final surface

treatment of formed surfaces uniformly across adjacent unformed surfaces, unless otherwise indicated.

FINISHING FLOORS AND SLABS

- General: Comply with recommendations in ACI 302.1R for screeding, restraightening, and finishing operations for concrete surfaces. Do not wet concrete surfaces.
 - 1. Select types of slab finishes indicated.
- Scratch Finish: While still plastic, texture concrete surface that has been screeded and bull-floated or darbied. Use stiff brushes, brooms, or rakes.
 - Apply scratch finish to surfaces indicated and to surfaces to receive concrete floor topping or mortar setting beds for ceramic or quarry tile, Portland Cement terrazzo, and other bonded cementitious floor finishes.
- Float Finish: Consolidate surface with power-driven floats or by hand floating if area is small or inaccessible to power driven floats. Restraighten, cut down high spots, and fill low spots. Repeat float passes and restraightening until surface is left with a uniform, smooth, granular texture.
 - Apply float finish to surfaces indicated, to surfaces to receive trowel finish, and to floor and slab surfaces to be covered with fluid-applied or sheet waterproofing, built-up or membrane roofing, or sand-bed terrazzo.
- Trowel Finish: After applying float finish, apply first trowel finish and consolidate concrete by hand or power-driven trowel. Continue troweling passes and restraighten until surface is free of trowel marks and uniform in texture and appearance. Grind smooth any surface defects that would telegraph through applied coatings or floor coverings.
 - Apply a trowel finish to surfaces indicated and to floor and slab surfaces exposed to view, in contact with liquids or to be covered with resilient flooring, carpet, ceramic or quarry tile set over a cleavage membrane, paint, or another thin film-finish coating system and to slabs in structures containing water, sewage or other liquids.
- Revise surface plane tolerances to suit Project. ACI 301 suggests that all residential floors and nonresidential floors less than 10,000 sq. ft. (929 sq. m) be measured by straightedge method and that other nonresidential floors be measured by F-number system.
- Finish and measure surface so gap at any point between concrete surface and an unleveled freestanding 10-foot- long straightedge, resting on two high spots and placed anywhere on the surface, does not exceed the following:

3/16 inch.

Immediately after float finishing, slightly roughen trafficked surface by brooming with fiber-bristle broom perpendicular to main traffic route. Coordinate required final finish with OAR before application.

TESTING AND REPAIRING CONCRETE STRUCTURES

Testing:

- Separately test each individual chamber that will contain liquid by filling to the overflow with water after the 28-day design strength of the concrete has been obtained. Repair any visible leakage. Damp spots that do not run may be acceptable if below ground or not on walls common with pump rooms or passageways.
- Allowable leakage not to exceed 0.1% of the volume contained in the chamber in a 24 hour period. Leakage in excess of the allowable amount requires repair to reduce leakage and will be considered to lack watertightness.

Repairs:

- In the event that the structure is not watertight, outline a procedure for repair prior to proceeding with the repair work. Complete any repairs to new work as per specifications at Contractor expense.
- Approved repairs can include, but not necessarily be limited to one or a combination of the repairs listed below. Use of these techniques is not to be construed as a warranty that the methods outlined will satisfy leakage repair requirements:

Replace defective concrete.

- Grouting of the joint by drilling grout holes to the center of the structural unit and forcing grout into the joint under pressure.
- Cutting of a bevel groove on the pressure side of the joint. Groove 1/2 to 3/4 inch in width and depth caulked with epoxy joint sealer in accordance with the manufacturer's instructions.

UNSATISFACTORY CONCRETE

- Any concrete placed which fails to meet or exceed the specified strength requirements as determined from molded cylinders or cores, or to meet the density or surface requirements, or which has been frozen during placing or curing, shall be removed and replaced with satisfactory materials at the Contractor's expense.
- Method of determining unsatisfactory concrete: Visual appearance characteristic of rain or freeze damage to concrete which is apparent to the DHSS Project Manager.

END OF SECTION 03300

SECTION 03313

PORTLAND CEMENT CONCRETE CURBS & SIDEWALK

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Prepare sub-grade to receive base course.
- B. Place stabilizing base courses, work and compact.
- C. Place Portland Cement Concrete (PCC) sidewalk.
- D. Place PCC Curb and Gutter.

