STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
CENTRAL REGION

PROPOSAL, CONTRACT, BOND, STANDARD MODIFICATIONS
AND SPECIAL PROVISIONS FOR:

Sterling Highway MP 173 to 174 Pavement Preservation
Project No. 0211(061)/56176
Sterling Highway MP 174 to 179 Pavement Preservation
Project No. 0211(059)/55260

As Advertised: April 14, 2014
DOCUMENT FEE: $100.00

To be used in conjunction with State of Alaska Standard Specifications for Highway Construction dated 2004, and the Plans for the above referenced project.

www.dot.alaska.gov - "Procurement"

THE STATE of ALASKA

GOVERNOR SEAN PARNELL

Department of Labor and Workforce Development
Post Office Box 111149
Juneau, Alaska 99811
Main: 907.465.2700 fax: 907.465.2784

Department of Transportation and Public Facilities
Post Office Box 112500
Juneau, Alaska 99811
Main: 907.465.3900 fax: 907.586.8365

Dear Prospective Contractor:

If you are considering bidding on an Alaska public works project, please remember the positive benefits of hiring locally. Construction, maintenance, and operation of public works projects are vital to the economic health of Alaska, and good paying jobs associated with such projects are important to Alaskans throughout the state.

Let me encourage you to pay particular attention to employment and training opportunities for residents in villages and communities in the vicinity of the project(s). As you are aware, people that live in rural Alaska do not have the same economic opportunities as those who live in urban areas. Jobs are especially critical in these communities.

One advantage to your company of hiring local residents who are veterans, welfare recipients, or unemployed is that it earns you tax credits. The Work Opportunity Tax Credit (WOTC) program is a surefire boost to local hire efforts. For more information on the tax credit program, contact your nearest Alaska Job Center, call (907) 465-5956, or visit the WOTC website, jobs.state.ak.us/wotc.htm.

The Alaska Departments of Transportation and Public Facilities, Labor and Workforce Development, the Alaska Job Center Network, and Alaska Native Coalition on Employment and Training, and Alaska's construction worker employment and training programs are all working closely together to maximize local hire through training and registered apprenticeship programs producing skilled workers using advanced industry standards.

The State of Alaska can assist by connecting you with skilled workers close to your work site. If you are awarded a contract, we will send you additional information on the business benefits of hiring locally and how to use the free Alaska Labor Exchange System to find qualified Alaska residents.

Your effort to hire locally is a show of good faith between your company and local Alaskan communities. I am sure you will find the benefits are well worth the effort. Good luck in the upcoming construction season, and thank you for putting Alaskans to work.

Sincerely,

Dianne Blumer

Dianne Blumer
Commissioner
Department of Labor
and Workforce Development

Patrick J. Kemp
Commissioner
Department of Transportation
and Public Facilities

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5. Federal Wage Rates

Federal wage rates can be obtained at http://www.wdol.gov/dba.aspx for the State of Alaska. Use the federal wage rates that are in effect 10 days before Bid Opening. The Department will include a paper copy of the federal wage rates in the signed Contract.

6. State Wage Rates

State wage rates can be obtained at http://www.labor.state.ak.us/lss/pamp600.htm. Use the State wage rates that are in effect 10 days before Bid Opening. The Department will include a paper copy of the State wage rates in the signed Contract.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

INVITATION TO BID

for Construction Contract

Date April 14, 2014

Sterling Highway MP 173 to 174 Pavement Preservation
Project No. 0211(061)/56176
Sterling Highway MP 174 to 179 Pavement Preservation
Project No. 0211(059)/55260

Location of Project: Homer, Alaska
Contracting Officer: Joel G. St. Aubin, P.E., Director, Design & Construction
Issuing Office: Central Region

State Funded [ ] Federal Aid [X]

Description of Work:

These federally funded combined projects will resurface the Sterling Highway from Pioneer Avenue (historic MP 173, CDS MP 131.956) to the end of the Homer Spit (historic MP 179.3, CDS MP 138.243), a distance of approximately 6.3 miles. The projects include improvements to curb ramps, guardrail and guardrail end treatments, ATRs, drainage, signage, and striping.

The Engineer's Estimate is between **$5,000,000 and $10,000,000**
All work shall be completed by: **June 30, 2015.**
Interim Completion dates, if applicable, will be shown in the Special Provisions.

Bidders are invited to submit sealed bids, in single copy, for furnishing all labor, equipment, and materials and for performing all work for the project described above. Bids will be opened publicly at 2:00 pm local time, in the main conference room, 4111 Aviation Avenue, Anchorage, Alaska on May 7, 2014.

SUBMISSION OF BIDS

ALL BIDS INCLUDING ANY AMENDMENTS OR WITHDRAWALS MUST BE RECEIVED PRIOR TO BID OPENING. BIDS SHALL BE SUBMITTED ON THE FORMS FURNISHED AND MUST BE IN A SEALED ENVELOPE MARKED AS FOLLOWS:

Bid for Project: **Sterling Highway MP 173 to 174 Pavement Preservation** **Project No. 0211(061)/56176** **Sterling Highway MP 174 to 179 Pavement Preservation** **Project No. 0211(059)/55260**	**ATTN: Contracts** **State of Alaska** **Department of Transportation & Public Facilities** **P.O. Box 196900** **Anchorage, AK 99519-6900**

Bids, amendments or withdrawals transmitted by mail must be received in the above specified post office box no later than 7 hours prior to the scheduled time of bid opening. Hand-delivered bids, amendments or withdrawals must be received by **Sharon L. Smith P.E., Chief of Contracts** at the Contracts Section, 4111 Aviation Avenue, prior to the scheduled time of bid opening. Faxed bid amendments must be addressed to **Sharon L. Smith, P.E., Chief of Contracts**. Fax number: (907) 269-0425.

A bid guaranty is required with each bid in the amount of 5% of the amount bid. (Alternate bid items as well as supplemental bid items appearing on the bid schedule shall be included as part of the total amount bid when determining the amount of bid guaranty required for the project.)

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:

See attached Special Notice to Bidders for this project.

Plans and Specifications may be ordered, for the price of **$100.00** from:

State of Alaska, Department of Transportation & Public Facilities
Plans Room
4111 Aviation Avenue
P.O. Box 196900
Anchorage, AK 99519-6900

Phone: (907) 269-0408

All questions relating to design features, constructability, quantities, or other technical aspects 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:

Sean Baski, P.E. Phone: (907) 269-0547 Fax: (907) 243-4409

All questions concerning bidding procedures should be directed to:

Sharon L. Smith, P.E.
Chief of Contracts
P.O. Box 196900
Anchorage, AK 99519-6900

Phone: (907) 269-0414

The Bid Calendar, Planholder lists, Bid Results and DBE information are available on the Internet at: www.dot.alaska.gov under Procurement.

This project was designed in the US customary (USC) units. Inspection will take place in USC units. Submittals must be provided in USC units.

To report bid rigging activities call: 1-800-424-9071.

The U.S. Department of Transportation (DOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m., Eastern time. Anyone with knowledge of possible rigging, bidder collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

The **2004 Standard Specifications for Highway Construction** can be obtained at **http://dot.state.ak.us/stwddes.dcsspecs/assets/pdf/hwyspecs/2004sshc.pdf**

SPECIAL NOTICE TO BIDDERS

The Department hereby notifies bidders that information to assist in bid preparation is available from the Department of Transportation and Public Facilities, Anchorage office, located at 4111 Aviation Avenue.

1. Publications. The following are available from the Plans Room or for download online:

   a. Standard Specifications for Highway Construction, 2004 Edition. Available online at: http://www.dot.state.ak.us/stwddes/dcsspecs/assets/pdf/hwyspecs/2004sshc.pdf
   b. Alaska Test Methods Manual (Lab & Field), April 30, 2012 Edition ($25.00). Available online at: http://www.dot.state.ak.us/stwddes/desmaterials/mat_waqtc/pop_testman.shtml
   c. Alaska Storm Water Pollution Prevention Plan Guide, February, 2011. http://www.dot.state.ak.us/stwddes/desenviron/pop_swppp.shtml
   d. Quantity Computations
   e. Erosion, Sediment Control Plan (ESCP) For Sterling Highway: MP 174-179 Pavement Preservation, Project Number 0211(059)/55260, February 2014, USKH
   f. Erosion, Sediment Control Plan (ESCP)- Sterling Highway MP 173 to 174 Pavement Preservation, Project No. 56176, February 2014, DOWL HKM.
   g. Traffic Control Plan (TCP). Sterling Highway MP 173 to 174 Pavement Preservation, Project No. 0211(061)/56176, and Sterling Highway MP 174 to 179 Pavement Preservation, Project No. 0211(059)/55260, February 2014, DOWL HKM.

2. Materials Certification List (MCL). The MCL provides the Engineer with the appropriate approving authority. Contractor, submit certification for each material to the Engineer. The MCL is included in Appendix __C__.

3. Environmental Documents. The Department has approved an environmental document addressing concerns and environmental commitments. This document is available for review in the Department Section of Preliminary Design and Environmental. (907) 269-0542.

4. Laborers Mechanics Minimum Rate of Pay. The current Laborers Mechanics Minimum Rate of Pay contains information on remote sites and per diem. The Department of Labor has issued WHPL #197, which further clarifies this requirement. See pay item 640(4).

5. Section 120, Disadvantaged Business Enterprise (DBE) Program. Effective for FHWA funded projects advertised on or after February 1, 2014; there is a revised Standard Modification E114 for Section 120 DBE Program, and a revised Bidder Registration Form 25D-6.

   Contractors are encouraged to review the construction and contract forms and the revised Standard Modification E114 for Section 120 DBE Program. There are new sections on the DBE decertification process, the termination of a DBE on a project, a revised DBE Replacement or Substitution section, and a revised definition for Commercially Useful Functions. See also the revised Bidder Registration Form 25D-6.

   The process for establishing mandatory vs. voluntary contact for DBEs has changed. The mandatory contacts list is established by interested certified DBEs self registering on the plan holder's list within seven (7) days of contract advertisement. Bidders are required to contact all DBEs listed as DBE – Mandatory Contact on the plan holder's list, at least seven (7) calendar days prior to bid opening. Bidders must give DBE's at least seven (7) calendar days to quote.

   A guide (title "**Plan Holder Self Registration List**") has been placed on the Civil Rights website http://www.dot.state.ak.us/cvlrts/index.shtml. This offers further instructions and guidance about these program changes.

   Any questions about this notice may be directed to Dennis Good, Manager of the Civil Rights Office, (907) 269-0848, or email dennis.good@alaska.gov.

6. DBE Program Waiver - Central Region Projects. The US DOT Waiver for the DBE Program has been implemented on Central Region Projects since August 1, 2011. The DBE Program Waiver approved by USDOT addresses the issue identified in the Department's Disparity Study which found that DBE firms that are owned by Non-Minority Women were participating on the Department's construction contracts and subcontracts on an equal basis similar to other non-DBE contractors and non-DBE subcontractors for Central Region only.

   As a result, DBE contract goals cannot be met through the use of female caucasian owned DBEs. This Waiver does not affect DBE project goals for airports or transit projects anywhere in Alaska, and does not apply to professional service agreements or highway construction projects in Northern or Southeast Regions.

   The decision to continue or discontinue the use of the Waiver will be made on an annual basis.

   Any questions about this notice may be directed to Dennis Good, Manager of the Civil Rights Office, (907) 269-0848, or email dennis.good@alaska.gov.

7. Utilities.

   a. **Agreements and Dispositions**. Utility Agreements and dispositions are available for review at the office of the Utilities Engineer, (907) 269-0650. Copies may be available, coordinate with the Utility Engineer.

   b. **Utilities, and Erosion, Sediment and Pollution Control.** Utilities will be relocated by others concurrently with construction of this project. The Contractor is responsible for the coordination with Other Contractor's and for control of erosion, sediment and pollution including stabilization of areas disturbed during utility relocation, as described in Section 105-1.06.

      The Contractor will identify, in their SWPPP, other work that is or will occur inside or adjacent to the project limits during the contract period.

8. Asphalt Laydown Temperatures. The Department may monitor laydown temperatures using a thermal imaging camera. Unsatisfactory areas will be subject to additional testing and/or replacement at the Contractor's expense as specified in Division 400.

9. High Visibility Garments. The Department requires all workers within the project limits to wear an outer visible surface or layer of high visibility color and retroreflectivity. See subsection 643-3.11.

10. Asphalt Material Price Adjustment – Unit Price. The unit price adjustment for asphalt material will be combined and paid under one Pay Item. Refer to Sections in Division 300 and 400 that include an Asphalt Material Price Adjustment – Unit Price Pay Item.

11. Surface Tolerance. Pavement smoothness is measured and reported as International Roughness Index (IRI) Refer to Section 401 and 408 for further information.

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

REQUIRED DOCUMENTS

Federal-Aid Contracts

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 25D-9)**
2. **Bid Schedule**
3. **Bid Security**
4. Any bid revisions must be submitted by the bidder prior to bid opening on the following form:

   Bid Modification (Form 25D-16)

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

1. **Subcontractor List (Form 25D-5)**
2. **DBE Utilization Report (Form 25A-325C)**
3. When Form 25A-325C indicates less than the stated goal for the project, the successful bidder shall submit documentation of efforts in meeting the goal by submitting the following:

   Summary of Good Faith Effort Documentation (Form 25A-332A), and

   Contact Reports (Form 25A-321A), as required the initial contact must be made within 7 calendar days prior to bid opening.
4. For each DBE to be used on the project, submit a **DBE Commitment (Form 25A-326)**

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. **Construction Contract (Form 25D-10A)**
2. **Payment Bond (Form 25D-12)**
3. **Performance Bond (Form 25D-13)**
4. **Contractor's Questionnaire (25D-8)**
5. **Certificate of Insurance** (from carrier)
6. **EEO-1 Certification (Form 25A-304)**
7. On projects that include bid item 645, Training Program, the successful bidder shall submit the following:

   Training Utilization Report (Form 25A-311), and/or

   DOT&PF Training Program Request (Form 25A-310), if required
8. On Federal-aid highway projects: **Material Origin Certificate (Form 25D-60)**
9. On Federal-aid airport projects: **Buy American Certificate (Form 25D-61)**
10. Bidders must register annually with the Civil Rights Office in order to be eligible for award. If not registered, or if unsure, submit the following: **Bidder Registration (Form 25D-6)**

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

FEDERAL EEO BID CONDITIONS

STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS FOR ALL NON-EXEMPT FEDERAL AND FEDERALLY-ASSISTED CONSTRUCTION CONTRACTS TO BE AWARDED IN THE STATE OF ALASKA

Authority and Guidelines.

The Alaska Department of Transportation & Public Facilities (Department), as a State Transportation Agency (STA), has authority under 23 U.S.C. 140 and its implementing regulations to conduct a compliance program addressing Equal Employment Opportunity (EEO) and Affirmative Action (AA) in employment on non-exempt federal and federally-assisted construction contracts that are awarded in the State of Alaska. The STA's authority to administer a contract compliance with Nondiscrimination, EEO and AA programs are authorized under 23 U.S.C., 49 U.S.C., Title VI of the Civil Rights Act of 1964, TEA-21 and implementing regulations. The provisions of 23 CFR 200 and 49 CFR 21 provide authority to determine, and where necessary obtain compliance with the nondiscrimination provisions of Title VI. Under the provisions of Title VI, 23 USC and related regulations, including 49 CFR 21 and 26, and 23 CFR Part 200, 230 and 633, it is the STA's responsibility to ensure compliance with and to enforce on all projects of Federal-aid contractors and subcontractors, whether a particular contract or work-site involves Federal-aid funds or not.

These citations confirm the requirement for contractors to provide, and States to obtain information that ensure non-discrimination in employment on all of Federal and federally-assisted projects, and through these provisions, provide for EEO for minorities and women in all terms and conditions of their employment at all of their facilities and on all projects.

1. Definitions. As used in these specifications:

   a. "**Covered area**" means the geographical area described in the solicitation from which this contract resulted;

   b. **"Employer identification number"** means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.

   c. "**Minority**" includes:

      (1) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);

      (2) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish culture or origin, regardless of race);

      (3) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and

      (4) American Indian or Alaska Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

2. Whenever the Contractor, or any subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of $10,000 the provisions of these specifications and which is set forth in the solicitations from which this contract resulted.

3. The Contractor will submit in writing verification that the EEO Officer, project supervisor/foreman or other designated personnel responsible for civil rights have satisfactorily completed the Department's Civil Rights Training module, or will present assurances that training will be completed within three (3) months of the Preconstruction Conference.
4. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the DOL in the covered area, either individually or through an association, its affirmative action obligations on all work in the Plan area shall be in accordance with that Plan for those trades that have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make good faith effort to achieve an equal representation of minority and female employment under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or subcontractors in an approved Plan does not excuse any covered Contractor's or subcontractor's failure to make good faith efforts to achieve the Plan.

5. The Contractor shall implement the specific affirmative action standards provided in paragraphs 6(a) through 6(p) of these specifications.

6. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:

    a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligations to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.

    b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.

    c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractor may have taken.

    d. Provide immediate written notification to the Civil Rights Office's Contract Compliance Officer when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.

    e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 6(b) above.

f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with on-site supervisory personnel such as Superintendent, general foreman, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and dispositions of the subject matter.

h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.

i. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's workforce.

k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.

l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.

m. Ensure that seniority practices, job classifications, work assignments and other personnel practices do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.

n. Ensure that all facilities and company activities are nonsegregated except that separate or single-used toilet, necessary changing facilities and necessary sleeping facilities shall be provided to assure privacy between the sexes.

o. Document and maintain a record of all solicitations of offers for subcontractors from minority and female construction contractors and suppliers, including circulations of solicitations to minority and female contractor associations and other business associations.

p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.

7. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations 6(a) through 6(p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the Contractor is a member and participant, may be asserted as fulfilling any or more of its obligations under 6(a) through 6(p) of these specifications provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female work force participation, makes a good faith effort to meet its individual EEO obligations, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.

8. The Contractor is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation if a particular group is employed in a substantially disparate manner.

9. The Contractor shall not use the equal employment or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.

10. The Contractor shall not enter into any subcontract with any person or firm debarred from government contracts.

11. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in item 6(a-p) above, so as to achieve maximum results from its efforts to ensure equal employment opportunities.

12. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic apprentice, trainees, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that the existing records satisfy this requirement, Contractors shall not be required to maintain separate records.

13. Nothing herein provided shall be construed as a limitation upon the application of other laws that establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Programs).

14. The Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.

15. EEO/AA obligations are applicable to all of the Contractor's construction work (whether or not it is federal or federally-assisted) performed in the covered area. The hours on minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of equalizing minority and female employment percentages shall be a violation of the contract. Compliance with equal minority and female employment utilization will be measured against the total work hours performed.

16. The Contractor shall provide written notification to the Department, for all subcontracts documents as follows: the name, address and telephone number of subcontractors and their employer identification number; the estimated dollar amount of the subcontracts; estimated starting and completion dates of the subcontracts; and the geographical area in which the contract is to be performed.

This written notification shall be required for all construction subcontracts in excess of $10,000 at any tier for construction work under the contract resulting from this project's solicitation.

17. As used in the Bid Notice, and in the contract resulting from this project's solicitation, the "covered area" is the State of Alaska.

Form 25A-324 (8/01)

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

DISADVANTAGED BUSINESS ENTERPRISE (DBE) SUBCONTRACTABLE ITEMS

Federal-Aid Contracts

Sterling Highway MP 173 to 174 Pavement Preservation
Project No. 0211(061)/56176
Sterling Highway MP 174 to 179 Pavement Preservation
Project No. 0211(059)/55260

The original DBE Utilization Goal for this project is: 10.8 % of the basic bid amount.
The following is the list of subcontractable items by category/subcategory that must be considered under Section 120, DBE Program, Good Faith Effort Criteria.

BID ITEM NO.	DESCRIPTION OF WORK OR PORTION OF WORK	CATEGORY
201 (1B)	Clearing	Clearing/Grubbing (Mechanical)-Construction
606 (1)	W-Beam Guardrail	Guardrail – Construction
606 (6)	Removing and Disposing of Guardrail	Guardrail – Construction
606 (13)	Parallel Guardrail Terminal	Guardrail – Construction
608 (1a)	Concrete Sidewalk, 4 Inches Thick	Concrete-Curb/Gutter/Sidewalk-Construction
608 (6)	Curb Ramp	Concrete-Curb/Gutter/Sidewalk-Construction
608 (8)	Asphalt Pathway and Medians	Asphalt Paving-Bike Paths-Construction
608 (10)	Detectable Warning Tiles	Concrete-Curb/Gutter/Sidewalk-Construction
609 (2)	Curb and Gutter, Type 1	Concrete-Curb/Gutter/Sidewalk-Construction
615 (1)	Standard Sign	Standard HWY Signs (Perm Installation)- Construction
642 (1)	Construction Surveying	Surveying Licensed – Construction

(Continued on Reverse Side)

Form 25A-324 (8/01)

BID ITEM NO.	DESCRIPTION OF WORK OR PORTION OF WORK	CATEGORY
642 (16)	Passing Sight Distance Measurement	Surveying Licensed – Construction
643 (3)	Permanent Construction Signs	Standard HWY Signs (Perm Installation)-Construction
669 (4-H1)	Traffic Data – Site H1	Electrical-Highway Signals & Illumination-Construction
669 (4-H2)	Traffic Data – Site H2	Electrical-Highway Signals & Illumination-Construction
669 (4-H3)	Traffic Data – Site H3	Electrical-Highway Signals & Illumination-Construction
669 (4-H4)	Traffic Data – Site H4	Electrical-Highway Signals & Illumination-Construction

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

SUBCONTRACTOR LIST

Sterling Highway MP 173 to 174 Pavement Preservation
Project No. 0211(061)/56176
Sterling Highway MP 174 to 179 Pavement Preservation
Project No. 0211(059)/55260

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 above-referenced project will be accomplished without subcontracts greater than ½ 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 SUBCONTRACTOR INFORMATION ON REVERSE

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 Registrations 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**

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

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
Civil Rights Office – DBE Program

BIDDER REGISTRATION

All firms are required to submit a Bidder's Registration form before an Alaska Department of Transportation and Public Facilities (DOT&PF) project can be awarded. The Bidder Registration form must be submitted to the Civil Rights Officer (CRO) on an annual basis by January 1 and is valid thru December 31. Complete this form for each contractor and subcontractor. Firms will be listed on the bidder registration online directory http://www.dot.state.ak.us/cvlrts/bidreg.shtml.

Name of Firm: _____

Street Address: _____

Mailing Address: _____

Contact Name: _____

Telephone Number: _____

Fax number: _____

E-mail Address: _____

Date Firm was Established: _____

The firm listed above is a (check all that apply)**:**

Prime Contractor?	☐	
Subcontractor?	☐	Identify specialty: _____
Service Provider?	☐	Identify service: _____
Material Supplier?	☐	Identify material: _____
Manufacturer?	☐	Identify product: _____
Certified DBE? *	☐	*DBE- Disadvantaged Business Enterprise
Self-Certified SBE? *	☐	*SBE- Small Business Enterprise *(Complete page 2 of this form.)*

Firm's gross annual receipts:

☐ < $500,000
☐ $500,000- $999,999
☐ $1,000,000- $4,999,999
☐ $5,000,000- $9,999,999
☐ $10,000,000- $16,999,999
☐ > $17,000,000

Type of contracts/proposals bid by the firm (check all that apply):

☐ Highways ☐ Airports ☐ Transit ☐ AMHS

Signature of Company Representative	**Title**	**Date**

Send this completed form to:
ADOT&PF Civil Rights Office
PO Box 196900
Anchorage, Alaska 99519-6900

OR

You may fax your completed form to:
(907) 269-0847

If you have any questions, please call **(907) 269-0851**.

SMALL BUSINESS ENTERPRISE PROGRAM (SBE) BIDDER'S REGISTRATION

[Complete the below only if you are a Self-Certified SBE Firm] All businesses are required to submit a SBE Bidder's Registration form before a DOT&PF contract can be awarded. The bidder's Registration from must be submitted on an annual basis by January 1 and is valid thru December 31.

In order to verify your firm's compliance with business size standards under 49 CFR 26.67(2)(i) and 26.65(b), ***at the time of award*** you will be required to submit the following documents:

- SBE Affidavit of Certification Eligibility
- Personal Financial Statement
- Past three years of your corporations and/or individual tax returns
- If not a certified DBE, please provide documentation that you are self-certified as a small business (please contact Procurement Technical Assistance Center (PTAC) at 907-274-7232 if you require assistance on becoming a self-certified small business)

At time of award send required documentation to:

DOT&PF Civil Rights Office
Attn: Certification
PO Box 196900
Anchorage, Alaska 99519-6900
Fax: (907) 269-0847

Fostering Small Business Participation (SBE) (49 CFR 26.39):
To meet the requirements of 49 CFR 26.39, DOT&PF has implemented a Small Business Enterprise Program. This component is only applicable to federally funded projects.

A. SBE Directory Information

1. Can you verify at time of award that your firm does not exceed the business size standards of $22.41 million for the last three years of gross annual receipts per 49 CFR 26.65(b)? [ ]Yes [ ] No*

**If you marked "No" you do not qualify for the SBE Program*

2. Can you verify at time of award that your firm does not exceed the personal net worth standards of $1.32 million per 49 CFR 26.67(2)(i)? [ ]Yes [ ] No*

**If you marked "No" you do not qualify for the SBE Program*

3. Contact Info.

_____ Name of Firm	_____ Contact Name
_____ Telephone Number	_____ Fax Number
_____ Email Address	_____ Company Website

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

CONTRACTOR'S QUESTIONNAIRE

Sterling Highway MP 173 to 174 Pavement Preservation
Project No. 0211(061)/56176
Sterling Highway MP 174 to 179 Pavement Preservation
Project No. 0211(059)/55260

A. FINANCIAL

1. 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

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. EXPERIENCE

1. 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. List, as an attachment to this questionnaire, other 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 TRANSPORTATION AND PUBLIC FACILITIES

BID FORM

For

Sterling Highway MP 173 to 174 Pavement Preservation
Project No. 0211(061)/56176
Sterling Highway MP 174 to 179 Pavement Preservation
Project No. 0211(059)/55260

by

Company Name

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

TO THE CONTRACTING OFFICER,
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES:

In compliance with your Invitation to Bid dated **April 14, 2014**, 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 **Homer, Alaska**, according to the plans and specifications and for the amount and prices named herein as indicated on the Bid Schedule consisting of **4** sheets, 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 Transportation and Public Facilities 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 within **N/A** calendar days, after the effective date of the Notice to Proceed, or by **June 30, 2015,** unless extended in writing by the Contracting Officer.

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

The Undersigned acknowledges receipt of the following addenda to the drawings and/or specifications (give number and date of each).

Addendum Number	Date Issued	Addendum Number	Date Issued	Addendum Number	Date Issued

NON-COLLUSION DECLARATION

The Undersigned declares, under penalty of perjury under the laws of the United States, that neither he nor the firm, association, or corporation of which he is a member, has, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with this bid.

The Undersigned has read the foregoing and hereby agrees to the conditions stated therein by affixing his signature below:

_____
Signature of Authorized Company Representative

_____
Typed Name and Title

( ) _____ ( ) _____
Phone Number **Fax Number**

State of Alaska Department of Transportation & Public Facilities Central Region	**BID SCHEDULE**	Sterling Hwy MP 173-174 Pavement Preservation and Sterling Hwy MP 174-179 Pavement Preservation AKSAS No.: 56176&55260 Federal No.: 0211(061)/0211(059)

Before preparing this bid schedule, read carefully, Section 102 of the 2004 State of Alaska Standard Specifications for Highway Construction and the following: The Bidder shall insert, as called for, a unit price or a lump sum price in figures opposite each Pay Item for which an estimated quantity appears in the Bid Schedule. A unit price or lump sum price is not to be entered or tendered for any Pay Item not appearing in the Bid Schedule. The Estimated Quantity of work for payment on a lump sum basis will be "All Required" and as further specified in the Contract. Wherever a contingent sum is shown for any item in this Bid Schedule, such amount shall govern and be included in the Bid Total.

Conditioned or qualified bids will be considered Non-Responsive.

Contract award will be made on the basis of the Basic Bid.

The DBE Utilization Goal for this project is 10.8% of the total contract award amount.

The bidder shall insert a unit bid price for each pay item listed below. Type or print legibly.

Basic Bid

Item No.	Item Description	Unit	Quantity	Unit Bid Price	Amount Bid
201 (1B)	CLEARING	LUMP SUM	All Req'd.	LUMP SUM	
202 (2)	REMOVAL OF PAVEMENT	SQUARE YARD	14,337		
202 (3)	REMOVAL OF SIDEWALK	SQUARE YARD	256		
202 (4)	REMOVAL OF CULVERT PIPE	LINEAR FOOT	575		
202 (8)	REMOVAL OF INLET	EACH	8		
202 (9)	REMOVAL OF CURB AND GUTTER	LINEAR FOOT	1,552		
202 (15)	PAVEMENT PLANING	SQUARE YARD	125,547		
202 (40)	REMOVE FUGITIVE MATERIALS	LINEAR FOOT	25,649		
203 (3)	UNCLASSIFIED EXCAVATION	CUBIC YARD	3,010		
203 (6A)	BORROW, TYPE A	TON	4,279		
203 (27)	DITCH LINEAR GRADING	STATION	85		
301 (1)	AGGREGATE BASE COURSE, GRADING D-1	TON	1,124		
308 (1)	CRUSHED ASPHALT BASE COURSE	SQUARE YARD	11,000		
401 (1A)	HOT MIX ASPHALT, TYPE II, CLASS A	TON	16,332		
401 (2)	ASPHALT CEMENT, GRADE PG 58-34	TON	899		

State of Alaska Department of Transportation & Public Facilities Central Region	**BID SCHEDULE**	Sterling Hwy MP 173-174 Pavement Preservation and Sterling Hwy MP 174-179 Pavement Preservation AKSAS No.: 56176&55260 Federal No.: 0211(061)/0211(059)

The bidder shall insert a unit bid price for each pay item listed below. Type or print legibly.

Basic Bid

Item No.	Item Description	Unit	Quantity	Unit Bid Price	Amount Bid
401 (6)	ASPHALT PRICE ADJUSTMENT - QUALITY	CONTINGENT SUM	All Req'd.	CONTINGENT SUM	**120,000.00**
401 (10)	ASPHALT MATERIAL PRICE ADJUSTMENT - UNIT PRICE	CONTINGENT SUM	All Req'd.	CONTINGENT SUM	**0.00**
603 (1-18)	18 INCH CSP	LINEAR FOOT	588		
603 (1-24)	24 INCH CSP	LINEAR FOOT	10		
603 (3-18)	END SECTION FOR 18 INCH CSP	EACH	1		
603 (3-24)	END SECTION FOR 24 INCH CSP	EACH	1		
603 (22)	CULVERT CLEANING	LINEAR FOOT	3,611		
604 (4)	ADJUST EXISTING MANHOLE	EACH	23		
604 (5)	INLET, TYPE A	EACH	8		
606 (1)	W-BEAM GUARDRAIL	LINEAR FOOT	3,035		
606 (6)	REMOVING AND DISPOSING OF GUARDRAIL	LINEAR FOOT	3,848		
606 (13)	PARALLEL GUARDRAIL TERMINAL	EACH	14		
608 (1a)	CONCRETE SIDEWALK, 4 INCHES THICK	SQUARE YARD	110		
608 (6)	CURB RAMP	EACH	13		
608 (8)	ASPHALT PATHWAY AND MEDIANS	TON	84		
608 (10)	DETECTABLE WARNING TILES	SQUARE FOOT	80		
609 (2)	CURB AND GUTTER, TYPE 1	LINEAR FOOT	1,552		
610 (2)	DITCH LINING	TON	3,123		
611 (1A)	RIP RAP, CLASS 1A	CUBIC YARD	3,155		
611 (1B)	RIP RAP, CLASS IV	CUBIC YARD	2,445		
611 (3)	SALVAGE AND REPLACE EXISTING ARMOR STONE	STATION	5		
615 (1)	STANDARD SIGN	SQUARE FOOT	933		
618 (2)	SEEDING	POUND	70		
618 (3)	WATER FOR SEEDING	MGAL	50		

State of Alaska Department of Transportation & Public Facilities Central Region	**BID SCHEDULE**	Sterling Hwy MP 173-174 Pavement Preservation and Sterling Hwy MP 174-179 Pavement Preservation AKSAS No.: 56176&55260 Federal No.: 0211(061)/0211(059)

The bidder shall insert a unit bid price for each pay item listed below. Type or print legibly.

Basic Bid

Item No.	Item Description	Unit	Quantity	Unit Bid Price	Amount Bid
620 (1)	TOPSOIL	SQUARE YARD	5,626		
627 (10)	ADJUSTMENT OF VALVE BOX	EACH	2		
630 (1)	GEOTEXTILE SEPARATION	SQUARE YARD	4,690		
639 (6)	APPROACH	EACH	16		
640 (1)	MOBILIZATION AND DEMOBILIZATION	LUMP SUM	All Req'd.	LUMP SUM	
640 (4)	WORKER MEALS AND LODGING, OR PER DIEM	LUMP SUM	All Req'd.	LUMP SUM	
641 (1)	EROSION, SEDIMENT, AND POLLUTION CONTROL ADMINISTRATION	LUMP SUM	All Req'd.	LUMP SUM	
641 (2)	TEMPORARY EROSION, SEDIMENT, AND POLLUTION CONTROL	CONTINGENT SUM	All Req'd.	CONTINGENT SUM	**269,000.00**
641 (6)	WITHHOLDING	CONTINGENT SUM	All Req'd.	CONTINGENT SUM	**0.00**
641 (7)	SWPPP MANAGER	LUMP SUM	All Req'd.	LUMP SUM	
642 (1)	CONSTRUCTION SURVEYING	LUMP SUM	All Req'd.	LUMP SUM	
642 (3)	THREE PERSON SURVEY PARTY	HOUR	110		
642 (16)	PASSING SIGHT DISTANCE MEASUREMENT	STATION	448		
643 (2)	TRAFFIC MAINTENANCE	LUMP SUM	All Req'd.	LUMP SUM	
643 (3)	PERMANENT CONSTRUCTION SIGNS	LUMP SUM	All Req'd.	LUMP SUM	
643 (15)	FLAGGING	CONTINGENT SUM	All Req'd.	CONTINGENT SUM	**225,000.00**
643 (23)	TRAFFIC PRICE ADJUSTMENT	CONTINGENT SUM	All Req'd.	CONTINGENT SUM	**0.00**
643 (25)	TRAFFIC CONTROL	CONTINGENT SUM	All Req'd.	CONTINGENT SUM	**435,190.00**
644 (1)	FIELD OFFICE	LUMP SUM	All Req'd.	LUMP SUM	
644 (10)	ENGINEERING COMMUNICATIONS	CONTINGENT SUM	All Req'd.	CONTINGENT SUM	**2,000.00**
645 (1)	TRAINING PROGRAM, 1 TRAINEES/APPRENTICES	LABOR HOUR	500		
646 (1)	CPM SCHEDULING	LUMP SUM	All Req'd.	LUMP SUM	
646 (2)	SCHEDULE PRICE ADJUSTMENT	CONTINGENT SUM	All Req'd.	CONTINGENT SUM	**0.00**

State of Alaska Department of Transportation & Public Facilities Central Region	**BID SCHEDULE**	Sterling Hwy MP 173-174 Pavement Preservation and Sterling Hwy MP 174-179 Pavement Preservation AKSAS No.: 56176&55260 Federal No.: 0211(061)/0211(059)

The bidder shall insert a unit bid price for each pay item listed below. Type or print legibly.

Basic Bid

Item No.	Item Description	Unit	Quantity	Unit Bid Price	Amount Bid
647 (5)	BACKHOE, 4WD, 1 CY BUCKET, 75 HP, 15 FT DEPTH	CONTINGENT SUM	All Req'd.	CONTINGENT SUM	**50,000.00**
651 (1)	EAGLE MONITORING	CONTINGENT SUM	All Req'd.	CONTINGENT SUM	**15,000.00**
669 (4-H1)	AUTOMATED TRAFFIC RECORDERS - SITE H1	LUMP SUM	All Req'd.	LUMP SUM	
669 (4-H2)	AUTOMATED TRAFFIC RECORDERS - SITE H2	LUMP SUM	All Req'd.	LUMP SUM	
669 (4-H3)	AUTOMATED TRAFFIC RECORDERS - SITE H3	LUMP SUM	All Req'd.	LUMP SUM	
669 (4-H4)	AUTOMATED TRAFFIC RECORDERS - SITE H4	LUMP SUM	All Req'd.	LUMP SUM	
670 (10A)	MMA PAVEMENT MARKINGS, LONGITUDINAL SURFACE APPLIED	LINEAR FOOT	110,410		
670 (10B)	MMA PAVEMENT MARKINGS, SYMBOLS AND ARROW(S) SURFACE APPLIED	EACH	50		
670 (10C)	MMA PAVEMENT MARKINGS, TRANSVERSE AND GORE SURFACE APPLIED	LINEAR FOOT	4,082		
670 (10F)	MMA PAVEMENT MARKINGS, TRANSVERSE AND GORE INLAID	LINEAR FOOT	4,800		
682 (1)	VAC-TRUCK POTHOLE	CONTINGENT SUM	All Req'd.	CONTINGENT SUM	**20,000.00**
	Total Basic Bid				$

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

CONSTRUCTION CONTRACT

Sterling Highway MP 173 to 174 Pavement Preservation
Project No. 0211(061)/56176
Sterling Highway MP 174 to 179 Pavement Preservation
Project No. 0211(059)/55260

This CONTRACT, between the STATE OF ALASKA, DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES, 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, on or before: _____ or within _____ calendar days. 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 _____ Dollars ($_____) 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, and $_____ Performance Bond, to secure the proper compliance with the terms and provisions of this Contract, are submitted herewith and made a part hereof.

IN WITNESS WHEREOF, the parties hereto have executed this Contract and hereby agree to its terms and conditions.

CONTRACTOR

Company Name

Signature of Authorized Company Representative

Typed Name and Title

Date

(Corporate Seal)

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

Signature of Contracting Officer

Typed Name

Date

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

PAYMENT BOND

Bond No. _____

For

Sterling Highway MP 173 to 174 Pavement Preservation
Project No. 0211(061)/56176
Sterling Highway MP 174 to 179 Pavement Preservation
Project No. 0211(059)/55260

NOW ALL WHO SHALL SEE THESE PRESENTS:

That _____

of _____ as Principal,

and _____

of _____ as Surety,

firmly bound and held unto the State of Alaska in the penal sum of

_____ Dollars

($_____) good and lawful money of the United States of America for the payment whereof, well and truly to be paid to the State of Alaska, we bind ourselves, our heirs, successors, executors, administrators, and 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 construction of the above-referenced project, said work to be done according to the terms of said contract.

Now, THEREFORE, the conditions of the foregoing obligation are such that if the said Principal shall comply with all requirements of law and pay, as they become due, all just claims for labor performed and materials and supplies furnished upon or for the work under said contract, whether said labor be performed and said materials and supplies be furnished under the original contract, any subcontract, or any and all duly authorized modifications thereto, 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 _____, _____ this _____ day of _____ A.D., 20_____.

Principal: _____

Address: _____

By: _____

Contact Name: _____

Phone: ( ) _____

Surety: _____

Address: _____

By: _____

Contact Name: _____

Phone: ( ) _____

The offered bond has been checked for adequacy under the applicable statutes and regulations:

_____ _____

Alaska Department of Transportation & Public Facilities Authorized Representative **Date**

See Instructions on Reverse

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 Contracting Officer.

2. The full legal name, business address, phone number, and point of contact of the Principal and Surety shall be typed 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 typed 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 Contracting Officer.

5. The bond shall be signed by authorized persons. Where such persons are 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.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

PERFORMANCE BOND

Bond No. _____

For

Sterling Highway MP 173 to 174 Pavement Preservation
Project No. 0211(061)/56176
Sterling Highway MP 174 to 179 Pavement Preservation
Project No. 0211(059)/55260

KNOW ALL WHO SHALL SEE THESE PRESENTS:

That _____

of _____ as Principal,

and _____

of _____ as Surety,

firmly bound and held unto the State of Alaska in the penal sum of

_____ Dollars

($_____) good and lawful money of the United States of America for the payment whereof, well and truly to be paid to the State of Alaska, we bind ourselves, our heirs, successors, executors, administrators, and 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 construction of the above-named project, said work to be done according to the terms of said contract.

Now, THEREFORE, the conditions of the foregoing obligation are 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 _____, _____ this _____ day of _____ A.D., 20_____.

Principal: _____

Address: _____

By: _____

Contact Name: _____

Phone: ( ) _____

Surety: _____

Address: _____

By: _____

Contact Name: _____

Phone: ( ) _____

The offered bond has been checked for adequacy under the applicable statutes and regulations:

_____ _____

Alaska Department of Transportation & Public Facilities Authorized Representative **Date**

See Instructions on Reverse

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 Contracting Officer.

2. The full legal name, business address, phone number, and point of contact of the Principal and Surety shall be typed 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 typed 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 Contracting Officer.

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.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

BID BOND

For

Sterling Highway MP 173 to 174 Pavement Preservation
Project No. 0211(061)/56176
Sterling Highway MP 174 to 179 Pavement Preservation
Project No. 0211(059)/55260

DATE BOND EXECUTED: _____

PRINCIPAL (Legal name and business address):	TYPE OF ORGANIZATION:
	[ ] Individual [ ] Partnership [ ] Joint Venture [ ] Corporation
	STATE OF INCORPORATION:

SURETY(IES) (Name and business address):

A.	B.	C.

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 the above-referenced Project in accordance with contract documents filed in the office of the Contracting Officer, and under the Invitation To Bid 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.**
			Corporate Seal

See Instructions on Reverse

CORPORATE SURETY(IES)

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

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

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

INSTRUCTIONS

1. This form shall be used whenever a bid bond is submitted.
2. 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 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.
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.
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.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

BID MODIFICATION

Sterling Highway MP 173 to 174 Pavement Preservation
Project No. 0211(061)/56176
Sterling Highway MP 174 to 179 Pavement Preservation
Project No. 0211(059)/55260

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 +/-

TOTAL REVISION: $_____

_____
Name of Bidding Firm

_____
Responsible Party Signature **Date**

This form may be duplicated if additional pages are needed.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

MATERIAL ORIGIN CERTIFICATE

Federal-Aid Highway Contracts

Sterling Highway MP 173 to 174 Pavement Preservation
Project No. 0211(061)/56176
Sterling Highway MP 174 to 179 Pavement Preservation
Project No. 0211(059)/55260

By signing this Material Origin Certificate, the offeror certifies that all steel and iron products to be furnished under this project are manufactured in the United States and comply with Subsection 106-1.01, **Buy America Provision**, of the Contract Special Provisions, except for those items listed by the offeror below or on a separate and clearly identified attachment.[1]

PRODUCT[2]	COUNTRY OF ORIGIN	COST[3]

THE FOLLOWING ITEMS ARE CONSIDERED TO BE MANUFACTURING PROCESSES[4]:

a. Modifying the chemical content.
b. Initial rolling into plates, shapes, rods, and bars. Structural steel completed at this point.
c. Rolling into sheets, corrugating, and rolling into culverts, guardrail, etc.
d. Processing and drawing into wire, spinning wire into cable or strand, forming wire fabric, fencing, etc.
e. The action of coating iron or steel. Coating includes epoxy coating, galvanizing, painting, and any other coating that protects or enhances the value of the product.

Contractor

Signature of Contractor's Representative

Date

1. The Contractor may amend this certificate after award only by a signed statement and only up to the limit specified in the contract.
2. Enter "NONE" on the first line if there are no exceptions.
3. Invoice cost as delivered to the project including freight.
4. There is a Nationwide waiver to Buy America for pig iron and processed, pelletized and reduced iron ore.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

EEO-1 CERTIFICATION

Federal-Aid Contracts

Sterling Highway MP 173 to 174 Pavement Preservation
Project No. 0211(061)/56176
Sterling Highway MP 174 to 179 Pavement Preservation
Project No. 0211(059)/55260

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

PLEASE CHECK APPROPRIATE BOXES

The [ ]Bidder [ ] Proposed Subcontractor hereby CERTIFIES:

PART A. Bidders and proposed Subcontractors with 50 or more year-round employees and a federal contract amounting to $50,000 or more are required to submit one federal Standard Report Form 100 during each year that the two conditions exist (50 employees and a $50,000 federal contract).

The company named below (Part C) is exempt from the requirements of submitting the Standard Report Form 100 this year.

[ ] NO (go to PART B) [ ] YES (go to PART C)

Instructions and blank Standard Report Form 100's may be obtained from a local U.S. Department of Labor office, or by writing to:

The Joint Reporting Committee
P.O. Box 779
Norfolk, Virginia 23501

Telephone number: (757) 461-1213

PART B. The company named below has submitted the Standard Report Form 100 this year.

[ ] NO [ ] YES

Note: Bidders and proposed Subcontractors who have not filed the required Standard Report Form 100 and are not exempt from filing requirements will not be awarded this contract or subcontract until Form 100 has been filed for the current year ending June 30.

PART C.

Signature of Authorized Company Representative	**Title**
Company Name	**Company Address (Street or PO Box, City, State, Zip)**
Date	( ) **Phone Number**

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

DOT&PF TRAINING PROGRAM REQUEST

Federal-Aid Contracts

Sterling Highway MP 173 to 174 Pavement Preservation
Project No. 0211(061)/56176
Sterling Highway MP 174 to 179 Pavement Preservation
Project No. 0211(059)/55260

Project Hours:

Section 645, entitled "Training Program" in the Special Provisions, specifies the number of minorities and/or woman to be trained and the number of hours of training provided under the term of this contract. Contractors desiring to use DOT&PF OJT approved training program(s) (instead of those approved by USDOL/OA) must:

- Complete Sections 1(A) through 5; use additional sheets, if necessary and reference appropriately
- Must provide training in skilled construction trades
- Contractors complete OJT form
- Contractors are encouraged to contact the DOT&PF Civil Rights Office for assistance with developing approvable training programs prior to bid opening

Section 1: Contractor Information

Contractor Name:_____ Contact Person:_____

Telephone #_____ E-mail _____

Section 1A: Trainee Minimum Qualifications

Minimum Starting Age: _____

High School Diploma Yes ☐ No ☐

Other Level of Education and/or Experience:

_____
_____
_____
_____
_____
_____

Section 2: Job Classification Information

Job Classification (Title):_____

REQUIRED SKILLS FOR POSITION	STARTING CAPABILITY DATE MEASURED
1. JOB SKILL NEEDED	NOT SKILLED: ☐ SOME SKILL: ☐ SKILLED: ☐
2. JOB SKILL NEEDED	NOT SKILLED: ☐ SOME SKILL: ☐ SKILLED: ☐
3. JOB SKILL NEEDED	NOT SKILLED: ☐ SOME SKILL: ☐ SKILLED: ☐
4. JOB SKILL NEEDED	NOT SKILLED: ☐ SOME SKILL: ☐ SKILLED: ☐
5. JOB SKILL NEEDED	NOT SKILLED: ☐ SOME SKILL: ☐ SKILLED: ☐

*ATTACH JOB DESCRIPTION

Section 3: Employer Training Information

Complete the training outline and estimated time for each skill.

TRAINING TO BE PROVIDED	ESTIMATED TRAINING HOURS	END CAPABILITY DATE MEASURED
1. SKILL TO BE ACQUIRED	ESTIMATED TRAINING HOURS	BEGINNING: ☐ INTERMEDIATE: ☐ SKILLED: ☐
2. SKILL TO BE ACQUIRED	ESTIMATED TRAINING HOURS	BEGINNING: ☐ INTERMEDIATE: ☐ SKILLED: ☐
3. SKILL TO BE ACQUIRED	ESTIMATED TRAINING HOURS	BEGINNING: ☐ INTERMEDIATE: ☐ SKILLED: ☐
4. SKILL TO BE ACQUIRED	ESTIMATED TRAINING HOURS	BEGINNING: ☐ INTERMEDIATE: ☐ SKILLED: ☐
5. SKILL TO BE ACQUIRED	ESTIMATED TRAINING HOURS	BEGINNING: ☐ INTERMEDIATE: ☐ SKILLED: ☐
LIST EQUIPMENT AND TOOLS NEEDED FOR TRAINING RELATED TO THE POSITION:		

Section 4: Third-Party Related Instruction

Complete the training outline and estimated time for each skill.

SKILLS TO BE LEARNED:	**ESTIMATED TRAINING HOURS**	**END CAPABILITY DATE MEASURED**
1. SKILL TO BE LEARNED	ESTIMATED TRAINING HOURS	BEGINNING: ☐ INTERMEDIATE: ☐ SKILLED: ☐
2. SKILL TO BE LEARNED	ESTIMATED TRAINING HOURS	BEGINNING: ☐ INTERMEDIATE: ☐ SKILLED: ☐
3. SKILL TO BE LEARNED	ESTIMATED TRAINING HOURS	BEGINNING: ☐ INTERMEDIATE: ☐ SKILLED: ☐
4. SKILL TO BE LEARNED	ESTIMATED TRAINING HOURS	BEGINNING: ☐ INTERMEDIATE: ☐ SKILLED: ☐
5. SKILL TO BE LEARNED	ESTIMATED TRAINING HOURS	BEGINNING: ☐ INTERMEDIATE: ☐ SKILLED: ☐
LIST EQUIPMENT AND TOOLS NEEDED FOR TRAINING RELATED TO THE POSITION:		

Section 5: Required Certifications for the Position
The Contractor shall actively assist the Trainee with getting certification(s) in order to gain marketable skills.

OSHA 10 ☐ **CPR/First Aid/AED** ☐ **Fork Lift** ☐

Fitness Card ☐ **CDL A** ☐ **Fast Track CDL** ☐

Department of Labor National Career Readiness Certificate (*where feasible*) ☐

Other Certificates Provided by Employer: _____
** Contractor will provide copies of the certifications received no later than the completion of project to the Civil Rights Office.*

Section 6: OJT Wages
Trainee Wages shall be paid prevailing Davis-Bacon fringes, plus the following during their training (See Section 645 wage requirements).

1st Half: $_____ = _____ % journey scale

3rd Quarter: $_____ = _____ % journey scale

4th Quarter: $_____ = _____ % journey scale

This OJT Training Program has been developed and approval is hereby requested for use on the above referenced project.

_____ _____
Signature of Authorized Company Representative **Title**

_____ _____ _____
Phone **E-mail** **Date**

Approved ☐ Disapproved ☐

Remarks: _____

_____

_____

_____

_____ _____

ADOT&PF Civil Rights Office OJT Coordinator **Date**

Section 7: Contractor Responsibility

1. It is the responsibility of the Contractor to provide each Trainee with a copy of the OJT Training Program, Job Description and Training Timeline prior to the start of the project.
2. Each Trainee will be reviewed upon completion of each section of training. The review shall be in writing and indicate the number of hours of training received.
3. The Trainee shall participate in the review, sign and receive a copy of the review.
4. The close out evaluation should indicate capability level reached.
5. The area in which the Trainee did not advance in level from its initial starting capability, the Contractor will attach documentation as part of the close out evaluation which explains the reason(s) a higher capability was not reached.
6. If the Contractor fails to comply with their OJT approved training program the ADOT&PF will enforce the measures outlined in the Spec 645-5.01

Section 8: DOT & PF Civil Rights Office (CRO) Monitoring

1. The CRO will conduct an on-site visit to assess the OJT Training program at the project hour's half-way mark when feasible.
2. The CRO will coordinate the on-site with the Project Engineer

Section 9: Trainee Assistance

1. On a case-by-case basis the CRO may be able to assist with partial funding for the Trainee to receive certification(s).
2. The CRO upon completion of the Trainee OJT Training Program will issue a "DOT&PF Civil Rights Office" Certificate of On-the-Job Completion for FHWA funded Projects" that will reflect completed hours.
3. The Trainee will go on a list that will be posted on the CRO website for Primes to solicit for future employment opportunities
4. The Trainee will be eligible for the OJT 50% Reimbursement Program not to exceed $500 dollars which administer through the CRO. The dollar amount may change due to FHWA grant monies received per fiscal year.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

TRAINING UTILIZATION REPORT

Federal-Aid Highway Contracts

Sterling Highway MP 173 to 174 Pavement Preservation
Project No. 0211(061)/56176
Sterling Highway MP 174 to 179 Pavement Preservation
Project No. 0211(059)/55260

Training Program Special Provision, Section 645 specifies the number of minorities and/or women to be trained and the number of hours of training to be provided under this Contract; the Contractor may train non-minority males in compliance with Section 645, but only if documentation of good faith efforts has been submitted to, and approved by, the Engineer, prior to the employment of such non-minority male(s). Good faith efforts, at a minimum, must be as extensive as the recruitment efforts listed in the EEO Bid Conditions, 6b, 6c, 6d, 6e, 6i, 6j, and 6l (Form 25A-301).