1.02 RELATED WORK

- A. Section 01050, Field Engineering
- B. Section 01410, Testing Laboratory Services
- C. Section 02215, Excavating, Backfilling and Grading
- D. Section 03200, Concrete Reinforcement
- E. Section 03300, Concrete

1.03 TESTING

- A. The Contractor shall provide concrete testing and inspection service by an independent, experienced concrete testing laboratory. The testing firm shall be approved by code enforcement authorities and the Owner prior to commencing work.
- B. The testing firm shall inspect and report on strength and thickness for compliance with the Drawings and Specifications.

1.04 TEST AND INSPECTION REPORTS REQUIRED

A. Shall conform to the requirements of Section 03300.

1.05 ENVIRONMENTAL REQUIREMENTS

A. Place no concrete when outside temperature is, or is expected to be, below 40 degrees F, or when the subgrade has standing water or snow.

B. Do not place on frozen materials.

Part 2 - PRODUCTS

2.01 PORTLAND CEMENT CONCRETE

- A. Concrete for exterior sidewalks and slabs shall meet the following requirements:
 - a. 28-day compressive strength 6,000 psi
 - b. Slump Range 5 to 10 inches after addition of high-range water reducer
 - c. Water-Cement Ratio Approx. 0.41
 - d. Cement Type I-II Low Alkali
 - e. Admixtures as follows:
 - i. Master Builders MB-AE 90 Air-Entraining Admixture
 - ii. BASF PS 1466 High-Range Water-Reducing Admixture
 - iii. Rheomax SF 100 Densified Silica Fume Mineral Admixture
- B. Other concrete shall be as specified in Sections 03300 "Concrete" and 03200 "Concrete Reinforcement".

Part 3 - EXECUTION

3.01 INSPECTION OF SITE

- A. Examine site surfaces and elevations, subsurface soils report, existing site survey and details of Drawings for defects that will adversely affect the work.
- B. Start of work shall mean acceptance of existing grades as capable of producing an acceptable job.

3.02 TOLERANCES

A. 1/8 inch in ten feet (non-cumulative) smooth surface alignment to elevations indicated on Drawings, without any local depressions.

END OF SECTION 03313

SECTION 05521 PIPE AND TUBE RAILINGS

<u> PART 1 – GENERAL</u>

1.01 WORK INCLUDED

A. Handrails.

1.02 RELATED SECTIONS

- A. Sections of Division 1
- B. Section 03313 PCC Curb and Sidewalk

1.03 REFERENCES

- A. Americans with Disabilities Act Accessibility Guidelines (ADA).
- B. American National Standards Institute (ANSI) A58.I Minimum Design Loads in Buildings and Other Structures.
- C. American National Standards Institute (ANSI) AI 17.1 Accessible and Usable Buildings and Facilities.
- D. American Society of Testing and Materials (ASTM) A47 Standard Specification for Ferritic Malleable Iron Castings.
- E. American Society of Testing and Materials (ASTM) A53 Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless.
- F. American Society of Testing and Materials (ASTM) A153 Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware.

1.04 SUBMITTALS

- A. Product Data
- B. Shop Drawings
- C. Selection Samples

1.05 QUALITY ASSURANCE

A. Railings Structural Requirements:

- 2. Handrail, wall rail and guardrail assemblies and attachments shall withstand a minimum concentrated load of 200 pounds applied horizontally or vertically down at any point on the top rail.
- 3. Handrail assemblies and guards shall be designed to resist a load of 50 pounds per linear foot applied in any direction at the top and to transfer this load through the supports to the structure.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Materials to be delivered to the job site in good condition and adequately protected against damage as handrails are a finished product.
- B. Store products in manufacturer's unopened packaging until ready for installation.

PART 2 - PRODUCTS

2.01 MANUFACTURER

- A. Kee Safety, Inc., 100 Stradtman St., Buffalo, NY 14206 Available from: Simplified Building Concepts Phone: 888-527-2278 Fax: 585-672-7313 Email: <u>info@simplifiedbuilding.com</u> Web: www.simplifiedbuilding.com;
- B. Or approved equal.

2.02 SYSTEM

- A. Handrails and Guardrails: Provide pipe, fittings, and accessories as indicated or required to match design indicated on the Drawings.
 - 1. Fittings: Aluminum.
 - 2. Pipe: Aluminum. (Steel at Egress Improvements)
 - 3. Handrail Pipe Size:
 - a. 1-1/4 inches industry standard 1.90 inches OD
 - b. 1-1/2 inches OD

2.03 MATERIALS

- A. Pipe:
 - 1. Aluminum pipe.
 - 2. Steel pipe. (Match Existing at Egress Improvements)
- B. Fittings, Including Elbows, Crossovers, Tees, Couplings:
 - 1. Aluminum Alloy: High grade aluminum silicon magnesium alloy.
- C. Finish:
 - 1. (Main Sidewalk- KPH Entrance to Bryant St.) Pipe and Fittings are to be

unfinished.