The number of individuals to be trained under this Contract is _____.

The number of hours of training to be provided is _____.

This Training Special Provision is implements 23CFR 230, Subpart A, Appendix B. Contractors can use either training programs approved by the U.S. Department of Labor, Bureau of Apprenticeship & Training (USDOL/BAT), or training programs approved by ADOT&PF. The Contractor must complete this form indicating the type of training to be provided, the number of individuals to be trained in each trade or job classification, the number of hours of training to be provided,[3] and the anticipated training start date.

1. **To be completed by Contractors using USDOL/BAT Training Programs**: Indicate below the number of apprentices, total number of hours, type of training, and anticipated start dates for each craft selected:

APPROVED CRAFTS, CERTIFICATION NUMBERS AND JURISDICTIONAL AREAS

STATEWIDE JURISDICTION				SOUTH OF THE 63° PARALLEL			
Craft/Cert Number	**No. of Appr.**	**No. of Hrs.**	**Start Date**	**Craft/Cert Number**	**No. of Appr.**	**No. of Hrs.**	**Start Date**
Asbestos Worker #90032				Carpenter #74032			
Bricklayer #85040				Painter #72820			
Cement Mason & Plasterer #78533				Pipefitter #72586			
Electrician #81299				Plumber #83534 [1]			
Ironworker #76779				Sheetmetal Worker #74072			
Op. Engineer #X90349				Other #			
Roofer #X90317				**NORTH OF THE 63° PARALLEL**			
Piledriver [2] (3/30/75)				Carpenter #47990			
Camp Culinary [2] (4/25/74)				Painter #77750			
Laborer #XAK92T017				Fitter/Plumber #75055			
Other # _____				Sheetmetal #76781			
Other # _____				Other # _____			
				Other # _____			

1. Juneau Jurisdictional area is #83534 and Anchorage area is #72586.
2. U.S. DOL does not assign Certification numbers to these training programs. Only approval dates.
3. The total number of hours of training should equal the hours of training required under Section 645.

2. **To be completed by Contractors using ADOT&PF training programs:** Indicate below the type of training, number of trainees, number of hours of training (500 hours per trainee), and anticipated start dates.

Job Classification	No. Trainees	Total No. Hrs.	Anticipated Start Date(s)

3. **To be completed by all Contractors** as part of the Contractor's EEO affirmative action program, the Contractor certifies that all training will be provided by the Contractor as stated in items 1 **OR** 2 above, in accordance with Training Program Special Provision, Section 645.

Company Name | **Company Address**

Point of Contact | **Phone Number**

Signature of Authorized Company Representative | **Date**

To be completed by the ADOT&PF OJT Coordinator prior to contract award:

Training Program(s) approved for this Project and Date Approved:

Signature of ADOT&PF OJT Coordinator | **Date**

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

CONTACT REPORT

Federal-Aid Contracts

Sterling Highway MP 173 to 174 Pavement Preservation
Project No. 0211(061)/56176
Sterling Highway MP 174 to 179 Pavement Preservation
Project No. 0211(059)/55260

Specific Work or Materials (by pay Item): _____

DBE Firm Contacted:

_____ _____ _____
Name **Address** **Phone Number**

A. INITIAL CONTACT: (See important contact information on instruction sheet)

1. Date _____ Method: [ ] Phone [ ] Mail [ ]FAX [ ] Other
2. Person Contacted _____ _____
Name Title

3. DBE's Response: Date: _____ Method: [ ] Phone [ ] Mail [ ]FAX [ ] Other
   - [ ] Submitted an acceptable sub-bid. (If sub-bid accepted, *skip to Section D*)
   - [ ] Not interested: Indicate Reason(s) _____
   - [ ] Needs more information: Date Prime provided requested information _____
   - [ ] Will provide quote by: Date _____
   - [ ] Received unacceptable sub-bid (*complete Section C*)

B. FOLLOW-UP CONTACT

1. Date _____ Method: [ ] Phone [ ] Mail [ ]FAX [ ] Other
2. Person Contacted _____ _____
Name Title

3. DBE's Response: Date: _____ Method: [ ] Phone [ ] Mail [ ]FAX [ ] Other
   - [ ] Submitted an acceptable sub-bid. (If sub-bid accepted, *skip to Section D*)
   - [ ] Received unacceptable sub-bid (*complete Section C*)
   - [ ] Other result: _____

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

1. Were the following required efforts made?
   a. [ ] Yes [ ] No Identified specific items of work, products, materials, etc. when asking for quote(s).
   b. [ ] Yes [ ] No Offered assistance in acquiring necessary bonding & insurance.
   c. [ ] Yes [ ] No Provided all appropriate information concerning the specific work items or materials.
2. Was the DBE's quote non-competitive (i.e., more than 10% higher than the accepted quote)? [ ] Yes [ ] No
3. Was the DBE unable to perform in some capacity? [ ] Yes [ ] No If "Yes", explain: _____

D. CERTIFICATION: I certify that the information provided above is accurate and that efforts to solicit sub-bids were made in good faith.

_____ _____ _____
Signature of Company Representative **Title** **Date**

_____ _____ _____
Name of DOT&PF Reviewer **Title** **Date**

INSTRUCTIONS

Project Name and Number: Enter project name and number as they appear on bid documents.

Work or Materials: Identify the specific work item or material that you requested this firm to furnish.

Firm Contacted: Enter name of firm as it appears in the current DOT&PF DBE directory.

Address: Enter address of firm contacted. **Phone Number:** Enter phone number of firm contacted.

A. INITIAL CONTACT (Must be made at least seven calendar days prior to bid opening.)

1. **Date and Method of Initial Contact:** Indicate the method and date that actual contact was made or the date correspondence was postmarked. Leaving a "please call me" message does not constitute a contact. Attach a copy of dated letter or fax.

2. **Name and Title of Person Contacted.** Enter name and title of company representative with whom you corresponded or discussed submitting a sub-bid.

3. **DBE's Response:** Indicate one or more of the responses listed. If a firm bid was received and accepted, skip to section D.

B. FOLLOW-UP CONTACT

If no response or an inconclusive response was received from the initial contact, a follow-up contact is required to determine for a certainty that the firm does not intend to submit a sub-bid or to conclude discussions with a sub-bid submittal.

1. **Date and Method of Follow-up Contact:** Indicate the method and date that actual contact was made or the date correspondence was postmarked. Leaving a "please call me" message does not constitute a contact. Attach a copy of dated letter or fax.

2. **Name and Title of Person Contacted.** Enter name and title of company representative with whom you corresponded or discussed submitting a sub-bid.

3. **DBE's Response:** Indicate one or more of the responses listed. If a firm bid was received and accepted, skip to section D.

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

1. A NO response to items 1a., b., or c. will result in rejection of this contact. Be specific on results of discussions.

2. A YES answer to item 2. is grounds for rejecting a DBE sub-bid.

3. A YES answer to item 3. is grounds for rejecting a DBE sub-bid, only if the inability to perform is in an area of work specifically identified as a sub-item under the applicable bid item.

D. CERTIFICATION

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

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

DISADVANTAGED BUSINESS ENTERPRISE UTILIZATION REPORT

Federal-Aid Contracts

Sterling Highway MP 173 to 174 Pavement Preservation
Project No. 0211(061)/56176
Sterling Highway MP 174 to 179 Pavement Preservation
Project No. 0211(059)/55260

The undersigned hereby certifies on behalf of the bidder that:

A. It [ ] is [ ] is not a DOT&PF certified DBE or DBE joint venture.

B. It [ ] has [ ] has not met the DBE Goal for the project. If it has not met the goal, the required documentation of sufficient good faith efforts [ ] is [ ] is not attached hereto.

C. Listed below are the **certified** DBEs to be used in meeting the DBE goal. Included are the firm name, bid items or portions of work to be performed by the item number, type of DBE credit claimed, and the creditable dollar amount to be counted toward the goal.

FIRM NAME	BID ITEM, WORK, OR PRODUCT	SUBCONTRACT AMOUNT*	TYPE OF CREDIT	CREDITABLE DOLLAR AMOUNT**
				$
				$
				$
				$
				$
				$

*or expenditure amount or fee/commission amount. ** (Subcontract amount x Goal Participation %).
If more room necessary, submit additional, signed copies of this form.

Total creditable DBE Utilization Amount $ _____

Basic Bid Amount $ _____

DBE Utilization % of Basic Bid Amount _____ %

DBE Project Goal _____10.8_____ %

Signature of Authorized Company Representative

Title

Company Name

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

Date

( )
Phone Number

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
Civil Rights Office – DBE Program

PRIME CONTRACTOR'S WRITTEN DBE COMMITMENT

Federal-Aid Contracts

Sterling Highway MP 173 to 174 Pavement Preservation
Project No. 0211(061)/56176
Sterling Highway MP 174 to 179 Pavement Preservation
Project No. 0211(059)/55260

All firms bidding on Alaska Department of Transportation and Public Facilities (DOT&PF) projects must have a written commitment from each DBE firm to be subcontracted. Please complete this form for each DBE firm and submit to the DOT&PF Regional Compliance Officer.

If you have any questions, please call (907) 269-0851.

Name of DBE Firm: _____

Street Address: _____

Mailing Address: _____ City: _____

State: _____ Zip Code: _____

Telephone Number: _____ Fax number: _____

Description of the work that DBE firm will perform: _____

_____

_____

_____

_____

_____

Please provide additional information on a separate sheet of paper.

The dollar amount of participation by the DBE firm: $ _____

Signatures of Authorized representatives of the Prime Contractor and the DBE firm below represent the written commitment by the Prime Contractor to subcontract with the DBE firm as described above and a written commitment by the DBE firm to subcontract for the work described above:

_____ _____

Prime Contractor Signature Date DBE Firm Signature Date

Prime Contractor Firm: _____

Address: _____

_____

_____

Telephone Number: _____ Fax number: _____

Form 25A-332A (8/01)

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

SUMMARY OF GOOD FAITH EFFORT DOCUMENTATION

Federal-Aid Contracts

Sterling Highway MP 173 to 174 Pavement Preservation
Project No. 0211(061)/56176
Sterling Highway MP 174 to 179 Pavement Preservation
Project No. 0211(059)/55260

Contractor: _____

List **all** items considered for DBE utilization. GFE requires at a minimum that the Contractor consider all items identified on Form 25A-324.

a. MATERIAL OR SPECIFIC ITEM OF WORK (SPECIFY PAY ITEM)	b. ACCEPTABLE DBE QUOTE RECEIVED[1]	c. # OF DBEs CONTACTED IN DBE DIRECTORY	d. # OF DBEs THAT RESPONDED[2]	e. # OF DBE QUOTES RECEIVED
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				

1. Check if acceptable DBE quote was received (if so, skip c, d, and e)
2. Attach completed Contact Reports, Form 25A-321A

LIST ADDITIONAL ITEMS ON REVERSE SIDE

a. MATERIAL OR SPECIFIC ITEM OF WORK (SPECIFY PAY ITEM)	b. ACCEPTABLE DBE QUOTE RECEIVED[1]	c. # OF DBEs CONTACTED IN DBE DIRECTORY	d. # OF DBEs THAT RESPONDED[2]	e. # OF DBE QUOTES RECEIVED
9.				
10.				
11.				
12.				
13.				
14.				
15.				

1. Check if acceptable DBE quote was received (if so, skip c, d, and e)
2. Attach completed Contact Reports, Form 25A-321A

Comments:

PART 4

STANDARD MODIFICATIONS AND SPECIAL PROVISIONS

To the **STATE OF ALASKA**

STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION

2004 EDITION

PROJECT NAME: STERLING HIGHWAY MP 174-179 PAVEMENT PRESERVATION &
STERLING HIGHWAY MP 173 TO 174 PAVEMENT PRESERVATION
PROJECT NO.: 0211(059)/55260 & 0211(061)/56176

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FED-CRTblCntnts-090413

SECTION 101

DEFINITIONS AND TERMS

Standard Modifications

101-1.03 DEFINITIONS.

PLANS. Delete Text of PLANS and replace with:

The Department's Contract drawings, profiles, typical cross sections, standard drawings, and supplemental drawings or reproductions showing the location, character, dimensions, and details of the work.

E32-012707

Add the following definition:

QUALIFIED PRODUCTS LIST. A list of companies and products that the Department has found conforms to the SSHC.

E36-012707

Insert the following definition after RESPONSIVE BID:

RETAINAGE. A percentage of a payment established in advance under a contract or subcontract to be withheld from progress payment due on the contract or subcontract. Payment or a percentage of payment withheld for unsatisfactory performance is not retainage.

E101-030512

Replace the definitions of SUBGRADE with the following:

SUBGRADE. The soil or embankment upon which the pavement structure is constructed.

E22-010106

SECTION 102

BIDDING REQUIREMENTS AND CONDITIONS

Standard Modification

102-1.04 EXAMINATION OF PLANS, SPECIFICATIONS, SPECIAL PROVISIONS, AND WORK SITE.

Replace the second paragraph with the following:

The records of geotechnical investigations including boring logs, test results, geology data reports, soil reports, material site reports, and geotechnical reports included in a bid package or made accessible to bidders or Contractors, are for information purposes only. These records are not part of the Contract. These records indicate subsurface conditions only at specific locations and times, and only to the depths penetrated. They do not necessarily reflect variations in soil, rock, or groundwater conditions that may exist between or outside such locations. Actual conditions may differ from what is shown in the records. Material Sources referenced in these records may not contain materials of sufficient quantity or quality to meet project requirements. The accessibility of these records does not constitute approval, nor guarantee suitability of soils or sources, or the rights to use sources for this project, except as specifically provided in subsections 106-1.02.4.b Mandatory Sources and 106-1.02.4.c Designated Sources. The records shall not substitute for independent investigation, interpretation, or judgment of the bidder or Contractor. The Department is not responsible for any interpretation or conclusion drawn from its records by the bidder or Contractor.

Bidders and Contractors shall examine subsection 106-1.02 Material Sources for further information about material source development.

E23-010106

102-1.05 PREPARATION OF BID. Modify the second sentence in the third paragraph, after:

"If a bidder is a corporation, the bid must be signed by a corporate officer," add: or agent.

E18-063004

SECTION 103

AWARD AND EXECUTION OF CONTRACT

Standard Modifications

Delete Subsection 103-1.05 and replace with the following:

103-1.05 PERFORMANCE AND PAYMENT BONDS. The successful bidder shall furnish all required Performance and Payment Bonds on forms provided by the Department for the sums specified in the Contract. If no sum is specified, the successful bidder shall comply with AS 36.25.010. The Surety on each bond may be any corporation or partnership authorized to do business in the state as an insurer under AS 21.09 or two individual sureties approved by the Contracting Officer.

If individual sureties are used, two individual sureties must each provide the Department with security assets located in Alaska equal to the penal amount of each bond. Any costs incurred by the Contractor and the individual Surety are subsidiary and shall be borne by the Contractor or the individual Surety. In no event will the Department be liable for these Costs.

Individual sureties shall provide security by one, or a combination, of the following methods:

1. Escrow Account, with a federally insured financial institution, in the name of the Department. Acceptable securities include, but are not limited to, cash, treasury notes, bearer instruments having a specific value, or money market certificates.

2. Irrevocable letters of credit, with a financial institution approved by the Contracting Officer.

3. Cashier's or certified check, made payable to the State of Alaska issued by financial institutions approved by the Contracting Officer.

These bonds and security assets, as applicable, shall remain in effect for 12 months after the date of final payment or, if longer, until all obligations and liens under this Contract are satisfied, including, but not limited to, obligations under Subsection 107-1.19.

The Department may, in its discretion, notify the bonding company or Surety of any potential default or liability.

The Contractor shall substitute, within five working days, another bond or surety acceptable to the Department if an individual Surety or the Surety on any bond furnished in connection with the Contract:
1. Becomes insolvent or is declared bankrupt;
2. Loses its right to do business in any state affecting the work;
3. Ceases to meet Contract requirements;
4. Fails to furnish reports of financial condition upon request; or
5. Otherwise becomes unacceptable to the Department.

When approved by the Contracting Officer, the Contractor may replace:
1. An individual surety with a corporate surety; or
2. Posted collateral with substitute collateral.

Failure to maintain the specified bonds or to provide substitute bonds when required under this section may be grounds for withholding contract payments until substitute bonding is obtained, and may, in the Department's discretion, be grounds for declaring the Contractor in default.

E65-022309

SECTION 104

SCOPE OF WORK

Standard Modifications

104-1.01 INTENT OF CONTRACT. Add to the end of this subsection:

The Contractor is responsible for the means, methods, techniques, sequence, or procedures of construction, safety, quality control, and to perform or furnish the work in accordance with the Contract documents.

E58-072808

SECTION 105

CONTROL OF WORK

Standard Modifications

105-1.02 PLANS AND WORKING DRAWINGS. In the third paragraph delete:

"(24"x36")" and replace with: (22"x34")

105-1.03 CONFORMITY WITH PLANS AND SPECIFICATIONS. In the first sentence of the first paragraph after:

"Work performed and materials furnished shall conform to the Plans and Specifications" add: and approved Working Drawings,

In the first sentence of the second paragraph after: "All work or material not conforming to the Plans and Specifications" add: and approved Working Drawings,

E33-012707

Special Provisions

105-1.06 UTILITIES. Add the following:

Request locates from the utilities having facilities in the area. Use the Alaska Digline, Inc. Locate Call Center for the following utilities.

ALASKA DIGLINE, INC.	
Locate Call Centers:	
Anchorage	278-3121
Statewide	(800) 478-3121
Call Centers will notify the following:	
Alaska Communications Systems (ACS)	
Chugach Electric Association (CEA)	
City of Homer (HPW)	
ENSTAR Natural Gas (ENS)	
General Communications, Inc. (GCI)	
Homer Electric Association (HEA)	

Call the following utilities and agencies directly:

Contact the Central Region Maintenance & Operations Office at (907) 269-0760 to obtain the appropriate District Superintendent's phone number for this project.

Utilities Relocated by Others.

Utilities will be relocated by others concurrently with construction of this project. The Contractor will give the Utility, through the Engineer, 15 calendar days advance written notice regarding the dates when the utility owner is required to begin and end operations. For utilities being relocated, the Contractor will:

1. include utility work on the Construction Phasing Plan and Progress Schedule;

2. provide erosion, sediment, and pollution control including the stabilization of areas disturbed during utility work. Identify all utility companies performing ground disturbing activity in the Storm Water pollution Prevention Plan (SWPPP). Refer to Section 641 for further information;

3. clear and grub. Payment will be made under Section 201, Clearing and Grubbing;

4. provide traffic control and flagging. Payment will be made under Section 643, Traffic Maintenance;

5. provide Right-of-Way and/or Construction Surveying before utility relocation. Include:
   - Control for utility relocation - either ROW or Centerline staking with Station information.

   Payment will be made as follows:

   a. Subsidiary to Pay Item 642(1) Construction Surveying, if the Contractor is required to provide the surveying as part of the Contract and/or,
   b. Under Pay Item 642(3) Three Person Survey Party, if the Construction or Right of Way staking required by the utility is either in advance of the 2 week work plan, or not required by the Contract.

   The utility shall give the Contractor, through the Engineer, 15 calendar days advance written notice for required staking.

6. remove and replace pavement. Payment will be made under Section 202, Removal of Structures and Obstructions; Section 401, Hot Mix Asphalt and Surface Treatments; Section 408, Hot Mix Asphalt and Surface Treatments, Type V; Section 409, Hot Mix Asphalt and Surface Treatments, Type R (Crumb Rubber) and according to project typical section.

7. remove and replace sidewalk and curb and gutter. Payment will be made under Section 202, Removal of Structures and Obstructions, Section 608, Sidewalks, and Section 609, Curbing.

8. Locate and pothole underground utilities in all areas of excavation for road, drainage, and approach improvements.

   Coordinate with ACS, HEA, ENSTAR, GCI, COH and the engineer to evaluate the extent of the conflicts, and work around each utility.

   Payment will be made under section 682, Utility Potholing.

Work done by utility owner(s) is as follows:

Provide each utility fifteen (15) calendar days advance written notice for each work location where conflicts may occur. Provide a copy of the written notice to the Engineer.

Utility contact information is as follows:

- Monty Williams, ACS of Northland, LLC, 907-321-9330
- Kathy McDonough, HEA, 907-235-3389
- Jerry Cochran, GCI, 907-868-5635
- Charlie Pierce, ENSTAR, 907- 714-7510
- Dan Gardner, COH, 907-339-4170

Utility Specific Coordination:

ACS of the Northland, LLC

ACS owns and operates underground telecommunications facilities along and crossing the Sterling Highway throughout the project limits. The contractor will pothole and expose all of the lines located in the table below. Provide ACS and the Engineer the potholing information to determine if there will be any conflicts to work around.

	Ditch Linear Grading Conflicts:	
Size of Cable	**Station**	**Closest Street Name**
BFC300x24	Between stations 6279+50 to 6299+00	Lambert Lane to B street
Service line*	Between stations 30+00 to 30+40	Main Street
BFC200x24	Approximate Station 30+40	Main Street
BFC6x22	Between stations 38+00 to 39+20	Beluga Avenue
BFC6x22	Between stations 68+10 to 68+50	Lake Street
BFC100x24	Approximate Station 6284+50	E Street
pedestal BD5A	Approximate Station 6286+00	Douglas Place
pedestal BD7	Approximate Station 6288+15	Douglas Place
BFC50x24	Between stations 6288+15 to 6294+00	Douglas Place
BFC300x24	Between stations 6288+15 to 6297+50	Douglas Place to B Street
pedestal BD5	Approximate Station 6288+15	Douglas Place
BFC25x24	Between stations 6288+15 to 6297+50	Douglas Place to B Street
pedestal BD7	Approximate Station 6297+50	B Street
BFC100x24	Approximate Station 6297+50	B Street
BFC300x24	Approximate Station 6297+50	B Street
BFC400x24	Between stations 6297+50 to 6299+00	B Street
BFC600x24	Between stations 6303+25 to 6303+50	Kachemak Drive
pedestal BD7	Approximate Station 6303+50	Kachemak Drive
BFC400x24	Between stations 6303+50 to 6307+50	Kachemak Drive
pedestal BD5	Approximate Station 6307+50	Kachemak Drive
BFC100x24	Between stations 222+00 to 226+00	Near Land's End Resort

*This is a non-reimbursable line

GCI Communication Corporation

GCI owns and operates overhead and underground telecommunications facilities along the Sterling Highway throughout the project limits. The contractor will pothole and expose all of the lines located in the tables below. Provide GCI and the Engineer the potholing information to determine if there will be any conflicts to work around.

	Ditch Linear Grading Conflicts:	
Size of Cable	**Station**	**Closest Street Name**
Vault	Approximate Station 23+00	Greatland Street
144 count fiber	Between stations 23+00 to 25+30	Greatland Street
48 count fiber*	Between stations 23+00 to 25+30	Greatland Street
144 count fiber	Between stations 28+00 to 30+40	Main Street
144 & (2) 24 count fibers	Between stations 43+30 to 44+10	Poopdeck Street
.750 & .500 coax cables*	Between stations 68+10 to 70+80	Lake Street
UG .625	Between stations 6279+50 to 6282+10	Lambert Lane to E Street
UG .500	Between stations 6288+15 to 6297+50	Douglas Place to B Street
UG .500	Between stations 6301+25 to 6305+75	B Street to Kachemak Drive

*This is a non-reimbursable line

	Culvert and Storm Drain Conflicts:	
Size of Cable	**Station**	**Closest Street Name**
144 count fiber	Approximate station 25+00	Greatland Street
48 count fiber*	Approximate station 25+00	Greatland Street
144 & (2) 24 count fibers	Approximate station 42+50	Poopdeck Street

*This is a non-reimbursable line.

Homer Electric Association, Inc.

HEA owns and operates overhead and underground electrical distribution facilities along and crossing the Sterling Highway throughout the project limits. The contractor will pothole and expose all of the lines

located in the tables below. Provide HEA and the Engineer the potholing information to determine if there will be any conflicts to work around.

	Ditch Linear Grading Conflicts:	
Size of Cable	**Station**	**Closest Street Name**
Single Phase UG line	Between stations 18+80 to 19+40	Pioneer Avenue
Single Phase UG line	Between stations 23+00 to 23+80	Greatland Street
Switch Cabinet and transformer	Approximate station 23+00	Greatland Street
3 phase UG line	Approximate station 43+90	Poopdeck Street
3 phase UG line	Between stations 44+15 to 49+40	Poopdeck Street
Single Phase UG line	Between stations 55+00 to 55+30	Heath Street
3 phase UG line	Between stations 69+10 to 69+20	Lake Street
Two anchors	Approximate station 69+20	Lake Street
3 phase pole 53-21 0364	Approximate Station 6279+50	Lambert Lane
3 phase pole 53-21 0663	Approximate Station 6282+25	E Street
3 phase pole 53-21 1162	Approximate Station 6284+50	E Street
3 phase pole 53-21 1361	Approximate Station 6286+25	Douglas Place
3 phase pole 53-21 1660	Approximate Station 6288+15	Douglas Place
3 phase pole 53-21 1959	Approximate Station 6289+55	Douglas Place
3 phase pole 53-21 2058	Approximate Station 6290+60	Douglas Place
3 phase pole 53-21 2457	Approximate Station 6294+05	Douglas Place
3 phase pole 53-21 2757	Approximate Station 6295+75	B Street
3 phase pole 53-21 ?	Approximate Station 6297+60	B Street
3 phase pole 53-21 ?	Approximate Station 6297+75	B Street
UG 3 phase	Between stations 6297+60 to 6298+50	B Street
UG 3 phase	Between stations 222+00 to 226+00	Near Land's End Resort

	Culvert and Storm Drain Conflicts:	
Size of Cable	**Station**	**Closest Street Name**
3 phase UG line	Approximate station 46+00	Poopdeck Street

Provide Homer Electric Association, Inc. (HEA) fifteen (15) calendar days advance written notice for the dig out work done between 150 feet west of Poopdeck Street to 200 feet east of Poopdeck Street. Provide a copy of the written notice to the Engineer.