- 2. (Egress Improvements 3rd floor Sky-bridge to Bryant St.) Pipe and Joints to be welded, smoothed and painted to match existing.
- D. Fasteners:
 - 1. (Main Sidewalk- KPH Entrance to Bryant St.) Type 304 or 305 stainless steel.
 - 2. (Egress Improvements 3rd floor Sky-bridge to Bryant St.) Pipe and Joints to be welded, smoothed and painted to match existing.

2.04 FABRICATION

- A. Fit and shop assemble components in largest practical sizes for delivery to site.
- B. Upright tops shall be plugged with weather and light resistant material.
- C. Assemble components with joints tightly fitted and secured. Accurately form components to suit installation.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Do not begin installation until mounting surfaces have been properly prepared.
- B. If mounting surface preparation is the responsibility of another installer, notify DHSS Project Manager of unsatisfactory preparation before proceeding.

3.02 PREPARATION

- A. Coordinate post setting drawings, diagrams, templates, instructions, and directions for installation of anchorages, such as sleeves, concrete inserts, anchor bolts, and miscellaneous items having integral anchors that are to be embedded in concrete and masonry construction.
 - 1. Coordinate delivery of anchorages to project site.
 - 2. Coordinate that blocking is in place for all mounting fasteners.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.03 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Fit exposed connections accurately together to form tight joints.

- C. Perform cutting, drilling, welding and fitting required for installation of handrails. Set handrails accurately in location, alignment, and elevation, measured from established lines and levels.
- D. Set posts plumb within a tolerance of 1/8 inch.

3.04 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION 05521

Scope of Work Ketchikan Pioneer Home Revised Walkway Renovations - JNU 16-22C

Project Description:

Replace and renew existing Concrete Ramps, Sidewalks and Railings with New Systems, according to Plans and Specifications associated with this project

Scope:

Contractor is to provide all labor, supervision, permits and materials to remove the existing (field verify) 280' + plus lineal feet of Handrails, Sidewalks, and Ramps in varying in widths from 4' foot to 6' foot plus. Haul away and dispose of removed concrete sections, handrail and all debris from site. All work is to be done in accordance with the plans and specifications associated with this document:

- Replace and Renew existing Concrete Sidewalks. (Approximately 280'+Lineal Feet-Field Verify)
- Replace and Renew existing Concrete Ramps including Concrete Stem Walls and Associated Foundations.
- Replace and Renew Old Steel Handrail with New Aluminum Handrail. (Approximately 350'+ Field Verify)
- Following Plans and Specifications; Contractor is to Modify Sidewalks and Handrails for Egress Improvements to Walkway extending from 3rd Floor Sky-bridge to East Entrance Gate.
- Contractor is to cautiously salvage any benches, gates, fencing, or any other apparatuses associated with the work and reinstall at final product.

Coordinate the work hours and type of work to be conducted with the onsite Maintenance Foreman, Markus Schiller, whom is available at (907) 545-5160.

Location: 141 Bryant Street, Ketchikan, Alaska 99901-5575

KETCHIKAN PIONEER HOME WALKWAY RENOVATIONS

141 BRYANT STREET KETCHIKAN, ALASKA 99901

DHSS/FMS PROJECT NO. JNU 16-22C APRIL 24, 2016



PROJECT SUMMARY:

THE OBJECTIVE OF THIS PROJECT IS TO RENOVATE EXISTING EXTERIOR SITE WALKWAYS ALONG THE SOUTH AND WEST SIDES OF THE KETCHIKAN PIONEER HOME INCLUDING CONCRETE SIDEWALKS, RAMPS, INCLUDED RETAINING WALLS AND RAILINGS AND IMPROVEMENTS TO THE EXISTING SIDEWALKS ON THE NORTH SIDE OF THE BUILDING FOR EMERGENCY EGRESS FROM THE THIRD FLOOR TO BRYANT STREET.