ENSTAR Natural Gas Company

ENSTAR owns and operates underground natural gas distribution facilities along and crossing the Sterling Highway throughout the project limits. The contractor will pothole and expose all of the lines located in the tables below. Provide ENSTAR and the Engineer the potholing information to determine if there will be any conflicts to work around.

	Ditch Linear Grading Conflicts:	
Size of Cable	**Station**	**Closest Street Name**
4" plastic line*	Between stations 18+80 to 25+30	Pioneer Avenue to Greatland Street
	Between stations 28+00 to 30+40	Main Street
	Between stations 38+00 to 42+60	Beluga Avenue to Poopdeck Street
	Between stations 43+30 to 44+10	Poopdeck Street
	Between stations 45+00 to 47+50	Poopdeck Street
	Between stations 48+20 to 52+20	Poopdeck Street
	Between stations 52+90 to 55+30	Heath Street
	Between stations 56+00 to 57+30	Heath Street
	Between stations 58+20 to 61+10	Heath Street
	Between stations 61+70 to 63+40	Waddell Way
	Between stations 64+00 to 66+90	Lake Street
	Between stations 68+10 to 70+80	Lake Street
	Between stations 6279+50 to 6307+50	Pioneer Avenue to Greatland Street
	Between stations 222+00 to 226+00	Near Land's End Resort
1" plastic line	Approximate Station 6283+00	E Street
1" plastic line	Approximate Station 6289+50	Douglas Place
1" plastic line	Approximate Station 6290+50	Douglas Place
1" plastic line	Approximate Station 6294+00	Douglas Place

*This is a non-reimbursable work.

	Culvert and Storm Drain Conflicts:	
Size of Cable	**Station**	**Closest Street Name**
4" Plastic Line	Approximate station 42+50	Poopdeck Street
	Approximate station 46+00	
	Approximate station 49+75	

*This is a non-reimbursable work.

City Of Homer

The City of Homer owns and operates water and sewer facilities along and crossing the Sterling Highway throughout the project limits. The Department will provide for the adjustment of the required valve boxes (V). At the approximate locations listed below:

Approximate Station	Approximate Offset
6276+95 (V)	15' RT
200+40 (V)	17' RT
210+75(V)	17' RT
222+05 (V)	17' RT
222+10 (V)	17' RT

COH will perform pre and post construction inspections on seven (7) water valves and three (3) sanitary sewer manholes throughout the project.

Allow COH one (1) working day for the preconstruction inspection and one (1) working day for the post construction inspection.

55260/56176-022514

105-1.07 COOPERATION BETWEEN CONTRACTORS. Add the following:

The following state owned projects may be under construction concurrently with this project.

Project Name:	**Project No.:**
HSIP: Pioneer Ave & Main St OH Beacon	55889

Coordinate traffic control, construction, and material hauling operations with the prime contractor of the above projects to minimize impact on the traveling public, and to minimize conflicts with the work being performed under the other contracts.

CR1051-110309

105-1.13 MAINTENANCE DURING CONSTRUCTION. Add the following at the end of this subsection:

Costs of maintenance work during construction and before the project is accepted as substantially complete shall be subsidiary to the prices bid on the various Contract items, and the Contractor will not be paid an additional amount for such work.

If in the Engineer's opinion, the Contractor at any time fails to provide adequate maintenance, the Engineer will notify the Contractor of such noncompliance. The notification will specify the areas or structures for which there is inadequate maintenance, the corrective maintenance required, and the time allowed to complete corrective maintenance. If the Contractor fails to take corrective action within the specified time, the Engineer may:

1. Suspend the work until corrective maintenance is completed;
2. Assess a traffic price adjustment against the Contract Amount when an adjustment rate is specified in the Contract; and
3. Employ others for corrective maintenance and deduct the cost from the Contract amount.

E33-012707

105-1.15 PROJECT COMPLETION. In the second paragraph, second sentence, delete:

"Subsection 621-3.04" and replace with: Subsection 618-3.06 and 621-3.04.

In the third paragraph, first sentence, delete:

"Subsection 621-3.04" and replace with: Subsection 618-3.06 and 621-3.04.

E59-072808

105-1.16 FINAL ACCEPTANCE AND RECORD RETENTION. Modify the first paragraph, Item 4. after:

"DOLWD" add: and State Department of Revenue.

E19-063004

Special Provisions

105-1.17 CLAIMS FOR ADJUSTMENT AND DISPUTES. Add the following:

Appeals to the superior court under AS 36.30.685 must be filed in the Third Judicial District.

CR1054-032101

Add the following Subsection 105-1.18:

105-1.18 RESERVED FOR WARRANTIES.

E33-012707

SECTION 106

CONTROL OF MATERIAL

Standard Modifications

106-1.01 SOURCE OF SUPPLY AND QUALITY REQUIREMENTS. In fifth paragraph, in two places remove the text. "Approved Products List" and replace with: *Qualified Products List*

E36-012707

Special Provision

Add the following:

Buy America Provision. Comply with the requirements of 23 CFR 635.410, Buy America Requirements, and submit a completed Material Origin Certificate, Form 25D-60, before award of the Contract.

Steel and iron products, which are incorporated into the work, shall be manufactured in the United States except that minor amounts of steel and iron products of foreign manufacture may be used, provided the aggregate cost of such does not exceed one tenth of one percent (0.001) of the total contract amount, or $2500, whichever is greater. For the purposes of this paragraph, the cost is the value of the products as they are delivered to the Project including freight.

"Manufactured in the United States" means that all manufacturing processes starting with the initial mixing and melting through the final shaping, welding, and coating process must be undertaken in the United States. The definition of "manufacturing process" is smelting or any subsequent process that alters the material's physical form, shape or chemical composition. These processes include rolling, extruding, machining, bending, grinding, drilling, etc. The application of coatings, such as epoxy coating, galvanizing, painting or any other coating that protects or enhances the value of steel or iron materials shall also be considered a manufacturing process subject to the "Buy America Requirements."

Buy America does not apply to raw materials (iron ore), scrap pig iron, and processed, pelletized and reduced iron ore. It also does not apply to temporary steel items (e.g., temporary sheet piling, temporary bridges, steel scaffolding, and falsework). Further, it does not apply to materials that remain in place at the Contractor's convenience (e.g., sheet pilings, and forms).

The North American Free Trade Agreement (NAFTA) does not apply to the Buy America requirement. There is a specific exemption within NAFTA (article 1001) for grant programs such as the Federal-aid highway program.

When steel and iron products manufactured in the United States are shipped to a foreign country where non-steel or iron products are installed on or in them (e.g., electronic components in a steel cabinet), the steel and iron is considered to meet the requirements of this subsection.

Take whatever steps are necessary to ensure that manufacturing processes for each covered product comply with this provision. Non-conforming products shall be replaced at no expense to the State. Failure to comply may also subject the Contractor to default and/or debarment. False statements may result in criminal penalties prescribed under Title 18 US Code Section 1001 and 1020.

CR13-020705

Standard Modification

106-1.02 MATERIAL SOURCES.

1. a. General. Within Item a. delete text and replace with: Utilize Useable Excavation according to subsection 104-1.04 before using material sources listed in subsection 106-1.02.4. When there is insufficient, Useable Excavation furnish additional required materials from sources of the Contractor's choice, except that the Contractor shall use a mandatory source when identified in the Contract.

4. Type of Sources. Replace the first paragraph with the following:

The Contractor shall utilize Useable Excavation according to subsection 104-1.04 before using material sources listed in this subsection. When there is insufficient Useable Excavation, the Contractor shall furnish additional required materials from sources of the Contractor's choice, except that the Contractor shall use a mandatory source when identified in the Contract.

When there is insufficient Useable Excavation, the Contractor shall supply additional required material from the following sources:

d. Available Sources. Replace the second paragraph with the following:

When the Department furnishes copies of existing boring logs, test results, or other data in its possession concerning Available Sources, the Contractor is responsible for determining the accuracy and completeness of this data, for assumptions the Contractor makes based on this data, and for exploring Available Sources to the Contractor's satisfaction.

e. Excluded Material Sources. Replace the paragraph with the following:

Some material sources may not be considered acceptable regardless of location or ownership. The bid documents may identify some material sources excluded from use. The Department reserves the right to exclude a material source or any portion of a material source, at any time after Contract Award that is determined by material testing to be unsuitable for use on the Project.

E24-010106

Add new Subsection 106-1.08:

106-1.08 SUBMITTAL PROCEDURE. The Contractor shall complete a Submittal Register, and shall submit to the Engineer on forms provided by the Department. The intent of the Submittal Register is to provide a blueprint for the smooth flow of specified Project document. The Contractor shall fill it out sequentially by bid Item and allow at least three spaces between bid items. The Submittal Register shall list working drawings, schedules of work, and other items required to be submitted to the Department by the Contractor including but not limited to Progress Schedule, anticipated dates of material procurement, Construction Phasing Plan, Utility Progress Schedule, Blasting Plan, Mining Plan, annual EEO reports, DBE payment documentation, and subcontracts.

The Contractor shall submit materials (product) information to the Engineer for review, as required by the Materials Certification List and the Contract.

The number of copies required for submittals may be included in the specifications for individual bid items. If the number of copies of a submittal is not otherwise specified, three copies shall be required. On each sheet submitted to the Department, including working drawings, catalog cuts, manufacturer's certifications, etc., space shall be provided for Contractor and Department review stamps.

Each copy of each submittal shall include a Submittal Summary sheet. The Contractor may use forms provided by the Department of a similar form of the Contractor's choice as approved by the Department. The Contractor shall sign submittals and submit them to the Engineer. The Department will review submittals within 30 days after they are received. The Department will return submittals to the Contractor as either: approved, conditionally approved with the conditions listed, or rejected with the reasons listed. The Contractor may resubmit a rejected submittal to the Engineer with more information or corrections. The Department will review resubmittals within 30 days after they are received.

The Contractor shall not order material or use working drawings that have not been approved by the Department. The Contractor shall be responsible for timely submittals. Failure by the Department to review submittals within the time given may be the basis for a request for extension of Contract time but not for additional compensation.

Payment for a specific Contract Item will not be made until the Department has received the Submittal Register for all items and approved all required submittals for that specific Contract Item.

When material invoices, freight bills, and mill certificates are submitted, they shall provide sufficient information for the Engineer to identify the date, company and location of invoice (bill, certificate); Project name and number where material will be incorporated, manufacturer, product number, quantity and cost.

Add the following Subsection 106-1.09:

106-1.09 RESERVED.

E34-012707

SECTION 107

LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC

Special Provisions

107-1.02 PERMITS, LICENSES, AND TAXES.

The Department will: Add No. 3.:

3. The Department has received the following permits on the Contractor's behalf:

    a. City of Homer Flood Hazard Permit

The Contractor shall: Add the following:

9. Obtain through the Engineer a written statement from the State Historic Preservation Officer stating that material disposal, extraction, stockpiling, or staging, on or off project site, is not expected to impact cultural resources. The State Historic Preservation Officer is with the Department of Natural Resources in Anchorage, and may be contacted at (907) 269-8715. If cultural resources are discovered during construction activities, stop work at the site and notify the Engineer.

10. Provide a wetland specialist able to conduct wetlands determinations and delineations according to the Corps of Engineers 1987 Wetland Delineation Manual, and the Regional Supplement to the Corps of Engineers Wetland Delineations Manual (Alaska Region, Version 2.0, September 2007). The wetland specialist shall conduct the determination and delineations of sites outside the project limits or not previously permitted, impacted by the Contractor's operations. These delineations will be subject to Corps of Engineers approval.

11. Provide information to comply with the Alaska Department of Environmental Conservation (ADEC) Alaska Pollutant Discharge Elimination System (APDES) General Permit for Alaska to discharge storm water from the construction site. Refer to Section 641, Erosion, Sediment, and Pollution Control for requirements for this permit.

Provide the Engineer a copy of permits or clearances received before using sites outside the project limits. Additionally, provide the Engineer a written statement that permits or clearances have been obtained. Also, provide a written statement to the Engineer listing agencies or offices contacted that responded that no additional action is required.

CR1072-042313

Standard Modifications

107-1.05 FEDERAL AID PROVISIONS. Add the following after paragraph two:

Form 25D-55H Required Contract Provisions for Federal-Aid (FHWA) Construction Contracts. The FHWA no longer requires the Contractor to fill out FHWA Form 47, Statement of Materials and Labor Used By Contractors on Highway Construction Involving Federal Funds. Section VI Records of Materials, Supplies and Labor of Form 25D-55H is no longer applicable to highway construction contracts.

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

(1) **Compliance with Regulations:** The Contractor shall comply with the Regulation relative to nondiscrimination in Federally-assisted programs of the Department of Transportation (hereinafter, "DOT") title 49, Code of Federal Regulations, Part 21, and the Federal Highway Administration (hereinafter "FHWA") Title 23, Code of Federal Regulations, Part 200 as they may be amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this Contract.

(2) **Nondiscrimination:** The Contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, or national origin, sex, age, and disability/handicap in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The Contractor shall not participate either directly or indirectly in the discrimination prohibited by 49 CFR, Section 21.5 of the regulations, including employment practices when the Contract covers a program set forth in Appendix B of the Regulations.

(3) **Solicitation for Subcontractors, Including Procurements of Materials and Equipment:** In all solicitations either by competitive bidding or negotiation made by the Contractor for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the Contractor of the Contractor's obligations under this Contract and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin, sex, age, and disability/handicap.

(4) **Information and Reports:** The Contractor shall provide all information and reports required by the Regulations or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the DOT&PF or the FHWA to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of a Contractor is in the exclusive possession of another who fails or refuses to furnish this information the Contractor shall so certify to the DOT&PF, or the FHWA as appropriate, and shall set forth what efforts it has made to obtain the information.

(5) **Sanctions for Noncompliance:** In the event of the Contractor's noncompliance with the nondiscrimination provisions of this Contract, the DOT&PF shall impose such contract sanctions as it or the FHWA may determine to be appropriate, including, but not limited to:

(a) withholding of payments to the Contractor under the Contract until the Contractor complies, and/or
(b) cancellation, termination, or suspension of the Contract, in whole or in part.

(6) **Incorporation of Provisions:** The Contractor shall include the provisions of paragraphs (1) through (6) in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto.

The Contractor shall take such action with respect to any subcontract or procurement as the DOT&PF or the FHWA may direct as a means of enforcing such provisions including sanctions for non-compliance: Provided, however, that in the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the Contractor may request the DOT&PF to enter into such litigation to protect the interests of the DOT&PF, and, in addition, the Contractor may request the United states to enter into such litigation to protect the interests of the United States.

E67-101509

107-1.07 ARCHAEOLOGICAL OR HISTORICAL DISCOVERIES. Change the first sentence to the following:

When operation encounters historic or prehistoric artifacts, burials, remains of dwelling sites, paleontological remains, (shell heaps, land or sea mammal bones or tusks, or other items of historical significance), cease operations immediately and notify the Engineer.

107-1.11 PROTECTION AND RESTORATION OF PROPERTY AND LANSDCAPE. Add the following:

If water is required for a construction purpose from a nonmunicipal water source, obtain a Temporary Water Use Permit from the Water Resource Manager, and provide a copy to the Engineer. The Water Resource Manager is with the Department of Natural Resources in Anchorage and may be contacted at (907) 269-8645.

CR1072-042313

Standard Modification

Add the following paragraphs:

7. Restoring Areas. Areas used by the Contractor, including haul routes, shall be restored to their original condition after the Contractor's operations are completed. The original condition of an area shall be determined as follows:

   Before beginning operations, the Engineer and the Contractor shall inspect each area and haul route that will be used by the Contractor and take photographs to document their condition. After construction operations are completed, the condition of each area and haul route will be compared to the earlier photographs. Before demobilization, the Contractor shall repair damages attributed to its operations. The Contractor agrees that costs associated with repairs shall be subsidiary to other items of work and will not be paid for directly.

8. Material Disposal Sites. Offsite disposal areas may be at locations of the Contractor's choice, provided the Contractor obtains from the owner of such land written permission for such dumping and a waiver of all claims against the State for any damage to such land which may result there from, together with permits required by law for such dumping. A copy of permission, waiver of claims, and permits shall be filed with the Engineer before beginning work on private property. The Contractor's selected disposal sites shall also be inspected and approved by the Engineer before use of the sites.

E35-012707

Add the following:

Bald Eagles are protected under the Bald Eagle Protection Act (16 U.S.C. 668-668c) which prohibits "takes" of bald eagles, their eggs, nests, or any part of the bird. The Act defines "taking" as "to pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or disturb."

Maintain a Primary Zone of a minimum 330 ft as an undisturbed habitat buffer around nesting bald eagles. If topography or vegetation does not provide an adequate screen or separation, extend this buffer to 0.25 miles, or a sufficient distance to screen the nest from human activities. The actual distance will depend on site conditions and the individual eagle's tolerance for human activity. Within the Secondary Zone, between 330 ft and 660 ft from eagles nest tree no obtrusive facilities or major habitat modifications shall occur. If nesting occurs in sparse stands of trees, treeless areas, or where activities would occur within line-of-site of the nest, this buffer shall extend up to 0.5 miles. No blasting, logging and other noisy, disturbing activities should occur during the nesting period (March 1 – August 31) within the primary or secondary zones.

Extremely noisy activities such as road construction or other activities that occur within the Secondary Zone shall be conducted outside the nesting period to avoid disturbance to eagles. If activities occur in proximity to a nest site, employ an individual qualified to observe and assess the impact of such activities

on nesting eagles. Behavior generally associated with disturbed eagles includes alarm calls, birds flushed from their nest or perch, and aggressiveness.

If nest trees are discovered within the vicinity of the project site, the U.S. Fish and Wildlife Service must be notified immediately by calling (907) 786-3503 or (907) 271 – 2772, before starting construction activities, for further site evaluation. This is an advisory. Do what is required to keep from disturbing a nesting eagle.

CR1071-081210

Add the following subsection:

107-1.21 FEDERAL AFFIRMATIVE ACTION. The Federal Equal Employment Opportunity Disadvantaged Business Enterprise and On-the-Job Training affirmative action program requirements that are applicable to this Contract are contained in the project Special Provisions and Contract Forms, and may include:

Disadvantaged Business Enterprise (DBE) Program	Section 120
Training Program	Section 645
Federal EEO Bid Conditions	Form 25A 301
EEO-1 Certification	Form 25A 304
ADOT&PF Training Program Request	Form 25A 310
Training Utilization Report	Form 25A 311
Contact Report	Form 25A 321A
DBE Subcontractable Items	Form 25A 324
DBE Utilization Report	Form 25A 325C
Summary of Good Faith Effort Documentation	Form 25A 332A
Required Contract Provisions, Federal-Aid Contracts	Form 25D 55

In addition to the sanctions provided in the above references, non-compliance with these requirements is grounds for withholding of progress payments.

S80-012202

SECTION 108

PROSECUTION AND PROGRESS

Standard Modification

Delete Subsection 108-1.01 in its entirety and replace with the following:

108-1.01 SUBCONTRACTING OF CONTRACT. The Contractor shall submit a Contractor Self Certification for Subcontractors and Lower Tier Subcontractors, Form 25D-042, before the Contractor or any subcontractor subcontracts, sells, transfers, assigns, or otherwise disposes of the Contract or any portion of the Contract. The Department has authority to review subcontracts and to deny permission to subcontract work. The Department may penalize the Contractor for false statements or omissions made in connection with Form 25D-042.

The Contractor shall perform, with the Contractor's own organization, work amounting to at least 30 percent of the difference between the original Contract price and the price of designated Specialty Items. For the purpose of this Subsection, work is defined as the dollar value of the services, equipment, materials, and manufactured products furnished under the Contract. The Engineer will determine the value of the subcontracts based on Contract unit prices or upon reasonable value, if entire items are not subcontracted.

The Department's consent to the subcontracting, sale, transfer, assignment, or disposal of all or a part of the Contract shall not relieve the Contractor and the Surety of responsibility for fulfillment of the Contract or for liability under bonds regardless of the terms of the transfer or sublet approvals.

1. The Contractor shall ensure that for all subcontracts (agreements):
   a. The Department is furnished with one completed Contractor Self Certification, Form 25D-042, for each subcontract;
   b. The subcontractors have submitted a Bidder Registration; Form 25D-6;
   c. The required prompt payment provisions of AS 36.90.210 are included in all subcontracts;
   d. A clause is included requiring the Contractor to pay the subcontractor for satisfactory performance according to AS 36.90.210 and within eight (8) working days after receiving payment for which the subcontractor is to be paid.
   e. A clause is included requiring the Contractor to pay the subcontractor interest, according to AS 45.45.100(a), for the period beginning the day after the required payment date and ending on the day payment of the amount due is made;
   f. A clause is included requiring the Contractor to pay the subcontractor all retainage due under the subcontract, within eight (8) working days after final payment is received from the Department, or after the notice period under AS 36.25.020(b) expires, whichever is later;
   g. A clause is included requiring the Contractor to pay interest on retainage, according to AS 36.90.250 and AS 45.45.101(a);
   h. Other required items listed in Form 25D-042 are included in the subcontracts;
   i. The subcontractors pay current prevailing rate of wages as per Subsection 107-1.04 and file certified payrolls with the Engineer and DOLWD for all work performed on the project; and
   j. Upon receipt of a request for more information regarding subcontracts, the requested information is provided to the Department within 5 calendar days.

2. The Contractor shall ensure that for all lower tier subcontracts (agreements between subcontractors and lower tier subcontractors):

   a. The required prompt payment provisions of AS 36.90.210 are included in all lower tier subcontracts;
   b. A clause is included requiring the subcontractor to pay the lower tier subcontractor for satisfactory performance according to AS 36.90.210, and within eight (8) working days after receiving payment from which the subcontractor is to be paid;
   c. A clause is included requiring the subcontractor to pay the lower tier subcontractor interest, according to AS 45.45.010(a), for the period beginning the day after the required payment date and ending on the day payment of the amount due is made;

d. A clause is included requiring the subcontractor to pay the lower tier subcontractor all retainage due under the subcontract, within eight (8) working days after final payment is received, or after the notice period under AS 36.25.020(b) expires, whichever is later;
e. A clause is included requiring the subcontractor to pay the lower tier subcontractor interest on retainage, according to AS 36.90.250 and AS 45.45.101(a);
f. Other required items listed in Form 25D-042 are included in the lower tier subcontracts;
g. The lower tier subcontractors pay current prevailing rate of wages as per Subsection 107-1.04 and file certified payrolls with the Engineer and DOLWD for all work performed on the project; and
h. Upon receipt of a receipt for more information regarding subcontracts, the requested information is provided to the Department within 5 calendar days.

3. The following will be considered as subcontracting, unless performed by the Contractor:

   a. **Roadside Production.** Roadside production of crushed stone, gravel, and other materials with portable or semi-portable crushing, screening, or washing plants set up or reopened in the vicinity of the project to supply materials for the project, including borrow pits used exclusively or nearly exclusively for the project.
   b. **Temporary Plants.** Production of aggregate mix, concrete mix, asphalt mix, other materials, or fabricated items from temporary batching plants, temporary mixing plants, or temporary factories that are set up or reopened in the vicinity of the project to supply materials exclusively or nearly exclusively for the project.
   c. **Hauling.** Hauling from the project to roadside production, temporary plants, or commercial plants, from roadside production or temporary plants to the project, from roadside production or temporary plants to commercial plants, and all other hauling not specifically excluded in this subsection.
   d. **Other Contractors.** All other contractors working on the project site under contract with the Contractor are considered subcontractors unless specifically excluded in this subsection.

4. The following will not be considered as subcontracting, but the Contractor shall comply with the prompt payment provisions AS 36.90:

   a. **Commercial Plants.** The purchase of sand, gravel, crushed stone, crushed slag, batched concrete aggregates, ready-mixed concrete, asphalt paving mix, and any other materials or fabrication produced at and furnished from established and recognized commercial plants that sell to both public and private purchasers.
   b. **Hauling.** Delivery of materials from a commercial plant to a different commercial plant, and delivery from a commercial plant to the project site by vehicles owned and operated by the commercial plants or by commercial freight companies that have a contract with the commercial plant. Commercial freight companies are trucking or hauling companies that deliver multiple types of materials to multiple clients, both public and private, on an established route, and on a recurrent basis.
   c. **Contractors' General Business.** Work within permanent home offices, branch plants, fabrication plants, tool yards, and other establishments that are part of a contractor's or subcontractor's general business operations.

5. **Owner-Operators.** Hauling of materials for the project by bona fide truck owner-operators who are listed as such on the certified payroll of the Contractor or approved subcontractor is not considered subcontracting for purposes of AS 36.30.115.

   The Contractor shall ensure that the required prompt payment provisions of AS 36.90.210 are included in contracts with owner-operators.

   The Contractor shall collect and maintain at the project site current and valid copies of the following to prove that each trucker listed is a bona fide owner-operator.

a. Alaska Driver's License with appropriate CDL class and endorsements;
b. Business license for trucking with supporting documents that list the driver as the business owner or corporate officer;
c. Documents showing the driver's ownership interest in the truck, including copies of:

(1) Truck registration; and
(2) Lease (if truck is not registered in driver's name or in the name of the driver's company).

The Contractor shall maintain legible copies of these records for a period of at least three years after final acceptance of the project.

Owner-operators must qualify as independent contractors under the current Alaska Department of Labor's criteria. Owner-operators may be required to show:

a. The owner-operator's right to control the manner in which the work is to be performed;
b. The owner-operator's opportunity for profit or loss depending upon their managerial skill;
c. The owner-operator's investment in equipment or materials required for their task, or the employment of helpers;
d. Whether the service rendered requires a special skill;
e. The degree of permanence of the working relationship; and
f. Whether the service rendered is an integral part of the owner-operator's business.

The status of owner-operators is subject to evaluation throughout the project period. If the criteria for an independent contractor are not met, the Contractor shall submit amended payrolls listing the driver as an employee subject to all labor provisions of the Contract.

The Contractor shall issue each owner-operator a placard in a form approved by the Engineer that identifies both the truck driver and the vehicle. The placard shall be prominently displayed on the vehicle so that it is visible to scale operators and inspectors.

Not withstanding the Department's definitions of contracting and subcontracting, the Contractor shall be responsible for determining and complying with all federal and state laws and regulations regarding contracting, subcontracting, and payment of wages. The Contractor shall promptly pay any fines or penalties assessed for violations of those laws and regulations, and shall promptly comply with the directives of any government agency having jurisdiction over those matters.

E102-030512

Special Provision

108-1.03 PROSECUTION AND PROGRESS. Delete the last sentence of the first paragraph and substitute the following:

Submit the following at the Preconstruction Conference:

Delete the last sentence of the first paragraph in No. 1. A progress schedule, and substitute the following:

1. A Critical Path Method (CPM) Schedule is required, in a format acceptable to the Engineer, showing the order the work will be carried out and the contemplated dates the Contractor and subcontractors will start and finish each of the salient features of the work, including scheduled periods of shutdown. Indicate anticipated periods of multiple shift work in the CPM Schedule. Revise to the proposed CPM Schedule promptly. Promptly submit a revised CPM Schedule if there are substantial changes to the schedule, or upon request of the Engineer.

CR261-121302

SECTION 109

MEASUREMENT AND PAYMENT

Special Provisions

109-1.02 MEASUREMENT OF QUANTITIES. Under subtitle Electronic Computerized Weighing System Item (1) add the following to the end of the first sentence:

", CD, or a USB device."

109-1.05 COMPENSATION FOR EXTRA WORK ON TIME AND MATERIALS BASIS. Under Item 3. Equipment, Item a. add the following to the second paragraph:

The rental rate area adjustment factors for this project shall be as specified on the adjustment maps for the Alaska – South Region.

CR14-043105

Standard Modification

Delete Subsection 109-1.06 in its entirety and replace with the following:

109-1.06 PROGRESS PAYMENTS. The Department will make monthly progress payments to the Contractor based on estimates of the value of work performed and materials on hand under Subsection 109-1.07. At the Departments discretion, a progress payment may be made twice monthly if the value of the estimate exceeds $10,000.

Contractor's failure to pay subcontractors or subcontractor's failure to pay lower tier subcontractors, according to prompt payment provisions required under Subsection 108-1.01 is considered unsatisfactory performance.

The Department will not withhold payment as retainage but may withhold payment for unsatisfactory performance. If satisfactory progress is being made and subcontractors are paid according to Subsection 108-1.01 and AS 36.90.210, the Engineer will authorize 100 percent payment for the estimated value of work accomplished, less any authorized deductions.

If the Engineer finds that satisfactory progress is not being made or payment for satisfactory work by a subcontractor or lower tier subcontractor is not paid according to Subsection 108-1.01, the Engineer may withhold up to 100 percent of the total amount earned from subsequent progress payments. The Engineer may withhold up to 200 percent of the estimated cost to complete final punch list items for unsatisfactory performance until those items are complete. The Engineer will notify the Contractor in writing within eight (8) working days of a request for a progress payment of the reasons why part or all of the payment is being withheld for unsatisfactory performance and what actions may be taken by the Contractor to receive full payment.

Payments of withheld amounts will be made in accordance with AS 36.90.200. No interest will be paid to the Contractor for amounts withheld for unsatisfactory performance except if the Department fails to pay the amount withheld within twenty one (21) calendar days after the Contractor satisfactorily completes the remedial actions identified by the Engineer, as provided in AS 36.90.200(e).

The Contractor shall pay interest on retainage withheld from subcontractors, and at an interest rate according to AS 36.90.250 and AS 45.45.010(a).

E103-030512

109-1.08 FINAL PAYMENT. Add the following sentence to the first paragraph:

The Department will not process the final estimate until the Contractor completes Items 1 through 4 in the first paragraph of Subsection 105-1.16.

E11-063004

Special Provisions

Add the following Section:

SECTION 120

DISADVANTAGED BUSINESS ENTERPRISE (DBE) PROGRAM

120-1.01 DESCRIPTION. The work consists of providing Disadvantaged Business Enterprises (DBEs), as defined in Title 49 CFR Part 26, the opportunity to participate fairly with other contractors in the performance of contracts financed with federal funds. The Contractor and subcontractors shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor will carry out applicable requirements of 49 CFR Part 26 in the award and administration of U.S. DOT assisted contracts.

120-1.02 INTERPRETATION. This section implements the requirements of 49 CFR Part 26, and the Department's federally approved DBE Program.

120-1.03 ESSENTIAL CONTRACT PROVISION. Failure to comply with the provisions of this section is a material breach of contract, which may result in contract termination or other remedy as DOT&PF deems appropriate. Failure to comply with this section is justification for debarment action as provided in AS 36.30.640(4).

120-1.04 DEFINITIONS AND TERMS.

1. **Administrative Reconsideration.** A process by which the low bidder may request reconsideration when the Department determines the Good Faith Effort (GFE) requirements have not been met.

2. **Broker.** A certified DBE for the delivery of creditable materials, supplies, equipment, transportation/hauling, insurance, bonding, etc., within its certified category, that is necessary to complete the project. A broker of materials certified in a supply category must be responsible for scheduling the delivery of materials and ensuring that the materials meet specifications before credit will be given.

3. **Civil Rights Office.** The Department's Civil Rights Office. (CRO)

4. **Contract Compliance Officer.** Individual within the CRO with the authority to administer the Department's compliance programs.

5. **Disadvantage Business Enterprise.** A Disadvantaged Business Enterprise (DBE) which is a for-profit small business concern that is certified in accordance with 49 CFR Part 26 and listed in the Alaska DBE Directory.

6. **DBE Key Employee.** A permanent, year-round employee of the DBE and whose name is on file with the CRO as a key employee. A key employee may act as an on-site representative when the owner is not on-site.

7. **DBE Utilization Goal.** The percent of work to be performed by certified DBEs. The goal is established by the Department and specified in the contract.

8. **DBE Officer.** Individual designated in writing as a representative of the Contractor concerning DBE issues.

9. **Manufacturer.** A DBE certified in a supply category that changes the shape, form, or composition of original material in some way. The DBE must provide that altered material to the general public or the construction industry at large on a regular basis.

10. **Race Conscious Participation.** DBE participation used to meet a specified DBE Utilization Goal.

11. **Race Neutral Participation.** DBE participation that is in excess of the specified DBE Utilization Goal or participation that does not count towards this goal.

12. **Regular Dealer.** A DBE certified in a supply category who operates in a manner consistent with industry practice and who:

    a. maintains an in-house inventory on a regular basis of the particular product provided to this project; and

    b. keeps an inventory in an amount appropriate for the type of work using that product; and

    c. offers that inventory for sale to the general public or construction industry at large (private and public sectors), not just supplied as needed on a project by project basis during the construction season, except where the product requires special or heavy equipment for delivery and the DBE possesses and operates this equipment on a regular basis throughout the construction season in order to deliver the product to the general public or construction industry at large. If the distribution equipment is rented or leased, it must be on a repetitive, seasonal basis; and may additionally fabricate (assemble large components) for use on a construction project, consistent with standard industry practice, for delivery to the project.

    d. a person may be a regular dealer in such bulk items as petroleum products, steel, cement, gravel, stone, or asphalt without owning, operating, or maintaining a place of business, if the person both owns and operates distribution equipment for the products. Any supplementing of regular dealers' own distribution equipment shall be by a long-term lease agreement and not on an ad hoc or contract-by-contract basis.

13. **Commercially Useful Function.** DBE performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. The DBE must also be responsible, with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material, and installing (where applicable) and paying for the material itself.

120-2.01 MEETING THE DBE UTILIZATION GOAL. A DBE's proposed work may be used to demonstrate the successful bidder's ability to meet the DBE Utilization Goal before Contract award. The DBE must be certified in a category covering the Commercially Useful Function to be performed at the time of listing on Form 25A-325C (DBE Utilization Report).

A bidder may meet the DBE Utilization Goal through (1) the participation of certified DBE firms, or (2) documentation of required GFE (Subsection 120-3.01), or (3) a combination of participation and GFE to be eligible for contract award.

DBE participation on contingent sum items will count as Race Neutral DBE Participation and not towards fulfilling a minimum DBE Utilization Goal.

120-3.01 DETERMINATION OF COMPLIANCE.

1. **Phase I-Bid.** All DBE GFEs must be completed prior to bid opening.

2. **Phase II-Award.** The apparent low bidder shall submit evidence of DBE commitment(s) within five working days after receipt of written notification by the Department of the successful low bid. The apparent low bidder may not supplement its DBE efforts after opening, nor offer new or additional DBE participation after submitting the DBE Utilization Report (Form 25A-325C).

   a. **Written DBE Commitment.** Complete Form 25A-326 for each DBE subcontractor.

   b. **DBE Utilization Report.** Submit a completed DBE Utilization Report Form 25A-325C. All listed DBEs must be certified in the appropriate work categories prior to bid opening to be used to meet the DBE contract goal.

   c. **GFE Documentation.** Submit a completed Summary of Good Faith Effort Documentation Form 25A-332A (with attachments) and Contact Report Form 25A-321A if the DBE Utilization Goal is not met on Form 25A-325C.

      If the bidder cannot meet the DBE Utilization Goal, and cannot document the minimum required GFE (as specified below), the Contracting Officer will determine the bidder to be not responsible.

120-3.02 GOOD FAITH EFFORT (GFE).

1. **GFE Criteria.** When a bidder fails to meet DBE Utilization Goal, the CRO will use the following criteria to judge whether they have demonstrated sufficient GFE to be eligible for award of the contract.

   a. **Consider All Subcontractable Items.** Before bid opening, the bidder shall, at a minimum, seek DBE participation for each of the subcontractable items with an established DBE goal as identified on Form 25A-324. It is the bidder's responsibility to facilitate DBE participation by making the work listed on the subcontractable items list available to DBE firms.

      If the bidder cannot achieve the DBE Utilization Goal, then the bidder should also consider other items not listed that could be subcontracted to DBEs.

   b. **Initial DBE Notification.** All DBEs listed in the Department's Plan Holders Self-Registration List for the particular project being bid must be contacted at least seven calendar days prior to bid opening. For GFE purposes, DBEs certified to perform the work items identified on Form 25A-324 and listed as mandatory contact on the Department's Plan Holders Self-Registration List, must be contacted to solicit their interest. Each contact with a DBE firm must be logged on a Contact Report, Form 25A-321A.

      The bidder must give DBEs at least seven calendar days to quote. The bidder may reject DBE quotes received after the deadline. Responsive DBE quotes must be accepted unless they are determined non-competitive. Deadline for quote submission and responsiveness determinations for DBEs and non-DBEs must be consistently applied.

The only acceptable methods of initial and follow up notification are:

(1) By fax with a confirmation receipt of successful transmission to the DBE's fax number listed in the DBE Directory. A fax transmission without receipt of successful transmission is unsatisfactory.

(2) By email with confirmation of successful receipt to the DBE's email address listed in the DBE Directory. Email without confirmation of successful receipt is unsatisfactory.

(3) By telephone solicitation with a record of the date and time of the telephone call made to the DBE's telephone number listed in the DBE Directory. Telephone solicitation without a record of date and time is unsatisfactory.

c. **Non-Competitive DBE Quotes.** DBE quotes more than 10 percent higher than an accepted non-DBE quote will be deemed non-competitive, provided they are for the exact same work or service.

All evidence in support of a non-competitive quote determination must be provided at the time of the GFE submittal. When a DBE quote is rejected as being non-competitive, the work must be performed by the non-DBE subcontractor whose quote was used to provide the basis of the determination. Payments received by the non-DBE subcontractor during the execution of the Contract shall be consistent with the accepted quote. This does not preclude increases due to change documents issued by the Department.

d. **Assistance To DBEs.** Contractors must provide DBEs with:

(1) Information about bonding or insurance required by the bidder.

(2) Information about securing equipment, supplies, materials, or related assistance or services.

(3) Adequate information about the requirements of the contract regarding the specific item of work or service sought from the DBE.

e. **Follow-up DBE Notifications.** If there is no response from the initial DBE notification, you must contact the DBE(s) again to determine if they will be quoting. For acceptable forms of notification and required documentation see 120-3.02, subsection 1.b items 1 through 3.

Failure to submit a quote by the deadline is evidence of the DBE's lack of interest in bidding. Documentation of follow-up contacts shall be logged on the Contact Report, Form 25A-321A.

f. **GFE Evaluation.** Subsections (a) through (e) must be completed for a GFE based submission to be considered. Failure to perform and document actions contained in subsections (a) through (e) constitutes insufficient GFE. After submitting a GFE, bidders may only clarify efforts taken before opening. No new efforts or additional DBE participation is permitted after opening.

2. **Administrative Reconsideration.** 49 CFR 26.53(d) provides an opportunity for administrative reconsideration when the Department determines that GFE is insufficient. This opportunity must be exercised within three working days of notification that GFEs were unsatisfactory. For reconsideration, the bidder must provide written documentation or argument concerning efforts to meet the DBE Utilization Goal. No new or additional contact information may be provided. Only contact information the bidder provided in support of its initial request for a GFE determination by the CRO may be presented to support the request for administrative reconsideration.

The process for an Administrative Reconsideration is as follows:

a. The bidder will have the opportunity to meet with the DBE Liaison Officer in person to discuss the issue. If so desired, the bidder must be ready to meet with the DBE Liaison Officer within four working days of receipt of notice that it failed to meet the requirements of this subsection.

b. The DBE Liaison Officer will render a written decision and provide notification to the bidder within four working days after the meeting. The written decision will explain the basis for finding.

c. The finding of the DBE Liaison Officer cannot be appealed to the U.S. DOT.

120-3.03 DBE CREDITABLE AND NON CREDITABLE WORK.

1. **DBE Creditable Work.** The Commercially Useful Function work items and creditable dollar amounts shown on the DBE Utilization Report, Form 25A-325C, shall be included in any subcontract, purchase order or service agreement with that DBE.

2. **DBE Decertification.**

   a. If a DBE performing a Commercially Useful Function loses its DBE certification at any time prior to execution of a subcontract, purchase order or service agreement, as the result of a determination of ineligibility pursuant to 49 CFR Part 26.87, the work of that firm will not be credited toward the DBE Utilization Goal and the Contractor must either:

      (1) meet the contract goal by subcontracting with an eligible DBE firm or demonstrate a GFE to do so; or

      (2) continue with the decertified DBE and find other work not already committed to DBEs in an amount that meets or exceeds the DBE Utilization Goal.

   b. If a DBE performing a Commercially Useful Function loses its DBE certification after execution of a subcontract, purchase order or service agreement, as the result of a determination of ineligibility pursuant to 49 CFR Part 26.87, the de-certified DBE may continue to perform, and the work may be credited toward the DBE Utilization Goal.

   c. If a DBE goes out of business and cannot perform the work, the Contractor must meet the contract goal by subcontracting with an eligible DBE Firm or demonstrate a GFE to do so.

      The provisions of 120-3.03(3) Termination of a DBE and 120-3.03(4) DBE Replacement or Substitution do not apply to this section.

      A Contractor must notify the CRO within one business day if they become aware of any change in a DBE's circumstances that might lead to a DBE's decertification.

3. **Termination of a DBE.**

   a. In accordance with 49 CFR 26.53(f)(1) the Contractor shall not terminate a DBE without good cause and the prior written consent of the Engineer. For purposes of this paragraph, good cause includes the following circumstances:

      (1) DBE defaults on their obligation for any reason;

      (2) The DBE fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or refusal of the DBE to perform its work on the subcontract results from the bad faith or discriminatory action of the Contractor.

      (3) The DBE fails or refuses to meet the Contractor's reasonable, nondiscriminatory bond requirements;

      (4) The DBE becomes bankrupt, insolvent, or exhibits credit unworthiness;

      (5) The DBE is ineligible to work on public works projects because of suspension and debarment proceedings pursuant 2 CFR Parts 180, 215, and 1,200 or applicable state law;

(6) The Engineer determines that the DBE is not a responsible contractor.

(7) The DBE voluntarily withdraws from the project and provides a written notice of its withdrawal;

(8) The DBE is ineligible to receive DBE credit for the type of work required;

(9) A DBE owner dies or becomes disabled with the result that the DBE is unable to complete its work; or

(10) Other documented good cause that the Engineer determines, compels the termination of the DBE, provided that good cause does not exist if the Contractor seeks to terminate a DBE it relied upon to obtain the contract so that the Contractor can self-perform the work for which the DBE was engaged or so that the Contractor can substitute another DBE or non-DBE after contract award.

b. The Contractor must give written notice to the DBE of its intent to request to terminate and/or substitute, and the reason for the request. The request to terminate and/or substitute must be submitted to the Engineer.

c. The Contractor must give the DBE five working days to respond to the written notice. Any response from the DBE must be submitted to the Engineer.

d. DBEs that are terminated must be replaced or substituted in accordance with 120-3.02(4).

4. **DBE Replacement or Substitution.**

a. The Contractor shall submit to the Engineer a written request to replace or substitute a DBE who fails or refuses to execute a written subcontract or who is terminated under 120-3.03(3). If approved, the Contractor shall, at a minimum, replace or substitute the DBE with another eligible DBE for the same work in order to fulfill its commitment under the DBE Utilization Goal.

b. If the Contractor cannot obtain replacement DBE participation, the DBE Utilization Goal will not be adjusted. However, the Engineer may consider the following criteria as satisfying that portion of DBE participation that cannot be replaced.

(1) The Contractor was not at fault or negligent and that the circumstances surrounding the replacement or substitution were beyond the control of the Contractor; and

(2) The Contractor is unable to find replacement DBE participation at the same level of DBE commitment and has adequately performed and documented the GFE expended in accordance with Subsection 120-3.02; or

(3) It is too late in the project to provide any real subcontracting opportunities for DBEs.

If the Engineer agrees that additional DBE participation is not available, the DBE may be replaced or substituted with a non-DBE or the Contractor may self-perform the work.

120-3.04 COMMERCIALLY USEFUL FUNCTION.

1. **Creditable Work.** Measuring the DBE Utilization Goal will be based upon the actual dollars paid to the DBEs for creditable Commercially Useful Function work on this project. This is determined by the Engineer in accordance with this Section.

Commercially Useful Function is limited to:

a. Prime Contractors;

b. Subcontractors;

c. Manufacturers;

d. Regular Dealers;

e. Brokers; or

f. Joint Ventures

2. **Determination of Commercially Useful Function.** In order for the Commercially Useful Function work of the DBE to be credited toward the goal, the Contractor will ensure that the DBE is certified in the appropriate category at the time of the submittal of the subcontract, or the issuance of a purchase order or service agreement. Subcontracts, purchase orders and service agreements shall be consistent with the written DBE commitment.

   a. The Commercially Useful Function performed by a DBE certified in a supply category will be evaluated by the Engineer to determine whether the DBE performed as either a broker, regular dealer, or manufacturer of the product provided to this project.

   b. The following factors will be used in determining whether a DBE trucking company is performing a Commercially Useful Function:

      (1) The DBE must be responsible for the management and supervision of the entire trucking operation for which it is performing on a particular contract, and there cannot be a contrived arrangement for the purpose of meeting DBE goals.

      (2) The DBE must itself own and operate at least one fully licensed, insured, and operational truck used on the contract.

      (3) The DBE receives credit for the total value of the transportation services it provides on the contract using trucks it owns, insures, and operates using drivers it employs.

   c. The Contractor will receive credit for the Commercially Useful Function performed by DBEs as provided in this Section. Contractors are encouraged to contact the Engineer in advance of the execution of the DBE's work or provision of goods or services regarding Commercially Useful Function and potential DBE credit.

   d. The DBE may perform work in categories for which it is not certified, but only work performed in the DBE's certified category meeting the Commercially Useful Function criteria may be credited toward the DBE Utilization Goal.

   e. DBE work shall conform to the following requirements to be a Commercially Useful Function:

      (1) It will be necessary and useful work required for the execution of the Contract.

      (2) The scope of work will be distinct and identifiable with specific contract items of work, bonding, or insurance requirement.

      (3) It will be performed, controlled, managed, and supervised by employees normally employed by and under the control of the certified DBE. The work will be performed with the DBE's own equipment. Either the DBE owner or DBE On-Site Representative will be at the work site and responsible for the work. Leased equipment may also be used provided the DBE has exclusive use of the equipment and it is operated by a driver the DBE employs. In remote locations or rare situations, a DBE may use equipment and/or personnel from the Contractor or its affiliates. Should this situation arise, a prior arrangement must be in place. The duration of the arrangement must be short term and prior written approval from the Engineer must be obtained.

(4) The manner in which the work is sublet or performed will conform to standard industry practice within Alaska, as determined by the Department. The work or provision of goods or services will have a market outside of the DBE program (and must also be performed by non-DBE firms within the Alaskan construction industry). Otherwise, the work or service will be deemed an unnecessary step in the contracting or purchasing process and no DBE credit will be allowed.

There will be no DBE credit for lower-tier non-DBE subcontract work.

(5) The cost of the goods and services will be reasonable and competitive with the cost of goods and services outside the DBE program within Alaska. Materials or supplies needed as a regular course of the Contractor's operations such as fuel, maintenance, office facilities, portable bathrooms, etc. are not creditable.

The cost of materials actually incorporated into the project by a DBE subcontractor is creditable toward the DBE goal only if the DBE is responsible for ordering and scheduling their delivery and fully responsible for ensuring that they meet specifications. The cost of materials purchased from the contractor or its affiliates is not creditable.

(6) Subcontract work, with the exception of truck hauling, shall be sublet by the same unit of measure as is contained in the Bid Schedule unless approved in advance by the Engineer.

(7) The DBE will control all business administration, accounting, billing and payment transactions. The Contractor cannot perform these functions for the DBE.

In accordance with AS 36.30.420(b), the Engineer may inspect the offices of the DBE and audit their records to assure compliance.

3. **Rebuttal of a Finding of No Commercially Useful Function.** Consistent with the provisions of 49 CFR Part 26.55(c)(4)&(5), before the Engineer makes a final finding that no Commercially Useful Function has been performed by a DBE, the Engineer will coordinate transmittal of the presumptive finding to the Contractor, who will in-turn, notify the DBE. The Contractor will provide the DBE the opportunity to provide rebuttal information. The Contractor shall present the information to the Engineer.

   The Engineer will make a final determination on whether the DBE is performing a Commercially Useful Function. Under no circumstances will the Contractor take any action with respect to the DBE until the final determination is made. The Engineer's decisions on Commercially Useful Function matters are subject to review by the Department, but are not administratively appealable to the U.S. DOT.

4. **Monthly Required Reporting.** On a monthly basis, the Contractor shall submit the Monthly Summary of Disadvantaged Business Enterprise Participation, Form 25A-336, to the Engineer. Reports are due by the 15th of the following month. Also attach copies of canceled checks or bank statements that identify payer, payee, and amount of transfer to verify payment information shown on the form.

120-4.01 DETERMINING DBE CREDIT. The Contractor is entitled to count toward the DBE Utilization Goal those monies actually paid to certified DBEs for Commercially Useful Function work performed by the DBE as determined by the Engineer. The Contractor will receive credit for the utilization of the DBEs, as follows:

1. Credit for the Commercially Useful Function of a DBE prime contractor is 100 percent of the monies actually paid to the DBE under the contract for creditable work and materials in accordance with 49 CFR Part 26.55.

2. Credit for the Commercially Useful Function of a subcontractor is 100 percent of the monies actually paid to the DBE under the subcontract for creditable work and materials.

3. Credit for the Commercially Useful Function of a subcontractor performing hauling/transportation is 100 percent of the monies actually paid to the DBE under the subcontract for creditable work for those firms certified in the 100 percent category. Credit for the Commercially Useful Function of a subcontractor performing hauling/transportation is 5 percent of the monies actually paid to the DBE under the subcontract for creditable work for those firms certified in the 5 percent credit category.

4. Credit for the Commercially Useful Function of a manufacturer is 100 percent of the monies paid to the DBE for the creditable materials manufactured.

5. Credit for the Commercially Useful Function of a regular dealer of a creditable material, product, or supply is 60 percent of its value. The value is the actual cost paid to the DBE not to exceed the bid price for such item.

6. Credit for the Commercially Useful Function of a broker performed by a DBE certified in a supply category for providing a creditable material, product or supply is limited to a reasonable brokerage fee. The brokerage fee will not exceed 5 percent of the cost of the procurement contract for the creditable item.

7. Credit for the Commercially Useful Function of a broker performed by a DBE certified in a bonding or insurance category is limited to a reasonable brokerage fee, not to exceed 5 percent of the premium cost.

8. Credit for the Commercially Useful Function of a joint venture (JV) either as the prime contractor or as a subcontractor may not exceed the percent of the DBE's participation in the JV agreement, as certified by the CRO. The DBE joint venture partner will be responsible for performing all of the work as delineated in the certified JV agreement.

120-5.01 ACHIEVEMENT OF DBE GOALS. Work under this item is subsidiary to other contract items and no payment will be made for meeting or exceeding the DBE Utilization Goal.

If the Contractor fails to utilize the DBEs listed on Form 25A-325C as scheduled or fails to submit proof of payment, requested documentation, or otherwise cooperate with a DBE review or investigation, the Department will consider this to be unsatisfactory work. If the Contractor fails to utilize GFE to replace or substitute a DBE, regardless of fault (except for Subsection 120-3.03(4)(b)(3)), the Department will also consider this unsatisfactory work. Unsatisfactory work may result in disqualification of the Contractor from future bidding under Subsection 102-1.13 and withholding or progress payments consistent with Subsection 109-1.06.

E114-020114

SECTION 201

CLEARING AND GRUBBING

Special Provisions

201-3.01 GENERAL. Add the following:

Perform the work necessary to preserve and/or restore land monuments and property corners from damage. Restore land monuments and/or property corners that are disturbed according to Section 642. An undisturbed area five feet in diameter may be left around existing monuments and property corners. A list of land monuments and property corners is shown on the Survey Control drawing.

CR2013-042313

Add the following:

Clearing and grubbing is not permitted within the migratory bird window of May 1 to July 15; except as permitted by Federal, State and local laws and approved by the Engineer.

CR2011-010114

201-5.01 BASIS OF PAYMENT. Add the following:

Add the following:

The work required to preserve and restore land monuments and property corners is subsidiary to 201 Pay Items.

CR2013-042313

SECTION 202

REMOVAL OF STRUCTURES AND OBSTRUCTIONS

Special Provisions

202-1.01 DESCRIPTION. Add the following:

Add the following:

This work also includes:

Pavement Planing. Remove, and or reuse, or dispose of planed pavement materials as noted herein.

CR2023-082310

Add the following:

This work also includes:

Fugitive Materials. Remove and dispose of fugitive materials from under guardrails, around luminaire bases, adjacent to pathways, and as specified in this section. Conduct a pre-construction inspection of the project area with the Engineer to determine the limits of the fugitive material removal and disposal work.