SHEET NO.
G0.0
G1.0
C0.1
C1.0
C2.0
C2.1
C2.1
C2.3
C2.4
C3.0
C3.1
C3.2



LINE, SYMBOL, AND HATCH LEGEND

GENERAL NOTES:

- 1. CONTRACTOR SHALL COORDINATE AND OBTAIN ALL NECESSARY PERMITS NOT PROVIDED IN THE BID DOCUMENTS PRIOR TO BEGINNING CONSTRUCTION.
- 2. THE CONTRACTOR IS RESPONSIBLE FOR SEDIMENT AND EROSION CONTROL. BEST MANAGEMENT PRACTICES (BMPS) MUST BE IN PLACE TO MINIMIZE EROSION AND MITIGATE POTENTIAL SEDIMENT AND OTHER POLLUTANTS SUSPENDED IN STORMWATER FROM EXITING THE SITE. BMPS MUST BE MAINTAINED AND INSPECTED REGULARLY AND REPLACED AS NEEDED. PLEASE CONSULT THE ALASKA CONSTRUCTION GENERAL PERMIT (2011 ACGP) FOR GUIDANCE.
- 3. FOLLOW ALL APPLICABLE REGULATIONS AND COORDINATE WITH PIONEERS HOME ADMINISTRATION FOR NOISE, HOURS OF OPERATION, AND DUST CONTROL, ACCESS, ETC. IT IS ALSO IMPORTANT TO NOTE THAT A PRESCHOOL IS HOUSED WITHIN THE PIONEERS HOME BUILDING AND USES THE PLAYGROUND BEHIND THE BUILDING.
- 4. UNDERGROUND UTILITIES MAY EXIST IN THE AREA THAT ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING UTILITY LOCATES PRIOR TO EXCAVATION. COORDINATE WITH THE FACILITY OWNER AND THE 811 ALASKA DIGLINE TO LOCATE UNDERGROUND UTILITIES.
- 5. DEWATERING WILL BE REQUIRED FOR ANY EXCAVATIONS THAT ENCOUNTER GROUND WATER IN VOLUMES SUFFICIENT TO NECESSITATE IT. ALL COSTS RELATED TO DEWATERING ARE THE CONTRACTOR'S RESPONSIBILITY.
- 6. NO OVER-EXCAVATION OR MINING OF MATERIALS IS ALLOWED UNLESS APPROVED IN WRITING BY THE OWNER.
- 7. ALL DAMAGE TO THE PROPERTY THAT IS CAUSED BY OR THAT RESULTS FROM CARRYING OUT THE WORK, OR FROM ANY ACT, OMISSION, OR NEGLECT OF THE CONTRACTOR, HIS SUBCONTRACTORS, OR HIS EMPLOYEES, SHALL PROMPTLY BE REMEDIED BY THE CONTRACTOR EITHER BY REPAIRING, REBUILDING, OR REPLACING OF THE PROPERTY DAMAGED OR IN SOME OTHER MANNER SATISFACTORY TO THE STATE OF ALASKA DEPARTMENT OF HEALTH AND SOCIAL SERVICES (DHSS).
- 8. SUBMIT A WORK PLAN IN WRITING TO THE OWNERS REPRESENTATIVE NOT LESS THAN TEN (10) DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS, OR WHENEVER THE CONTRACTOR PROPOSES TO CHANGE CONSTRUCTION METHODS. PROVIDE A WORK PLAN WITH INFORMATION ON SAFEGUARDS AND PROTECTION AROUND AND IN THE VICINITY OF ALL EXCAVATIONS AS MAY BE NECESSARY TO PREVENT DAMAGE TO PROPERTY, INCLUDING (BUT NOT LIMITED TO): SHORING; PLACEMENT OF FILI; STOCKPILE AND DISPOSAL OF TRENCH EXCAVATION; IMPORT/ EXPORT SCHEDULE AND PLAN (INCLUDING TRAFFIC CONTROL); ETC. THE WORK PLAN IS FOR CONSTRUCTION PURPOSES AND ITS SUBMITTAL TO AND REVIEW BY THE ENGINEER DOES NOT ABSOLVE THE CONTRACTOR OF RESPONSIBILITY OF FEDERAL, STATE, AND LOCAL REGULATIONS.
- 9. CONTRACTOR SHALL SUBMIT PLAN FOR CONSTRUCTION JOINTS.

CONSTRUCTION SPECIFICATIONS AND MATERIALS:

- 1. ALL WORK PERFORMED AND MATERIALS FURNISHED FOR THIS PROJECT WILL CONFORM TO THE ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (SSHC), 2004 EDITION, UNLESS OTHERWISE SPECIFIED ON THE PLANS OR APPROVED BY THE ENGINEER.
- 2. FURNISH ALL MATERIALS REQUIRED TO COMPLETE THE WORK.







ABBREVIATIONS

AC	ASPHALT CONCRETE
APPROX	APPROXIMATE
CB	CATCH BASIN
CONC	CONCRETE
DHSS	ALASKA DEPARTMENT OF HEALTH
	AND SOCIAL SERVICES
DIA	DIAMETER
DOT&PF	ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
EOP	EDGE OF PAVEMENT
EXIST	EXISTING
FG	FINISH GRADE
FH	FIRE HYDRANT
FT	FEET
GB	GRADE BREAK
INV	INVERT
KPH	KETCHIKAN PIONEER HOME
LF	LINEAL FEET
LT	LEFT
MAX	MAXIMUM
M.E.	MATCH EXISTING
MIN	МІЛІМИМ
Ν	NORTHING
NTS	NOT TO SCALE
0.C.	ON CENTER
RAD	RADIUS
ROW	RIGHT OF WAY
RT	RIGHT
SQ	SQUARE
SF	SQUARE FEET
SY	SQUARE YARDS
STA	STATION
SWLK	SIDEWALK
TYP	TYPICAL
W/	WITH





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101	10500.0000	19500.0000	37.311	СР	1	E.	
102	10596.8580	19586.9760	45.929	СР			
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105 42. CP	147				1	ALASKA /FMS	IONEER HOME ENOVATIONS

NO. DESCRIPTION DATE BUBLING DESCRIPTION DATE DESCRIPTION DESCRIP



1. FIELD SURVEY PERFORMED BY R&M CONSULTANTS, INC. DURING SUMMER 2014.

3. NO SITE SPECIFIC GEOTECHNICAL INVESTIGATION WAS PERFORMED FOR THIS PROJECT. CONTRACTOR TO FIELD VERIFY EXISTING SOIL CONDITIONS AND NOTIFY ENGINEER IF PLANS DO NOT MATCH EXISTING SITE CONDITIONS AS NOTED IN THE PLANS.

1. ALL DEMOLITION ITEMS, WASTE AND SCRAP SHALL BE REMOVED FROM THE PROJECT SITE AND DISPOSED OF BY THE CONTRACTOR UNLESS INDICATED OTHERWISE.

2. THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION AND REMOVAL OF ALL EXISTING ITEMS NECESSARY FOR COMPLETION OF THE PROPOSED WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE DEMOLITION LIMITS INDICATED WITH THE REQUIREMENTS FOR NEW CONSTRUCTION.

3. DHHS RESERVES THE RIGHT TO SALVAGE ITEMS FROM THE SITE PRIOR TO THE CONTRACTOR MOBILIZATION OF THE SITE. CONTRACTOR TO NOTIFY THE DHHS SEVENTY-TWO (72) HOURS PRIOR TO SITE MOBILIZATION.

IT IS RECOMMENDED THE CONTRACTOR PERFORM A SITE VISIT TO VERIFY ALL DEMOLITION ITEMS AND EXISTING SITE CONDITIONS.

THE CONTRACTOR IS RESPONSIBLE FOR ALL UTILITY LOCATES. THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES ENCOUNTERED DURING CONSTRUCTION SHALL BE RECORDED ON THE CONTRACTOR AS-BUILT DRAWINGS.

PROTECT ALL EXISTING UTILITIES AND STRUCTURES AND OTHER IMPROVEMENTS SCHEDULED TO REMAIN FROM DAMAGE.

7. AT THE INTERFACE BETWEEN CONCRETE TO BE DEMOLISHED AND CONCRETE TO REMAIN, SAW CUT CONCRETE TO PROVIDE A CLEAN EDGE FOR NEW WORK.

8. CONTRACTOR TO SALVAGE ALL METAL YARD GATES FOR REINSTALLATION.

REMOVE AND DISPOSE OF APPROXIMATELY 1,520 SF OF CONCRETE SIDEWALKS, CONCRETE RAMPS AND ASSOCIATED HANDRAILS.





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STAKING POINTS						
Τ#	NORTHING	EASTING	ELEVATION	DESCRIPTION		
5	10499.57	19681.54	44.75	EDGE OF CONC		
5	10496.75	19690.58	44.70	EDGE OF CONC		
,	10505.40	19693.16	44.65	EDGE OF CONC		
3	10508.43	19684.93	44.80	EDGE OF CONC		
)	10489.81	19687.33	44.80	EDGE OF CONC		
D	10507.64	19699.26	44.65	EDGE OF CONC		