202-2.01 MATERIALS. Add the following:

Fugitive Materials. Including but not limited to organic matter (peat, roots, sticks, sod or other), muck, earth (where not part of surface material) rocks, gravel, sand, silts and debris (trash and similar) and as identified by the Engineer.

55260/56176-022514

202-3.05 REMOVAL OF PAVEMENT, SIDEWALKS, AND CURBS. Add the following:

Removed pavement material, including sidewalks and curbs, is the property of the Contractor. Handle and transport materials according to the Alaska Department of Environmental Conservation (DEC) regulations. Store materials at a Contractor DEC approved site.

Removed pavement, sidewalks, and curbs may be used for embankment construction if it is not exposed at the completed embankment surface. Maximum allowable dimension of broken materials is 6 inches. The use of pavement, sidewalk, and curb in the embankment requires written approval and direction for use from the Engineer.

Dispose of removed pavement, sidewalks, and curbs not wanted by the Contractor and not used in the project, according to Subsection 3.09.

CR2022-010610

Add the following Subsection 3.06:

202-3.06 PAVEMENT PLANING. Remove existing asphalt pavement by cold planing at locations shown in the Plans. Adjust planing machine to remove all ruts in the roadway surface and as directed by the Engineer. The surface of the pavement after planing shall be a uniformly fine milled textured surface.

Notify the Engineer of pavement areas that may be thin or unstable. Where the planing equipment breaks through the existing pavement, repair as specified in the Division 400, Sections 401, 408, and 409. Repair with Section 401 HMA; Type II, Class A. If Section 401 is not included in the project special provisions use the HMA Type specified for the immediate layer of HMA to be placed over the planed surface. Repair work and materials are subsidiary to HMA Pay Items.

Remove planed material from the project immediately after planing. Stockpile planed material at the Homer maintenance yard located at 3450 Sterling Highway, Homer, Alaska. Coordinate with Gordon Lange, Maintenance Chief, (907) 235-5218 for acceptance of material and desired location of stockpile. Planed material not acceptable to the Maintenance Chief will be disposed of in an acceptable manner, or incorporated into the road structure prism as directed by the Engineer. Handle, transport, store, or dispose material according to Subsection 3.05, Removal of Pavement, Sidewalks, and Curbs.

Dispose of planed material not accepted by the maintenance yard, not used in the project, and not wanted by the Contractor according to Subsection 3.09.

During planing operations, sweep the streets according to 643-3.04 Traffic Control Devices, No. 6. Street Sweeping and Power Brooming to control dust and remove loose material from the planed areas. The removal operation shall follow within 50 feet of the planing machine.

Do not allow traffic to travel on surfaces that have an abrupt longitudinal planed edge greater than 2 inches. In the event it is necessary to route traffic across such edges, an asphalt pavement transition 2 feet in width shall be placed adjacent to the edge and to gutters.

Where existing asphalt pavement overlays gutters adjacent to the area being planed remove the existing pavement.

The existing curb, gutter, and edge of existing Portland cement pavement not designated for removal shall not be damaged or disturbed. Damage caused by the planing operation shall be removed and replaced by the Contractor at the Contractor's expense.

The planing machine shall have the following capabilities:
1. Self propelled and capable of milling at speeds from 0 ft to 40+ ft per minute.
2. Able to spray water inside the milling chamber to reduce dust.
3. Able to mill adjacent to a gutter without damaging gutter.
4. Automatic cross slope and depth control combined with automatic longitudinal grade control actuated by sonic or laser ski sensors.
5. Produce a "fine milled" textured surface with a tool spacing of 5/16 inch.
6. Able to uniformly maintain a planar surface across adjacent lanes (no elevation differential or ridges between adjacent passes).

Provide a small machine (producing a "fine milled" textured surface) to trim areas that are inaccessible to the larger machine at manholes, valve covers, curb returns, and intersections.
The Engineer may reject any machine that does not comply with the above noted requirements.

CR2023-082310

Add the following Subsection 3.08:

202-3.08 REMOVAL OF FUGITIVE MATERIALS. Remove fugitive materials from in front of, under, for a width of 10 ft behind sections of guardrail, measured from the roadside face of guardrail, and behind sections of pathway and sidewalk as required to establish positive drainage or as directed by the Engineer. Provide positive drainage away from the roadway. Slope edges of sand removal at 3:1 or flatter.

Clean around the base of a luminaire when the base falls within the 10 ft. The 10 ft width is measured from the roadside face of the guardrail toward the shoulder to the closest point of the luminaire base plate, or as directed by the Engineer. Remove fugitive materials from around the base to a level flush with surrounding ground, or as directed by the Engineer.

Remove disturbed materials in the same work shift the disturbance occurred.

Removed materials are the property of the Contractor. Do not reuse these materials within the project limits without the written approval of the Engineer.

Dispose of removed materials at an approved disposal site as required dependent on the type of materials and as required by the Federal, State, and Municipal environmental regulations.

55260/56176-022514

Add the following Subsection 3.09.

202-3.09 DISPOSAL OF PAVEMENT, SIDEWALKS, AND CURBS.

Pavement, sidewalk and curb materials not being used in the project, stored at a Contractor DEC approved site, provided to the local DOT Maintenance and Operations Yard, or disposed of at a previously approved DEC disposal site require a DEC Solid Waste Disposal Permit.

Disposal sites shall be outside the project limits unless directed otherwise, in writing, by the Engineer. Obtain written consent from the property owner. Dispose of solid waste materials, pavement, sidewalk, and curb (including handling, transporting, storing and disposing) according to the Alaska Department of Environmental Conservation (DEC) Regulations.

A DEC Permitting Officer in Anchorage may be contacted at (907) 269-7590.

CR2021-010114

202-4.01 METHOD OF MEASUREMENT. Add the following:

Item 202(15). Pavement planing is measured by the square yard of the pavement planed.

CR2023-082310

Add the following:

Removing and disposing fugitive materials is measured along the edge of the traveled way on the side of the road nearest the area of work by the linear foot.

55260/56176-022514

202-5.01 BASIS OF PAYMENT. Add the following:

Acquiring a solid waste disposal permit from DEC is subsidiary to 202 Pay Items.

CR2021-010114

Add the following:

Item 202(15). At the Contract Unit Price - payment is full compensation for activities and equipment associated with pavement planing including:

- removal of pavement from curbs and gutters;
- mechanical sweepers and power brooms used during the planing operation;
- stockpiling planed material when required;

Replace damaged loop detectors, piezoelectric sensors, RWIS or other highway data sensors outside the specified planing depth according to the requirements of section 660 and 669 at no expense to the Department.

Payment will be made under:

Pay Item No.	Pay Item	Pay Unit
202(15)	Pavement Planing	Square Yard

CR2023-082310

Add the following:

Pay Item No.	Pay Item	Pay Unit
202(40)	Remove Fugitive Materials	Linear Foot

55260/56176-022514

SECTION 203

EXCAVATION AND EMBANKMENT

Special Provisions

203-1.01 DESCRIPTION. Add the following:

Ditch linear grading shall consist of the final shaping of designated ditches and slopes for drainage by grading with a small dozer, motor grader, or other suitable means approved by the Engineer. It includes shoulder cleaning and grading in locations where ditch is adjacent to the pathway and sidewalk.

55260/56176-011414

Standard Modification

203-2.01 MATERIALS. Add to the end of this subsection.

6. Crushed Glass: May be combined with soil-aggregate material to be used in embankment construction. Meet 703-2.15 requirements.

203-3.01 GENERAL. Add to the end of this subsection.

Do not place soil-aggregate containing glass cullet:

1. Within four feet from the face of any embankment slope,
2. Within 150 feet from any surface water body,
3. In embankment areas where culvert placement is required,
4. In contact with any geosynthetic material.

E92-080112

203-4.01 METHOD OF MEASUREMENT. Add the following:

8. Item 203(27). Measurement of ditch linear grading, whether flat bottom or "V" ditch, will be measured for payment by the station along the center of the ditch for each ditch so designated, constructed, and accepted by the Engineer.

203-5.01 BASIS OF PAYMENT. Add the following:

Payment for ditch linear grading will be full compensation for furnishing equipment, labor, tools, and incidentals to provide the preparation, excavation and shaping necessary to complete the work. Hauling and disposing of excess material is subsidiary.

Payment will be made under:

Pay Item No.	Pay Item	Pay Unit
203(27)	Ditch Linear Grading	Station

55260/56176-011414

SECTION 204

STRUCTURE EXCAVATION FOR CONDUITS AND MINOR STRUCTURES

Special Provision

204-2.01 MATERIALS. In paragraph three replace: "pavement" with "roadbed."

204-3.01 CONSTRUCTION REQUIRMENTS. Replace paragraph four with:

Native material may be utilized for conduit, pipe culvert, storm drain, manhole, inlet and other minor structure backfill outside the roadbed structure if it meets the minimum requirements of Selected Material, Type C, as specified in subsection 703-2.07. Excavation, bedding, backfill, and compaction may be visually inspected and approved by the Engineer.

CR2041-121212

SECTION 301

AGGREGATE BASE AND SURFACE COURSE

Special Provision

301-2.01 MATERIALS. Add the following after the first sentence:

Recycled Asphalt Material (RAM) may be substituted for aggregate base course, inch for inch, if the following conditions are met:

1. RAM shall be crushed or processed to 100 percent by weight passing the 1.5 inch sieve and 95-100 percent by weight passing the 1 inch sieve.

2. The gradation of the extracted aggregate shall meet the following:

Sieve	Percent Passing by Weight
1 inch	100
3/4 inch	70 – 100
3/8 inch	42 – 90
No. 4	28 – 78
No. 16	11 – 54
No. 50	5 – 34
No. 100	3 - 22
No. 200	2 – 12

3. The asphalt content shall be 2.5 – 5.0 percent by weight of the RAM.

CR176-012407

Standard Modification

Add to the end of this subsection.

1. Crushed Glass: May be combined with soil-aggregate material to be used in base course construction. Meet 703-2.15 requirements.

Add to the end of this subsection.

Place surfacing material over all soil-aggregate bases containing glass cullet.

Do not place soil-aggregate containing glass cullet:

1. Within four feet from the face of any embankment slope,
2. Within 150 feet from any surface water body,
3. In embankment areas where culvert placement is required,
4. In contact with any geosynthetic material.

E93-080112

Special Provisions

301-3.01 PLACING. Add the following:

Base course material used for the sidewalk and pathway foundation shall be placed with a "Layton box" or similar equipment capable of providing a specified depth with a uniform surface.

CR26-090189

301-3.03 SHAPING AND COMPACTION. Add the following:

If recycled asphalt material is substituted for aggregate base course, the following conditions shall be met:

1. Density acceptance will be determined by control strip method ATM 412. Use a test strip with a vibratory compactor with a minimum dynamic force of 40,000 pounds. The optimum density will be determined by the Engineer using a nuclear densometer gauge to monitor the test strip. Adequate water shall be added to aid compaction.

2. After the appropriate coverage with the vibratory compactor, a minimum of 6 passes with a pneumatic tire roller shall be completed. Tires shall be inflated to 80 psi (± 5 psi) and the roller shall have a minimum operating weight per tire of 3,000 pounds.

301-5.01 BASIS OF PAYMENT. Add the following:

Recycled asphalt material substituted for aggregate base course will be paid for as Item 301(1) Aggregate Base Course, at the unit price shown in the bid schedule for that Item.

CR176-012407

SECTION 308

CRUSHED ASPHALT BASE COURSE

308-3.01 PULVERIZING AND MIXING. Add the following:

Remove built up sand from road shoulders prior to pulverizing the road to prevent mixing of the sand into the road surface materials.

Excess surface material meeting the requirements for RAM listed in subsection 301-2.01 may be used in place of aggregate base course on this project.

Excess surface material not used on the project shall be stockpiled at the Homer maintenance yard in accordance with subsection 202-3.06.

Dispose of excess material resulting from ditch cleaning and shoulder shaping in accordance with subsection 202-3.01.

308-5.01 BASIS OF PAYMENT. Add the following:

Shaping shoulders and removal of excess material is subsidiary to 308 pay items.

55260-112613

Special Provisions

Replace Section 401 with the following:

SECTION 401

HOT MIX ASPHALT AND SURFACE TREATMENTS

401-1.01 DESCRIPTION. Construct one or more layers of plant-mixed Hot Mix Asphalt (HMA) pavement on an approved surface, to the lines, grades, and depths shown in the Plans.

1. In this Section, HMA refers to Type I, II, III and IV.
   a. Temporary Asphalt Pavement: HMA, Type II, Class B, minimum.
   b. Preleveling/Leveling Course: HMA, Type IV, Class B.
   c. Use of Recycled Asphalt Pavement (RAP) is not permitted in HMA, except RAP may be used in HMA, Type II, Class B.
   d. Warm Mix Asphalt (WMA) is not permitted in HMA.

MATERIALS

401-2.01 COMPOSITION OF MIXTURE - JOB MIX DESIGN (JMD). Design the JMD according to the Alaska Test Manual (ATM Alaska Test Manual (ATM) 417 using the design requirements of Table 401-1.

TABLE 401-1

HMA DESIGN REQUIREMENTS

DESIGN PARAMETERS	CLASS "A"	CLASS "B"
HMA (Including Asphalt Cement)		
Stability, Pounds	1800 Min.	1200 min.
Flow, 0.01 Inch	8 – 14	8 - 16
Voids in Total Mix, %	3 - 5	3 – 5
Compaction, Number of Blows Each Side of Test Specimen	75	50
Asphalt Cement		
Percent Voids Filled with Asphalt Cement (VFA)	65 - 75	65 - 78
Asphalt Cement Content, Min. % @ 4% VTM	5.0	5.0
Dust-Asphalt Ratio*	0.6 - 1.4	0.6 - 1.4
Voids in the Mineral Aggregate (VMA), %, Min.		
Type I	12.0	11.0
Type II	13.0	12.0
Type III, IV	14.0	13.0

*Dust-asphalt ratio is the percent of material passing the No. 200 sieve divided by the percent of effective asphalt cement.

The JMD will specify the Target Values (TV) for gradation, the TV for asphalt cement content, the Maximum Specific Gravity (MSG) of the HMA, the additives, and the allowable mixing temperature range.

Target values for gradation in the JMD must be within the broad band limits shown in Table 703-3, for the Type of HMA specified. For acceptance testing, HMA mixture will have the full tolerances in Table 401-2 applied. The tolerance limits will apply even if they fall outside the broad band limits shown in Table 703-3, except the tolerance limit of the No. 200 sieve is restricted by the broad band limits. Tolerance limits will not be applied to the largest sieve specified.

Do not mix HMA produced from different plants for testing or production paving. HMA from different plants will be rejected.

Submit the following to the Engineer at least 15 days before the production of HMA:

1. A letter stating the location, size, and type of mixing plant, the proposed gradation for the JMD, gradations for individual stockpiles with supporting process quality control information, and the blend ratio of each aggregate stockpile. The proposed gradation must meet the requirements of Table 703-3 for each Type of HMA specified in the Contract.

2. Representative samples of each aggregate (coarse, intermediate, fine, and blend material and mineral filler, if any) in the proportions required for the proposed mix design. Furnish a total of 500 pounds of material.

3. Five separate 1-gallon samples of the asphalt cement proposed for use in the HMA. Include name of product, manufacturer, test results of the applicable quality requirements of Subsection 702-2.01, manufacturer's certificate of compliance according to Subsection 106-1.05, a temperature viscosity curve for the asphalt cement or manufacturer's recommended mixing and compaction temperatures, and current Material Safety Data Sheet.

4. One sample, of at least 1/2 pint, of the anti-strip additive proposed, including name of product, manufacturer, and manufacturer's data sheet, and current Material Safety Data Sheet.

The Engineer will evaluate the material and the proposed gradation using ATM 417 and the requirements of Table 401-1 for the appropriate Type and Class of HMA specified. The mix, the materials and proposed gradation meeting the specification requirements will become part of the Contract when approved, in writing, by the Engineer.

The Engineer has the option to require further verification of the JMD. Evaluation of the JMD may be included in the Process Quality Controls, Supplemental Process Quality Controls, Subsection 401-2.05, Test Strip construction.

FAILURE TO MEET SPECIFICATION REQUIREMENTS

Submit a new JMD with changes noted and new samples in the same manner as the original JMD when:

- The results do not achieve the requirements specified in Table 401-1
- The asphalt cement source is changed
- The source of aggregate, aggregate quality, gradation, or blend ratio is changed
- The results of a Test Strip do not meet the requirements of the specification – the Engineer may require a new JMD.

Do not produce HMA for production paving and payment before the Engineer provides written approval of the JMD, the original or a new replacement JMD. If a Test Strip(s) is required, do not produce HMA for production paving and payment before the Engineer provides written approval of the Test Strip construction, construction process, the materials, and the JMD, Subsection 401-2.05.

Payment for HMA will not be made until the new JMD and the Test Strip, when required, is approved. Approved changes apply only to HMA produced after the submittal of changes.

The Engineer will assess a fee for each mix design subsequent to the approved Job Mix Design. The fee will be included under Item 401(6) Asphalt Price Adjustment – Quality.

401-2.02 AGGREGATES. Conform to Subsection 703-2.04.

Use a minimum of three stockpiles for crushed HMA aggregate (coarse, intermediate, and fine).

401-2.03 ASPHALT CEMENT. Conform to 702-2.01. If not specified, use PG 52-28.

Provide test reports for each batch of asphalt cement showing conformance to the specifications in Section 702 before delivery to the project. Require that the storage tanks used for each batch be noted on the test report, the anti-strip additives required by the mix design be added during load out for delivery to the project, and a printed weight ticket for anti-strip is included with the asphalt cement weight ticket. The location where anti-strip is added may be changed with the written approval of the Engineer.

Furnish the following documents at delivery:
1. Manufacturer's certificate of compliance (Subsection 106-1.05).
2. Conformance test reports for the batch (provide prior to delivery as noted above).
3. Batch number and storage tanks used.
4. Date and time of load out for delivery.
5. Type, grade, temperature, and quantity of asphalt cement loaded.
6. Type and percent of anti-strip added.

401-2.04 ANTI-STRIP ADDITIVES. Use anti-strip agents in the proportions determined by ATM 414 and included in the approved JMD. At least 70% of the aggregate must remain coated when tested according to ATM 414. A minimum of 0.25% by weight of asphalt cement is required.

401-2.05 PROCESS QUALITY CONTROL. Sample and test materials for quality control of the HMA according to Subsection 106-1.03. Submit to the Engineer, with the JMD, a documentation plan that will provide a complete, accurate, and clear record of the sampling and testing results. When directed by the Engineer, make adjustments to the plan and resubmit.

Submit a paving and plant control plan at the pre-paving meeting to be held a minimum of 5 working days before initiating paving operations. Address the sequence of operations and joint construction. Outline steps to provide product consistency, to minimize segregation, to prevent premature cooling of the HMA and to provide the mat and longitudinal density required by these specifications. Include a proposed quality control testing frequency for gradation, asphalt cement content, and compaction.

Failure to perform quality control forfeits the Contractor's right to a retest under Subsection 401-4.02.

Provide copies of the documented sampling and testing results no more than 24 hours from the time taken.

SUPPLEMENTAL PROCESS QUALITY CONTROL

The Engineer has the option to require supplemental process quality controls including additional sampling and testing. Include the supplemental process quality controls in the documentation plan.

When directed by the Engineer: provide "Density Profiles" and or "Test Strips."

1. Density Profiles. Provide density profile testing, with a nuclear density gauge, of the mat and longitudinal joints. Include the frequency of the test groups, configuration of the test groups for mat density and joint density individually or combined. Indicate the number of tests in a test group intended to confirm the density of the mat and joints.

   Locations that may require testing include: all lanes on bridge decks, adjacent to longitudinal joints, areas where segregation is visible, thermal segregation potential exists, where mat density is lower than the minimum (considered segregated), and the paver starts/stops. The Engineer will identify these and other areas that require density testing.

2. Test Strips. Construct test strips (ATM 412) using the approved job mix HMA a minimum of 5 working days prior to planned production paving, except use the proposed JMD when the test strip is being constructed to help evaluate the JMD as part of the mix performance analysis. Submit a proposed test strip location to the Engineer for coordination, and approval; include in the process control documentation plan. The Engineers approval and written authorization of the location, date, and time, is required before construction of a test strip.

   Establish roller patterns and the number of passes required to assure that proper placement and compaction is achieved. The test strip shall include no less than 300 tons and no more than 1000 tons, except as may be authorized, in writing, by the Engineer. The full complement of the paving train will be on site to receive instructions from the Engineer as needed to complete the mix performance analysis. Make the equipment available for inspection as required by Subsection 401-3.02. Provide an onsite process control representative with authority to modify mix components as instructed by the Engineer.

   Payment for Test Strips: Subsection 401-5.01 Basis of Payment and as noted here.
   a. Approved. Test strip construction and material, approved by the Engineer in writing, as meeting the specification requirements will be paid for at the Contract unit prices. Price adjustments will not be included for quality, unit price, or other.
   b. Failed. The Engineer may direct the Contractor to remove and dispose of test strips not meeting specification requirements. Contractor, construct a new test strip or return the surface materials and grade to their original condition as directed by the Engineer. The materials, construction of, removal and disposal of a failed test strip will be at the Contractor's expense.

   Only after the Engineer approves the test strip may HMA be produced for production paving and payment.

CONSTRUCTION REQUIREMENTS

401-3.01 WEATHER LIMITATIONS. Do not place the HMA on a wet surface, on an unstable/yielding roadbed, when the base material is frozen, or when weather conditions prevent proper handling or finishing of the mix. Do not place HMA unless the roadway surface temperature is a minimum of 40° F or warmer. HMA Type II, Class A - Do not place mix after September 15 unless approved by the Engineer in writing.

401-3.02 EQUIPMENT, GENERAL. Use equipment in good working order and free of HMA buildup. Make equipment available for inspection and demonstration of operation a minimum of 24 hours before placement of production HMA, except when a test strip is required, 24 hours before placement of the test strip HMA.

401-3.03 ASPHALT MIXING PLANT. Meet AASHTO M 156. Use an asphalt plant designed to dry aggregates, maintain accurate temperature control, and accurately proportion asphalt cement and aggregates. Calibrate the asphalt plant and furnish copies of the calibration data to the Engineer at least 4 hours before HMA production. Provide daily burner charts to the Engineer showing start/stop times and temperatures.

Provide a scalping screen at the asphalt plant to prevent oversize material or debris from being incorporated into the HMA.

Provide a tap on the asphalt cement supply line just before it enters the plant (after the 3-way valve) for sampling asphalt cement.

Provide aggregate and asphalt cement sampling equipment meeting OSHA safety requirements.

401-3.04 HAULING EQUIPMENT. Costs associated with Subsection 401-3.04 are subsidiary to Section 401 Pay Items.

Vehicles/Equipment. Haul HMA in trucks with tight, clean, smooth metal beds, thinly coated with a minimum amount of paraffin oil, lime water solution, or an approved manufactured asphalt release agent. Do not use petroleum fuel as an asphalt release agent.

During HMA hauling activities, the hauling vehicle will have covers attached and available for use. Be prepared to demonstrate deployment of the cover when hauling material or empty. Illustrate the efficiency of deployment and how the materials are protected from the environment and the environment is protected from the materials. When directed by the Engineer cover the HMA in the hauling vehicle(s).

Roadway Maintenance. Daily inspect, remove/clean, and dispose of project materials deposited on existing and new pavement surfaces(s) inside and outside the project area including haul routes.

The inspection plan and method of removal/cleaning and disposal shall be submitted in writing to the Engineer and approved by the Engineer 5 days before initiating paving operations. Include alternatives, options to immediately correct deficiencies in the inspection plan and methods of removal/cleaning and disposal that may be discovered as the work is being performed.

The Engineer may require the Contractor to include a vehicle/equipment cleaning station(s), to be added at the project site and or at the plant, in the basic plan or as one of the corrective alternatives/options. At a minimum, the cleaning station will include the materials and means to:

(1) Spray truck tires with an environmental degradable release agent if mix adheres to tires before dumping in front of the paver.
(2) Clean off loose mix from gates, chains, and tires that might fall on the pavement of the haul route.
(3) Contain, collect and disposal of (1) and (2).

The Contractor is responsible for the inspection plan, the means, and methods used for removal/cleaning and disposal of fugitive materials/debris. The Contractor is responsible for the damage as a result of not removing these materials (to the roadway material and the users and others) and the damage to the roadway materials from the removal method(s). Approval does not change the Contractor's responsibility, nor add responsibility to the Department for this work.

Repair damage to the existing roadway materials (asphalt type) as a result of the fugitive materials or their removal as specified in Subsection 401-3.16 Patching Defective Areas.

401-3.05 ASPHALT PAVERS. Use self-propelled pavers equipped with a heated vibratory screed. Control grade and cross slope with automatic grade and slope control devices. Use an erected string line, a 30-foot minimum mobile stringline (ski), or other approved grade follower, to automatically actuate the paver screed control system. Use grade control on either (a) both the high and low sides or (b) grade control on the high side and slope control on the low side.

Equip the paver with a receiving hopper having sufficient capacity for a uniform spreading operation and a distribution system to place the HMA uniformly in front of screed.

Use a screed assembly that produces a finished surface of the required smoothness, thickness, and texture without tearing, shoving, or displacing the HMA.

Equip the paver with a means of preventing segregation of the coarse aggregate particles from the remainder of the HMA when carried from the paver hopper back to the augers. Use means and methods approved by the paver manufacturer. Means and methods may consist of chain curtains, deflector plates, or other similar devices or combination of devices. When required by the Engineer, provide a Certificate of Compliance that verifies the means and methods required to prevent segregation are being used.

The use of a "Layton Box" or equivalent towed paver is allowed on bike paths, sidewalks, and driveways.

401-3.06 ROLLERS. Use both steel-wheel (static or vibratory) and pneumatic-tire rollers. Avoid crushing or fracturing of aggregate. Use rollers designed to compact HMA mixtures and reverse without backlash.

Use pneumatic rollers to compact the prelevel/leveling course.

All rollers shall have an attached infrared thermometer that measures and displays the surface temperature to the operator.

Use fully skirted pneumatic-tire rollers having a minimum operating weight of 3000 pounds per tire.

401-3.07 PREPARATION OF EXISTING SURFACE. Prepare existing surfaces conforming to the Plans and Specifications. Before applying tack coat to an existing paved surface, clean loose material from cracks for the depth of the cracks. Fill the cleaned cracks, wider than 1 inch, with an approved HMA tamped in place. Wash and or sweep the paved surface clean and free of loose materials.

Preparation of a milled surface:

- Prelevel remaining ruts, pavement delaminations, or depressions having a depth greater than 1/2 inch with HMA, Type IV. Compact the prelevel/leveling course using pneumatic-tire rollers. The Engineer's approval of the material and material installation is required. The Engineer will inspect the material and material installation. Correct material and material installations identified by the Engineer as required by the Engineer for approval. Density testing is not required for the leveling course (prelevel) material, material installation.

- Where the planing equipment breaks through existing pavement, remove 2 inches of existing base material depth and replace with HMA, Type II, Class B. Cold mix HMA prohibited.

  During the planing operation, notify the Engineer of pavement areas that may be thin or unstable.

Do not apply the tack coat material until the Engineer approves the existing surface including, not limited to; the existing paved surface, the milled surface, and a prior layer of HMA pavement.

Before placing the hot asphalt mix, apply tack coat material (Section 702) as specified here and in Section 402. Uniformly coat contact surfaces of curbing, gutters, sawcut pavement, cold joints, manholes, and other structures with tack coat material. Allow tack coat to break before placement of HMA on these surfaces.

401-3.08 PREPARATION OF ASPHALT. Provide a continuous supply of asphalt cement to the asphalt mixing plant at a uniform temperature, within the allowable mixing temperature range.

401-3.09 PREPARATION OF AGGREGATES. Dry the aggregate so the moisture content of the HMA, sampled at the point of acceptance for asphalt cement content, does not exceed 0.5% (by total weight of mix), as determined by WAQTC FOP for AASHTO T 329.

Heat the aggregate for the HMA to a temperature compatible with the mix requirements specified.

Adjust the burner on the dryer to avoid damage to the aggregate and to prevent the presence of unburned fuel on the aggregate. HMA containing soot or fuel is unacceptable (Subsection 105-1.11).

401-3.10 MIXING. Combine the aggregate, asphalt cement, and additives in the mixer in the amounts required by the JMD. Mix to obtain 98% coated particles when tested according to AASHTO T195.

For batch plants, put the dry aggregate in motion before addition of asphalt cement.

401-3.11 TEMPORARY STORAGE. Silo type storage bins may be used, provided the characteristics of the HMA remain unaltered. Changes in the JMD, visible or otherwise, are cause for rejection. Changes may include: visible segregation, heat loss, and the physical characteristics of the asphalt cement, lumpiness, or stiffness of the HMA or similar.

401-3.12 PLACING AND SPREADING. Use asphalt pavers to distribute HMA, including leveling (preleveling) course and temporary HMA. Place the HMA upon the approved surface, spread, strike off, and adjust surface irregularities. The maximum compacted lift thickness allowed is 3 inches.

During placement, the Engineer, using an infrared camera, may evaluate the HMA surface immediately behind the paver for temperature uniformity. Areas with temperature differences more than 25° F lower than the surrounding HMA may produce areas of low density. Contractor shall immediately adjust laydown procedure to maintain a temperature differential of 25° F or less. Thermal images and thermal profile data will become part of the project record and shared with the Contractor.

Use hand tools to spread, rake, and lute the HMA in areas where irregularities or unavoidable obstacles make the use of mechanical spreading and finishing equipment impracticable.

When the section of roadway being paved is open to traffic, pave adjacent traffic lanes to the same elevation within 24 hours. Place approved material against the outside pavement edge when the drop off exceeds 2 inches.

When multiple lifts are specified in the Contract, do not place the final lift until lower lifts throughout that section, as defined by the Paving Plan, are placed and accepted.

Do not pave against new Portland cement concrete curbing until it has cured for at least 72 hours.

Do not place the final lift until curb and gutter, all types, are installed complete, except as approved by the Engineer.

Place HMA over bridge deck membranes according to Section 508 and the manufacturer's specifications.

401-3.13 COMPACTION. Thoroughly and uniformly, compact the HMA by rolling. In areas not accessible to large rollers, compact with mechanical tampers or trench rollers. Do not leave rollers or other equipment standing on HMA that has not sufficiently cooled to prevent indentation.

A mat area with density lower than 92% MSG is considered segregated and not in conformance with the requirements of the Contract. The work shall be deemed unacceptable by the Engineer according to Subsection 105-1.11 unless, the Engineer determines that reasonably acceptable work has been produced as permitted in Subsection 105-1.03.

The density TV is 95% of the MSG, as determined by WAQTC FOP for AASHTO T 209. The MSG of the JMD will be used for the first lot of each Type of HMA. The MSG for additional lots will be determined from the first sublot of each lot.

Acceptance testing for density will be performed according to WAQTC FOP for AASHTO T 166/T 275 using a 6 inch diameter core. (Acceptance testing for density of leveling course or temporary pavement is not required).

When directed by the Engineer, provide density profiles of the mat and longitudinal joints with a nuclear density gauge. Deliver the results of density tests to the Engineer at the time of the testing, in writing in the format detailed in the Quality Control Plan Subsection 401-2.05.

401-3.14 JOINTS. Minimize the number of joints. Do not construct longitudinal joints in the driving lanes unless approved by the Engineer in writing at the Pre-paving meeting. Place and compact the HMA to provide a continuous bond, texture, and smoothness between adjacent sections of the HMA.

Remove to full depth improperly formed joints resulting in surface irregularities. Before removing pavement, cut a neat, straight line along the pavement to be removed and the pavement to remain. Use a power saw or other method approved by the Engineer. Replace the removed asphalt with new HMA and thoroughly compact.

Form transverse joints by cutting back on the previous run to expose the full depth of the layer. Saw cut the joint, use a removable bulkhead or other method approved by the Engineer.

Offset the longitudinal joints in one layer from the joint in the layer immediately below by at least 6 inches. Align the joints of the top layer at the centerline or lane lines. Where preformed marking tape striping is required, offset the longitudinal joint in the top layer not more than 6 inches from the edge of the stripe.

On the final lift, before paving against the longitudinal joint (completing the joint) uniformly coat the surface below the final lift with tack coat material conforming to Section 702. Coat the vertical edge of pavement (including milled edges) with Crafco Pavement Joint Adhesive No. 34524, Deery Cold Joint Adhesive, or approved equal. Apply a 1/8 inch thick band of joint adhesive over the cold mat according to manufacturer's recommendations.

The Engineer shall evaluate the difference in elevation of the final surface of adjacent mats each side of the longitudinal joint, at the joint, with a straight edge and by requiring the Contractor to flood the joint surface with water. The Engineer will determine where and how often to evaluate the joint. All differences in the surface elevations greater than 1/8 inch or that pond water shall be repaired at no cost to the Department. Heat the HMA pavement to be repaired with an infrared heater (310˚ F max) and roll flat or add HMA until the joint differential is within tolerance.

For the top layer of HMA, the minimum specification limit for longitudinal joint density is 91% of the MSG of the panel completing the joint. Cut one 6 inch diameter core centered on the longitudinal joint at each location the panel completing the joint is cored for acceptance density testing. Density will be determined according to WAQTC FOP for AASHTO T 166/T 275.

For areas that fail to achieve the prescribed joint density seal the surface of the longitudinal joints with Asphalt Systems GSB-88 or approved equal, while the HMA is clean, free of moisture, and before traffic marking. Longitudinal joint sealing shall be according to the manufacturer's recommendations and a maximum application rate of 0.15 gallons per square yard. Apply the sealant at least 12 inches wide centered on the longitudinal joint.

Hot lapped joints formed by paving in echelon must be completed while the mat temperature is over 150°F. These joints do not need to be tacked and will not be measured or evaluated for joint density.

Longitudinal joints will be evaluated for acceptance according to Subsection 401-4.03.

401-3.15 SURFACE TOLERANCE. The Engineer will test the finished surface after final rolling at selected locations using a 10-foot straightedge. Correct variations from the testing edge, between any two contacts, greater than 1/4 inch.

After completion of corrective work, the Engineer will measure the pavement surface in the driving lanes a second time for a smoothness price adjustment. No measurements will be taken in turn lanes, intersections, ramps, and lane transitions; within 25 feet of the existing pavement or in areas where curb and gutter is left in place. Smoothness will be measured in both wheel paths of each lane and reported as International Roughness Index (IRI). IRI will be reported as a job average for all measured lanes, calculated to the nearest 0.1 inch.

Costs associated with meeting surface tolerances are subsidiary to the HMA Pay Item.

401-3.16 PATCHING DEFECTIVE AREAS. Remove HMA that is contaminated with foreign material, is segregated (determined visually or by testing), flushing, or bleeding asphalt after compaction is completed or is in any way determined to be defective. Do not skin patch. Remove defective HMA for the full thickness of the course. Cut the pavement so that edges are vertical, the sides are parallel to the direction of traffic. Coat edges with a tack coat meeting Section 402 and allow to cure. Place and compact fresh HMA according to Subsection 401-3.13 to grade, and smoothness requirements.

Costs associated with patching defective areas are subsidiary to the HMA Pay Item.

401-4.01 METHOD OF MEASUREMENT. Section 109 and the following:

1. Hot Mix Asphalt.
   a) By weighing. No deduction will be made for the weight of asphalt cement or anti stripping additive or cutting back joints.
   b) By the final HMA surface.

2. Asphalt Cement. By the ton, as follows.
   Method 1:
   Percent of asphalt cement for each sublot multiplied by the total weight represented by that sublot. ATM 405 or WAQTC FOP for AASHTO T 308 will determine the percent of asphalt cement. The same tests used for the acceptance testing of the sublot will be used for computation of the asphalt cement quantity. If no acceptance testing is required, the percent of asphalt cement is the target value for asphalt cement in the JMD.

   Method 2:
   Supplier's invoices minus waste, diversion and remnant. This procedure may be used on projects where deliveries are made in tankers and the asphalt plant is producing HMA for one project only.

   The Engineer may direct, at any time that tankers be weighed in the Engineer's presence before and after unloading. If the weight determined at the project varies more than 1% from the invoice amount, payment will be based on the weight determined at the project.

   Any remnant or diversion will be calculated based on tank stickings or weighing the remaining asphalt cement. The Engineer will determine the method. The weight of asphalt cement in waste HMA will be calculated using the target value for asphalt cement as specified in the JMD.

   Method 1 will be used for determining asphalt cement quantity unless otherwise directed in writing. The procedure initially used will be the one used for the duration of the project. No payment will be made for any asphalt cement more than 0.4% above the optimum asphalt cement content specified in the JMD.

3. Job Mix Design. When specified, Contractor furnished JMD(s) will be measured as one according to the HMA Class and Type.

4. Temporary Pavement. By weighing. No deduction will be made for the weight of asphalt cement or anti-stripping additive.

5. Preleveling/Leveling Course. By weight or Lane-Station (12 foot width). No deduction will be made for the weight of asphalt cement or anti stripping additive.

6. Asphalt Price Adjustment – Quality. Calculated by quality level analysis under Subsection 401-4.03. Also included in the measurement are the fees and deductions specified in Subsection 401-2.01 and Subsection 401-4.02.

   Asphalt Price Adjustment – Quality, does not apply to, and measurements will not be made for: 1) Leveling Course/Prelevel (rut repair) HMA, 2) Temporary HMA, 3) Approach HMA.

7. Longitudinal Joint and Joint Adhesive. By the linear foot of longitudinal joint.

401-4.02 ACCEPTANCE SAMPLING AND TESTING. The total price adjustment is the sum of the individual lot price adjustments as determined in Subsection 401-4.03 Evaluation of Materials for Acceptance, and is included in Item 401(6) Asphalt Price Adjustment-Quality. Penalties assessed are also included in Item 401(6).

A mat area of finished surfacing that is visibly segregated, has a lower density than specified (Subsection 401-3.13), fails to meet surface tolerance requirements, or is flushing asphalt cement is considered unacceptable according to Subsection 105-1.11.

HOT MIX ASPHALT

The quantity of each class and Type of HMA produced and placed will be divided into lots and the lots evaluated individually for acceptance.

A lot will normally be 5,000 tons. The lot will be divided into sublots of 500 tons; each randomly sampled and tested for asphalt cement content, density, and gradation according to this subsection. If the project has more than 1 lot, and less than 8 additional sublots have been sampled at the time a lot is terminated, either due to completion of paving operations or the end of the construction season (winter shutdown), the material in the shortened lot will be included as part of the prior lot. The price adjustment computed, according to Subsection 401-4.03, for the prior lot will include the samples from the shortened lot.

If 8 or 9 samples have been obtained at the time a lot is terminated, they will be considered as a lot and the price adjustment will be based on the actual number of test results (excluding outliers) in the shortened lot.

If the contract quantity is between 1,500 tons and 5,000 tons, the Contract quantity will be considered one lot. The lot will be divided into sublots of 500 tons and randomly sampled for asphalt cement content, density, and gradation according to this subsection except that a determination for outliers will not be performed. HMA quantities of less than 300 tons remaining after dividing the Contract quantity into sublots will be included in the last sublot. HMA quantities of 300 tons or greater will be treated as an individual sublot. The lot will be evaluated for price adjustment according to Subsection 401-4.03 except as noted.

For Contract quantity of less than 1,500 tons (also for approaches and temporary pavement), HMA will be accepted for payment based on the Engineer's approval of a JMD and the placement and compaction of the HMA to the specified depth and finished surface requirements and tolerances. The Engineer reserves the right to perform any testing required in order to determine acceptance. Remove and replace any HMA that does not conform to the approved JMD.

Samples collected at the plant from dry batched aggregates, the conveyor system, or the asphalt cement supply line shall be taken by the Contractor in the presence of the Engineer. The Engineer will take immediate possession of the samples.

The Engineer will determine where samples are taken.

1. Asphalt Cement Content. Hot mix samples taken for the determination of asphalt cement content will be taken randomly from behind the screed before initial compaction, or from the windrow according to WAQTC FOP for AASHTO T 168 and ATM 403, as directed by the Engineer. HMA samples taken for the determination of both asphalt cement content and gradation will be taken randomly from behind the screed before initial compaction or from the windrow according to WAQTC FOP for AASHTO T 168 and ATM 403.

   Two separate samples will be taken, one for acceptance testing and one held in reserve for retesting if applicable. At the discretion of the Engineer, asphalt cement content will be determined according to ATM 405 or WAQTC FOP for AASHTO T 308.

2. Aggregate Gradation.

   a. Drum Mix Plants. Samples taken for the determination of aggregate gradation from drum mix plants will be from the combined aggregate cold feed conveyor via a diverter device or from the stopped conveyor belt according to WAQTC FOP for AASHTO T2 or from the same location as samples for the determination of asphalt cement content. Locate diverter devices for obtaining aggregate samples from drum mix plants on the conveyor system delivering combined aggregates into the drum. Divert aggregate from the full width of the conveyor system and maintain the diverter device to provide a representative sample of aggregate incorporated into the HMA. Two separate samples will be taken, one for acceptance testing and one held in reserve for retesting if applicable. The aggregate gradation for samples from the conveyor system will be determined according to WAQTC FOP for AASHTO T 27/T 11. For HMA samples, the gradation will be determined according to WAQTC FOP for AASHTO T 30 from the aggregate remaining after the ignition oven (WAQTC FOP for AASHTO T 308) has burned off the asphalt cement.

   b. Batch Plants. Samples taken for the determination of aggregate gradation from batch plants will be from the same location as samples for the determination of asphalt cement content, or from dry batched aggregates according to WAQTC FOP for AASHTO T 2. Two separate samples will be taken, one for acceptance testing and one held in reserve for retesting if applicable. Dry batched aggregate gradations will be determined according to WAQTC FOP for AASHTO T 27/T 11. For HMA samples, the aggregate gradation will be determined according to WAQTC FOP for AASHTO T 30 from the aggregate remaining after the ignition oven (WAQTC FOP for AASHTO T 308) has burned off the asphalt cement.

3. Density.

   a. Acceptance Testing.

      The Engineer will determine and mark the location(s) where the Contractor will take each core sample. Core samples will not be taken at bridge decks or the milled edge of existing pavement.

      1) Mat Cores: The location(s) for taking core samples will be determined using a set of random numbers and the Engineer's judgment.

      2) Longitudinal Joint Cores: The Engineer will mark the location(s) to take the core sample, centered on the visible surface joint, and adjacent to the mat core sample taken in the panel completing the joint. Take joint core samples in the presence of the Engineer.

      Cut full depth core samples, centered on the marks and as noted above, from the finished HMA within 24 hours after final rolling. Neatly core drill one six inch diameter sample at each marked location. Use a core extractor to remove the core - do not damage the core. Backfill and compact voids left by coring with new HMA within 24 hours.

      The Engineer will immediately take possession of the samples. Density of the samples will be determined, by the Engineer, according to WAQTC FOP for AASHTO T 166/T 275.

      A penalty will be assessed for each failure to take core samples or backfill core sample voids within the specified period, or take core samples at the location marked by the Engineer.

4. Retesting. A retest of any sample outside the limits specified in Table 401-2 may be requested provided the quality control requirements of 401-2.05 are met. Deliver this request in writing to the Engineer within 7 days of receipt of the final test of the lot. The Engineer will mark the sample location for the density retest within a 2 foot radius of the original core. The original test results will be discarded and the retest result will be used in the price adjustment calculation regardless of whether the retest result gives a higher or lower pay factor. Only one retest per sample is allowed. Except for the first lot, when gradation and asphalt cement content are determined from the same sample, retesting for gradation or asphalt cement from the first sublot of a lot will include retesting for the MSG; when separate samples are used, retesting for asphalt cement content will include retesting for MSG.

ASPHALT CEMENT

The lot size for asphalt cement will normally be 200 tons. If a project has more than one lot and the remaining asphalt cement quantity is less than 150 tons, it will be added to the previous lot and that total quantity will be evaluated for price adjustment as one lot. If the remaining asphalt cement quantity is 150 tons or greater, it will be sampled, tested and evaluated as a separate lot.

If the contract quantity of asphalt cement is between 85 – 200 tons, the contract quantity will be considered as one lot and sampled, tested, and evaluated according to this subsection. Quantities of asphalt cement less than 85 tons will be accepted based on manufacturer's certified test reports and certification of compliance.

Asphalt cement will be sampled according to WAQTC FOP for AASHTO T 40, tested for conformance to the specifications in Section 702, and evaluated for price adjustment in accordance with 401-4.03. Asphalt cement pay reduction factors for each sample will be determined from Table 401-4. Three separate samples from each lot will be taken, one for acceptance testing, one for Contractor retesting, and one held in reserve for referee testing if applicable.

401-4.03 EVALUATION OF MATERIALS FOR ACCEPTANCE.

Price adjustments in this subsection are addressed under Item 401(6) Asphalt Price Adjustment-Quality.

HOT MIX ASPHALT

The total Hot Mix Asphalt price adjustment is the sum of all price adjustments for each lot.

The following method of price adjustment will be applied to each Type of HMA when the contract quantity equals or exceeds 1,500 tons, except as specified in Subsection 401-4.02.

Acceptance test results for a lot will be analyzed collectively and statistically by the Quality Level Analysis method as specified in Subsection 106-1.03 to determine the total estimated percent of the lot that is within specification limits.

The price adjustment is based on the lower of two pay factors. The first factor is a composite pay factor for HMA that includes gradation and asphalt cement content. The second factor is for density.

A lot containing HMA with less than a 1.00 pay factor will be accepted at an adjusted price, provided the pay factor is at least 0.75 and there are no isolated defects identified by the Engineer. A lot containing HMA that fails to obtain at least a 0.75 pay factor will be considered unacceptable and rejected under Subsection 105-1.11.

The Engineer will reject HMA that appears to be defective based on visual inspection. A minimum of two samples will be collected from the rejected HMA and tested if requested. If test results are within specification limits, payment will be made for the HMA. If any of the test results fail to meet specifications, no payment will be made and the cost of the testing will be subtracted as a price adjustment. Costs associated with removal and disposal of the rejected HMA are subsidiary to the Hot Mix Asphalt Pay Item.

Outlier Test. Before computing the price adjustment, the validity of the test results will be determined by SP-7, the Standard Practice for Determination of Outlier Test Results. Outlier test results will not be included in the price adjustment calculations.

When gradation and asphalt cement content are determined from the same sample, if any size on the gradations test or the asphalt cement content is an outlier, then the gradation test results and the asphalt cement content results for that sublot will not be included in the price adjustment. The density test result for that sublot will be included in the price adjustment provided it is not an outlier.

When gradation and asphalt cement content are determined from separate samples, if any sieve size on the gradation test is an outlier, then the gradation test results for that sample will not be included in the price adjustment. The asphalt cement content and density test results for that sublot will be included in the price adjustment provided neither is an outlier. If the asphalt cement content test result is an outlier, it will not be included in the price adjustment but the gradation and density test results for the sublot will be included provided neither is an outlier. If the density test result is an outlier, it will not be included in the price adjustment but the gradation and asphalt cement content test results will be included provided neither is an outlier.

Quality Level Analysis. Pay factors are computed as follows:

1. Outliers (determined by SP-7), and any test results on material not incorporated into the work, are eliminated from the quality level analysis.

   The arithmetic mean ($\bar{x}$)of the remaining test results is determined:

   $$\bar{x} = \frac{\sum x}{n}$$

   Where: $\sum$ = summation of
   x = individual test value to x_n
   n = total number of test values

   ($\bar{x}$) is rounded to the nearest tenth for density and sieve sizes except the No. 200 sieve.
   ($\bar{x}$) is rounded to the nearest hundredth for asphalt cement content and the No. 200 sieve.

2. The sample standard deviation (s) after the outliers have been excluded, is computed:

   $$s = \sqrt{\frac{n\sum(x^2) - (\sum x)^2}{n(n-1)}}$$

   Where: $\sum(x^2)$ = sum of the squares of individual test values.
   $(\sum x)^2$ = square of the sum of the individual test values.

   The sample standard deviation (s) is rounded to the nearest hundredth for density and all sieve sizes except the No. 200 sieve. The sample standard deviation (s) is rounded to the nearest 0.001 for asphalt cement content and the No. 200 sieve.

   If the computed sample standard deviation (s) is <0.001, then use s = 0.20 for density and all sieves except the No. 200. Use s = 0.020 for asphalt cement content and the No. 200 sieve.

3. The USL and LSL are computed. For aggregate gradation and asphalt cement content, the Specification Limits (USL and LSL) are equal to the Target Value (TV) plus and minus the allowable tolerances in Table 401-2. The TV is the specified value in the approved JMD. Specification tolerance limits for the largest sieve specified will be plus 0 and minus 1 when performing Percent Within Limits (PWL) calculations. The TV for density is 95% of the MSG and the LSL is 92% of MSG.

TABLE 401-2

LOWER SPECIFICATION LIMIT (LSL) & UPPER SPECIFICATION LIMIT (USL)

Measured Characteristics	LSL	USL
3/4 inch sieve	TV -6.0	TV + 6.0
1/2 inch sieve	TV -6.0	TV + 6.0
3/8 inch sieve	TV -6.0	TV + 6.0
No. 4 sieve	TV -6.0	TV + 6.0
No. 8 sieve	TV -6.0	TV + 6.0
No. 16 sieve	TV -5.0	TV + 5.0
No. 30 sieve	TV -4.0	TV + 4.0
No. 50 sieve	TV -4.0	TV + 4.0
No. 100 sieve	TV -3.0	TV + 3.0
No. 200 sieve*	TV -2.0	TV + 2.0
Asphalt %	TV -0.4	TV + 0.4
Mat Density %	92	100

*Tolerances for the No. 200 sieve may not exceed the broad band limits in Table 703-3.

4. The Upper Quality Index (Q_U) is computed:

$$Q_U = \frac{USL - \bar{x}}{S}$$

Where: USL = Upper Specification Limit
Q_U is rounded to the nearest hundredth.

5. The Lower Quality Index (Q_L) is computed:

$$Q_L = \frac{\bar{x} - LSL}{S}$$

Where: LSL = Lower Specification Limit
Q_L is rounded to the nearest hundredth.

6. P_U (percent within the upper specification limit which corresponds to a given Q_U) is determined. See Subsection 106-1.03.

7. P_L (percent within the lower specification limit which corresponds to a given Q_L) is determined. See Subsection 106-1.03.

8. The Quality Level (the total percent within specification limits) is determined for aggregate gradation, asphalt cement content, and density.

Quality Level = $(P_L + P_U) - 100$

9. Using the Quality Levels from Step 8, the lot Pay Factor (PF) is determined for Density (DPF) and gradation and asphalt cement content pay factors from Table 106-2. The maximum pay factor for the largest sieve size specification for gradation is 1.00.

10. The Composite Pay Factor (CPF) for the lot is determined using the following formula:

$$CPF = \frac{[f_{3/4\ inch}\ (PF_{3/4\ inch}) + f_{1/2\ inch}\ (PF_{1/2\ inch}) + \ldots f_{ac}\ (PF_{ac})]}{\Sigma f}$$

The CPF is rounded to the nearest hundredth.

Table 401-3 gives the weight factor (f), for each sieve size and asphalt cement content.

TABLE 401-3
WEIGHT FACTORS

Sieve Size	Type I Factor "f"	Type II Factor "f"	Type III Factor "f"
1 inch sieve	4	-	-
3/4 inch sieve	4	4	-
1/2 inch sieve	4	5	4
3/8 inch sieve	4	5	5
No. 4 sieve	4	4	5
No. 8 sieve	4	4	5
No. 16 sieve	4	4	5
No. 30 sieve	4	5	6
No. 50 sieve	4	5	6
No. 100 sieve	4	4	4
No. 200 sieve	20	20	20
Asphalt Cement Content, %	40	40	40

The price adjustment will be based on either the CPF or DPF, whichever is the lowest value. The price adjustment for each individual lot will be calculated as follows:

Price Adjustment = $[(CPF \text{ or } DPF)^{*} - 1.00] \times (\text{tons in lot}) \times (PAB)$

*CPF or DPF, whichever is lower.

PAB = Price Adjustment Base = $__133.50___ per ton

ASPHALT CEMENT

The total asphalt cement price adjustment is the sum of all price adjustments for each lot.

Asphalt cement will be randomly sampled and tested in accordance with Subsection 401-4.02. Asphalt cement pay reduction factors for each sample will be determined from Table 401-4.

Table 401-4
ASPHALT CEMENT PAY REDUCTION FACTORS
(Use the single, highest pay reduction factor)

Test	Spec	Pay Reduction Factor (PRF)								
		0.00	0.04	0.05	0.06	0.07	0.08	0.10	0.25	Reject or Engr Eval
Tests On Original Binder										
Viscosity	< 3 Pa-s	≤ 3		> 3						
Dynamic Shear	> 1.00 kPa	> 1.00		0.88-0.99				0.71-0.89	0.50-0.70	< 0.50
Toughness	> 110 in-lbs	> 93.5	90.0-93.4	85.0-89.9	80.0-84.9	75.0-79.9	70.0-74.9			< 70.0
Tenacity	> 75 in-lbs	> 63.8	61.0-63.7	58.0-60.9	55.0-57.9	52.0-54.9	48.0-51.9			< 48.0
Tests On RTFO										
Mass Loss	< 1.00 %	< 1.00		1.001-1.092				1.093-1.184	1.185-1.276	> 1.276
Dynamic Shear	> 2.20 kPa	> 2.20		1.816-2.199				1.432-1.815	1.048-1.431	< 1.048
Test On PAV										
Dynamic Shear	< 5000 kPa	< 5000		5001-5289				5290-5578	5579-5867	> 5867
Creep Stiffness, S	< 300 MPa	< 300		301-338				339-388	389-450	> 450
Creep Stiffness, m-value	> 0.300	> 0.300		0.287-0.299				0.274-0.286	0.261-0.273	< 0.261

Asphalt Cement Price Adjustment = $5 \times PAB \times Qty \times PRF$ (for each sample)
PAB = Price Adjustment Base
Qty = Quantity of asphalt cement represented by asphalt cement sample
PRF = Pay Reduction Factor from Table 401-4

Asphalt Cement Appeal Procedure. Once notified of a failing test result of an asphalt cement sample, the Contractor has 21 days to issue a written appeal. The appeal must be accompanied by all of the Contactor's quality control test results and a test result of Contactor's sample of this lot tested by an AASHTO accredited asphalt laboratory (accredited in the test procedure in question). The Engineer will review these test results using ASTM D3244 to determine a test value upon which to base a price reduction.

If the Contractor challenges this value, then the referee sample held by the Engineer will be sent to a mutually agreed upon independent AASHTO accredited laboratory for testing. This test result will be incorporated into the ASTM D3244 procedure to determine a test value upon which to base a price reduction. If this final value incurs a price adjustment, the Contractor shall pay the cost of testing the referee sample.

PAVEMENT SMOOTHNESS

The top layer of HMA will be measured according to 401-3.15 and evaluated for a smoothness price adjustment. The Engineer will calculate the smoothness price adjustment as follows:

Smoothness Price Adjustment = $PAB \times PQ \times SF$
PAB = Price Adjustment Base
PQ = Final quantity of HMA, tons
RR = Roughness Reduction = (Initial IRI-Final IRI) / Initial IRI
SF = Smoothness Factor

If the PQ is less than 3000 tons, the $SF = 0$
If the PQ is 3000 tons or greater, the $SF = 0.12RR - 0.02$ *(not to exceed 5%)*

LONGITUDINAL JOINT DENSITY

Longitudinal joint density price adjustments apply when HMA quantities equal or greater than 1,500 tons. A longitudinal joint density price adjustment for the top layer will be based on the average of all the joint densities on a project and determined as follows:

1. If project average joint density is less than 91% MSG, apply the following disincentive:
   a. Longitudinal joint density price adjustment equal to $3.00 per lineal foot is deducted.

   Sections of longitudinal joint represented by cores with less than 91% density shall be surface sealed according to Subsection 401-3.14.

2. If project average joint density is greater than 92% MSG, apply the following incentive:
   a. Longitudinal joint density price adjustment equal to $1.50 per linear foot is added.

401-4.04 ASPHALT MATERIAL PRICE ADJUSTMENT – UNIT PRICE.

This subsection provides a price adjustment for asphalt material by:
(a) additional compensation to the Contractor or
(b) a deduction from the Contract amount.

1. This provision shall apply to asphalt material meeting the criteria of Section 702, and is included in items listed in the bid schedule of Sections 306, 307, 308, 318 and 401 through 409, except Section 402. Also included is the asphalt material in the Prelevel/Leveling Course (rut repair) HMA and Temporary HMA as part of 401, Approach HMA as included in 401 or 639 and Pathway HMA as part of 608.

2. This provision shall only apply to cost changes in asphalt material that occur between the date of bid opening and the date the asphalt material is incorporated into the project.

3. The asphalt material price adjustment will only apply when:
   a. More than a 7.5% increase or decrease in the Alaska Asphalt Material Price Index, from the date of bid opening to the date the asphalt material is incorporated into the project.

4. The Alaska Asphalt Material Price Index (AAMPI) is posted on the Department's Materials website along with the formula used to calculate the Index. The AAMPI as used in the determination of the "Asphalt Material Price Adjustment – Unit Price" is calculated for the first and third Friday of each month. The index applies from the beginning of the period start day 00:00 hrs, and ends 00:00 hrs the start of the next period. Other calculation and or period start/end days, including the post day (except as fall on the 1st and 3rd Friday) are not permitted.

5. Price adjustment will be cumulative and calculated with each progress payment. Use the price index in effect on the last day of the pay period, to calculate the price adjustment for asphalt material incorporated into the project during that pay period. The Department will increase or decrease payment under this Contract by the amount determined with the following asphalt material price adjustment formula:

   For an increase exceeding 7.5%, additional compensation = $[(IPP-IB)-(0.075 \times IB)] \times Q$
   For a decrease exceeding 7.5%, deduction from contract = $[(IB-IPP)-(0.075 \times IB)] \times Q$

   Where: Q = Quantity of Asphalt Material incorporated into project during the pay period, in tons
   IB = Index at Bid: the bimonthly Alaska Asphalt Material Price Index in effect on date of bid, in dollars per ton
   IPP = Index at Pay Period: the bimonthly Alaska Asphalt Material Price Index in effect on the last day of the pay period, in dollars per ton

   Method of measurement for determining *Q* (quantity) is the weight of asphalt material meeting the criteria of this subsection and is incorporated into the project. The quantity does not include aggregate, mineral filler, blotter material, thinning agents added after material qualification, or water for emulsified asphalt.

401-5.01 BASIS OF PAYMENT.

Except where specified as individual Pay Items:
Asphalt cement, anti-stripping additives, tack coat, crack sealing, joint adhesive and surface sealing of longitudinal joints, surface tolerance corrections, patching defective areas, repair work and materials when planing equipment breaks through existing pavement - Subsection 401-3.07 Preparation of Existing Surface, and the work and materials associated with Subsection 401-3.04 Hauling Equipment are subsidiary to the associated Hot Mix Asphalt Pay Items.

Item 401(1F) Hot Mix Asphalt, Preleveling/Leveling Course, Type IV: Asphalt Cement, anti-stripping additives are subsidiary.

Item 401(3) Hot Mix Asphalt, Temporary, Type II, Class B: Asphalt cement, anti-stripping additives, removal and disposal are subsidiary.

Item 401(6) Asphalt Price Adjustment – Quality: is the sum of the price adjustments for each material lot (excluding the Preleveling/Leveling Course (rut repair) HMA, Temporary HMA and Approach HMA) and for deductions and fees assessed.

Deductions and fees assessed:

- Each mix design subsequent to the approved Job Mix Design (Subsection 401-2.01) for each Type and Class of Hot Mix Asphalt specified will result in a fee of $2500.00 each.
- Failure to cut core samples within the specified period will result in a deduction of $100.00 per sample per day (Subsection 401-4.02).
- Failure to backfill voids left by sampling within the specified period will result in a deduction of $100 per hole per day (Subsection 401-4.02).

Item 401(10). Asphalt Material Price Adjustment – Unit Price.

For each Section as included in Subsection 401-4.04 Asphalt Material Price Adjustment – Unit Price, item 1, the "Asphalt Material Price Adjustment – Unit Price" is paid under the asphalt material Pay Item for the Section with the greatest quantity as determined by the estimate of quantities included in the Plans at the time of the bid opening.

- When more than one "Asphalt Material Price Adjustment – Unit Price" Pay Item is included in the Plans or bid schedule the asphalt material price adjustment, for each Section's asphalt material, is paid under the Pay Item with the greatest quantity.

- When more than one asphalt material is included in the project and only one "Asphalt Material Price Adjustment – Unit Price" Pay Item is included in the Plans or bid schedule, the asphalt material price adjustment, for each Section's asphalt material, is paid under the one Pay Item regardless of the quantity.

- When the Pay Item "Asphalt Material Price Adjustment – Unit Price," is not included, for any section, no payment will be made.

Payment will be made under:

Pay Item No.	Pay Item	Pay Unit
401(1A)	Hot Mix Asphalt, Type II; Class A	Ton
401(1F)	Hot Mix Asphalt, Preleveling/Leveling Course, Type IV; Class B	Lane-Station
401(2)	Asphalt Cement, Grade PG 58-34	Ton
401(3)	Hot Mix Asphalt, Temporary, Type II; Class B	Ton
401(4)	Hot Mix Asphalt, Type __; Class __	Square Yard
401(6)	Asphalt Price Adjustment - Quality	Contingent Sum
401(8)	Hot Mix Asphalt, Approach, Type __; Class __	Ton
401(9)	Longitudinal Joint Adhesive	Linear Foot
401(10)	Asphalt Material Price Adjustment – Unit Price	Contingent Sum

CR401-091313

SECTION 603

CULVERTS AND STORM DRAINS

Special Provisions

603-1.01 DESCRIPTION. Add the following:

This work shall also consist of installing culvert marker posts and cleaning of culverts.

603-2.01 MATERIALS. Delete the second paragraph and substitute the following:

When Item 603(17-xx), Pipe, is listed in the bid schedule, furnish either Corrugated Steel Pipe (CSP) or Reinforced Concrete Pipe. Corrugated Polyethylene Pipe is not allowed. End Sections for Metal Pipe must be of the same material as the pipe.

Add the following:

Culvert marker posts shall meet the requirements of subsection 730-2.05, Flexible Delineator Posts. The color shall be blue with no other markings. The 2.5 inch by 6 foot post shall be rectangular in cross section with reinforcing ribs capable of a minimum bending radius of 9 inches.

CR42-082703

603-3.03 JOINING PIPE.

2. Metal Pipe. Add the following after the 2nd sentence:

   Install a gasket in all pipe joints; joints between new sections of pipe and joints between new and existing sections of pipe of similar or dissimilar materials, regardless of the type of coupling band. Except, the end section joint does not require a gasket. Use flexible watertight gaskets (ASTM D 1056 2B3) as specified in Subsection 705-2.05.

3. Polyethylene Pipe. Add the following after the 1st sentence:

   Install a gasket in all pipe joints; joints between new sections of pipe and joints between new and existing sections of pipe. Except, the end section joint, and where the pipe is manufactured with a locking joint such that the joint seals watertight, a gasket is not required. Use flexible watertight gaskets (ASTM D 1056 2B3) as specified in Subsection 705-2.05.

CR6031-032411

603-3.04 CLEANING CULVERTS. Add the following:

Clean culverts by removing sediments, dirt, rocks, vegetation, and detritus from pipes. Hydraulic or mechanical methods of cleaning may be used. Dispose of waste material off-site according to Subsection 203-3.01.

55260/56176-011414

Add the following subsection:

603-3.06 CULVERT MARKER POSTS. Culvert marker posts shall be installed on the approach side of storm drain outfalls 30 inches and smaller, field inlets not in paved parking lots, all end sections to cross culverts, or as directed by the Engineer. Forty-two inches of post shall remain above the ground after driving.

603-4.01 METHOD OF MEASUREMENT. Add the following:

Culvert marker posts will not be measured for payment.

CR42-082703

5. Culvert Cleaning. The length of pipe cleaned, measured in place, along the invert.

55260/56176-011414

603-5.01 BASIS OF PAYMENT. Replace the first sentence with:

Coupling bands, gaskets and other items necessary for the proper joining of the sections are subsidiary.

CR6031-032411

Culvert marker posts will not be paid for directly, but will be subsidiary to pipe items.

CR42-082703

Add the following:

Disposal of waste material is subsidiary to Culvert Cleaning.

Add the following Pay Item:

Pay Item No.	Pay Item	Pay Unit
603(22)	Culvert Cleaning	Linear Foot

55260/56176-011414

SECTION 606

GUARDRAIL

Special Provisions

606-1.01 DESCRIPTION. Replace Subsection 606-1.01 with the following: Construct new guardrail, terminal sections, and transition rail of the kind and type specified.

Remove and reconstruct or remove and dispose of existing guardrail, terminal sections, and transition rail.

CR60611-051513

Delete Subsection 606-2.01 and replace with the following:

606-2.01 MATERIALS. Use materials that conform to the following:

Concrete, Class A or W
(or an approved, pre-mixed, sacked concrete)..... Subsection 501-3.01
Wire Cable..... Subsection 709-2.02
Metal Beam Rail..... Subsection 710-2.04
Guardrail Posts and Blocks..... Subsection 710-2.06
Guardrail Hardware..... Subsection 710-2.07
Guardrail Terminals..... Subsection 710-2.11

Terminal Markers - Flexible (marker). The marker includes the pole/post/rod (pole), reflective and retroreflective sheeting and mounting hardware.

The marker materials shall be durable, resistant to impact from (snow and vehicle), vandals, ultraviolet light, moisture, ozone, and hydrocarbons.

When the pole is loaded, the marker shall bend/flex, remain flexible and oriented as installed continuing to function as designed without permanent displacement along the length of the member. The flexibility may be in the primary vertical element, a connecting device between the vertical element and connection to the support member (spring or other) or a combination.

Provide a connection sufficient to transfer the loads from the pole to the supporting member without reducing the strength, flexibility, or durability of either. The connection shall not negatively impact the performance of the guardrail. Provide approval of the connection from the marker manufacturer and support member manufacturer (if proprietary).

- Design Loads:
  - Impact load from snow thrown by snowplows
  - Weight of snow covering the pole as a result of snow thrown from snowplows
  - Wind loads (100 mph, 3 sec gust)

- Service Temperature Range: -40˚ F to +140˚ F.

- Pole:
  1. Material:
     - Steel, or
     - Stainless Steel, or
     - Other Poles:
       (a) Continuous glass fiber and marble reinforced thermosetting composite, or
       (b) Engineered plastic alloy, or
       (c) Fiberglass Reinforced Polyester (FRP)
       (d) High-Impact Polyolefins
  2. Dimensions

- Top of Pole: 60 inches to 84 inches above top of guardrail
- Width/Diameter: minimum = 1 1/4 inches, maximum = 2 inches (steel/stainless steel may not be greater than 5/8 inch diameter)
- Thickness: as required by design

3. Visibility:
   - Daytime: Pole - color orange
     a. Steel and Stainless Steel Poles: Applied permanent finish.
     b. Other Poles: Color pigment ultraviolet stabilized and solid through the cross section from end to end.
   - Nighttime: Added retroreflective sheeting - color white
     a. Approximately 12 square inches visible from the traveled way before and after the marker. Applied to a flag attached to the pole or as banding applied directly to the pole. (A flag is required when using steel/stainless steel poles.)
     b. Place top edge of flag/banding 1 inch from top of pole.
        (1) Flag: Single retroreflective sheet each face
        (2) Banding: Two bands completely around marker, 4 inches between bands

- Hardware and Fasteners:
  - Steel, and/or
  - Stainless Steel, or
  - Aluminum alloy (hardware only)

Manufacturers of flexible markers (snowpoles):

Manufacturer	Model	Type	Contact
Nordic Fiberglass, Inc.	FF2	Steel Pole w/ Flag	Ph: (218) 745-5095
PEXCO	Model 3639	High-Impact Polyolefins	Ph: (404) 564-8560
New Century Northwest, LLC	NCN2549	Engineered Plastic Alloy	Ph: (541) 485-5566
Carsonite Composites, LLC	SNFB	Continuous glass fiber and marble reinforced thermosetting composite	Ph: (800) 648-7916

Submit manufacturer's specifications to the Engineer for review and approval before ordering markers.

Guardrail Reflector Assembly Brackets ..... Section 730

Fabricate from aluminum alloy or galvanized steel.

Retroreflective Sheeting ..... AASHTO M 268, Type VIII or IX

CR6062-051513

Add the following:

Guardrail Connection Plate ..... Subsection 722
High Strength Bolts ..... Subsection 722

CR60611-051513

CONSTRUCTION REQUIREMENTS

606-3.01 GENERAL. Replace the first sentence in the first paragraph with:

Install guardrail and terminals at the locations shown in the Plans.

56176-121113

Replace the second paragraph with the following:

At locations where public traffic is adjacent to guardrail work, have all materials on site, including crashworthy terminals that are required to completely install a segment of guardrail before beginning work on the segment.

Start guardrail installation at the "upstream" end (the end adjacent traffic will encounter first) by either installing a crashworthy terminal, connecting to an existing barrier or shielding the end with a truck mounted attenuator (TMA) meeting NCHRP 350, Test Level 3. Continue installation in the direction of traffic. Exception: if the guardrail run will connect to existing barrier, buried in the backslope, or guardrail, existing or new bridge railing, or other existing structure at the "downstream" end, guardrail installation may be started at the point of connection. The exception allows for starting at the downstream end, a temporary crash cushion or TMA is required at all incomplete upstream guardrail ends.

Do not leave posts installed for guardrail within the clear zone for more than 48 hours before installing the rail.

If guardrail runs are not completed within 10 calendar days after beginning installation, install temporary crash cushions meeting NCHRP 350 or MASH test Level 3 at all non-crashworthy guardrail ends within the clear zone. Apply Traffic Price Adjustment if the Contractor does not comply with the crash cushion requirement.

CR6063-110410

Add to the 3rd paragraph:

Use 25 linear feet of guardrail or two 12'-6" pieces of guardrail to transition to match the existing or new guardrail elements and/or end treatments.

CR60611-051513

606-3.02 POSTS. Delete the first two numbered items and replace with:

1. Exclusive of end treatments, use one type of post in each run of guardrail.

Replace 3.a. with:

   a. The underlying material is no larger than six inches; and

Replace No. 4. with:

4. Backfill and compact around posts with material as specified in the typical section to firmly support the post laterally and vertically. Compact under and around posts to the Engineer's satisfaction.

CR6064-110410

606-3.03 BEAM RAIL. In the first paragraph, second sentence, replace "150 feet" with "100 feet"

CR6065-110410

606-3.06 REMOVAL AND RECONSTRUCTION OF GUARDRAIL. Add the following:

Guardrail removed and to be replaced with new guardrail shall have the entire new run installed within 14 calendar days after removal.

Guardrail located within 50 feet of bridge ends shall have the new guardrail installed by the end of the shift in which the existing guardrail is removed.

CR6066-110410

606-3.07 REMOVAL AND DISPOSAL OF EXISTING GUARDRAIL. Delete the last sentence.

Add the following:

Guardrail.

Notify the Engineer a minimum of 5 days before removing guardrail. The Engineer will notify the ADOT & PF, M & O, and have an M & O representative designate portions of guardrail for salvage. Deliver salvaged guardrail and associated hardware to the M & O yard located in Homer. Remaining items removed become the Contractor's property.

CR6067-040113

Add the following subsection 606-3.09 Install New Guardrail.

606-3.09 INSTALL NEW GUARDRAIL. Install guardrail as shown on the applicable Standard Drawings, measured from the top of the rail to the finished shoulder surface below the rail. New guardrail installed with height less than 28", or greater than 30" is unacceptable and must be adjusted according to Subsection 606-3.08. Adjusting new guardrail will not be paid for separately, but is subsidiary to other 606 pay items.

CR60611-051513

Add the following Subsection 606-3.10 Flexible Markers:

606-3.10 FLEXIBLE MARKERS. For each parallel rail terminal, a flexible marker shall be attached to the extreme piece of rail. The flexible markers shall be attached using hardware and attachment methods recommended by the manufacturer.

CR6062-051513

Add the following Subsection 606-3.11 Length of Need Verification.

606-3.11 LENGTH OF NEED VERIFICATION. After shaping the slopes and staking the proposed guardrail locations, notify the Engineer to field verify the beginning and ends. The Engineer will approve the staked location of the guardrail before installation. The Engineer may determine additional guardrail is necessary and the Contractor shall comply without delay.

CR6068-051513

Add the following:

606-5.01 BASIS OF PAYMENT. Add the following:

Payment for temporary crash cushions or TMA installed to protect motorists from guardrail installations that have not been completed within 10 calendar days of beginning installation is subsidiary to other items.

2. Terminal Sections. Replace a. with the following:

   a. Parallel Guardrail Terminal. The contract price includes rail elements, posts, blocks, pipe sleeves, cable assemblies, guardrail extruders, terminal markers, and all associated hardware required for a complete installation.

   Delete b.

   c. Controlled Release Terminals (CRT).

   Replace "object markers" with "terminal markers"

Add d.:

d. Buried in Backslope Guardrail Terminal. The contract price includes rail elements, posts, blocks, concrete, rebar, anchors, and all associated hardware required for a complete installation.

CR6061-110410

Add the following:

Guardrail salvage is subsidiary to Pay Item 606(6) Removing and Disposing of Guardrail.

CR6067-040113

Payment will be made under:

Delete Pay Item 606(10) Slotted Rail Terminal and 606(11) Extruder Terminals.

Add Pay Item 606(13) Parallel Guardrail Terminal:

Pay Item No.	Pay Item	Pay Unit
606(13)	Parallel Guardrail Terminal	Each

CR6061-110410

SECTION 608

SIDEWALKS

Special Provisions

608-1.01 DESCRIPTION. Add the following:

Construct asphalt (HMA) pathways, sidewalks and medians.

608-2.01 MATERIALS.

Delete paragraph number 2 and substitute the following:

2. Asphalt (HMA)
   Asphalt Cement, PG 52-28 ..... Subsection 702-2.01
   Aggregate, Type II or III ..... Subsection 703-2.04

   Mix Design Requirements (ATM 417)
   Marshall Stability, pounds, min. 1000
   Percent Voids, Total Mix 2-5
   Compaction, Blows/side 50

608-3.03 CURB RAMPS. Delete subsection in its entirety and replace with the following:

Construct curb ramps according to the details and the locations shown in the Plans. Follow the construction requirements of Subsection 608-3.01. Give the exposed concrete surface a coarse broom finish. Install detectable warnings.

Add new subsection:

608-3.04 DETECTABLE WARNINGS. Construct detectable warnings according to the details and the locations shown in the Plans. Install detectable warning tile by embedding tile flanges into cast in place concrete construction so there are no vertical changes in grade exceeding 0.25 inch or horizontal gaps exceeding 0.5 inch. Align pattern on a square grid in the predominant direction of travel. Install the same type of detectable warning tile throughout the project.

Install cast iron detectable warning plates with a slip resistant surface and coated with either yellow polymer soaked or black asphalt dip finish, with handle or flange on bottom and with truncated dome pattern or approved equal.

Detectable warnings shall be manufactured and installed according to the Americans with Disabilities Act Accessibility Guidelines.

608-4.01 METHOD OF MEASUREMENT. Delete fifth paragraph beginning with: "Curb Ramp" and replace with the following:

Curb Ramp. By each installation, complete in place, including detectable warnings, ramp runs, backing curbs, flares, and landings necessary to provide a single street-level access.

Detectable Warning Tiles. By each location where detectable warning tiles are to be installed on existing curb ramps or pathways. Detectable Warning Tiles in new curb ramps are incidental to the Curb Ramp pay item. Detectable Warning Tiles pay item includes removal of existing detectable warning tile, preparation or removal of existing concrete or asphalt surface, constructing concrete pad, and furnishing and installing detectable warning surface according to the plans.

Asphalt Pathways, Sidewalks and Medians are measured by the ton of HMA.

Additional HMA used for matching existing surfaces, such as paved parking lots behind a new sidewalk/pathway, will be included in the measurement of the related asphalt Pay Item.

608-5.01 BASIS OF PAYMENT. Add the following:

Asphalt cement is subsidiary to related HMA Pay Items.

Embankment and bed course materials will be furnished, placed, and paid under Sections 203 and 301, respectively.

Add the following Pay Items:

Pay Item No.	Pay Item	Pay Unit
608(8)	Asphalt Pathway and Medians	Ton
608(10)	Detectable Warning Tiles	Square Foot

55260/56176-033114

SECTION 610

DITCH LINING

Special Provisions

610-2.01. MATERIALS. Add the following:

Use well graded stones that are hard, angular, and have no more than 50% wear at 500 revolutions as determined by AASHTO T 96. Use stones with breadth and thickness at least 1/4 of its length. Do not use rounded stones.

55260/56176-040914

SECTION 611

RIPRAP

Special Provisions

611-2.01 MATERIALS. Add the following after the first sentence:

Apparent specific gravity will be determined by WAQTC FOP for AASHTO T85.

CR277-110705

Add the following after Item 4:

5. Class 1A 0-10% weighing less than 3 pounds
60-80% weighing less than 25 pounds
95-100% weighing less than 40 pounds

611-3.01 CONSTRUCTION REQUIREMENTS. Replace the third paragraph with the following:

Place the stones on prepared slopes within the limits shown on the Plans or as directed by the Engineer. Construct a uniform and regular surface with slopes no steeper than those shown on the Plans. Maintain the riprap until final acceptance, and replace any displaced material to the design slopes, lines, and grades at the contractor's expense.

Place materials in a manner that produces a well-keyed mass of stone. Stones in Class III and Class IV lifts shall be placed with each individual stone having at least three points of contact. Ensure that finished surfaces of all layers are free from pockets of single sized stone. Placement of small stone to choke the spaces between large stones or for leveling the surface is not permitted. Breaking of individual pieces in place by blasting or mechanical methods is not permitted. Place filter or underlayer stone to the full course thickness at one operation and in a manner that avoids displacing underlying materials. Placement by methods likely to cause segregation, such as end dumping, side dumping or pushing into position with earth-moving equipment, are not permitted. Obtain the desired distribution of various sizes of stones throughout the mass by selective loading and by controlled placement of successive loads during placement. Materials that do not meet the specified requirements for size, quality or distribution of sizes will not be allowed for use.

Add the following subsection:

611-3.02 SALVAGE AND REPLACE EXISTING RIPRAP.

Areas exist where existing Class III to Class IV riprap must be moved to facilitate embankment repairs. Existing stones shall be stockpiled for reinstallation after embankment repairs have been made. Stockpiles may be on-site, but cannot be located below the ordinary high water line. Rounded rock, generally less than 25 pounds each, has been used for temporary embankment repairs. This rock shall be salvaged and delivered to the Homer Maintenance Station.

After embankment repairs have been made according to the Plans, replace the stockpiled Class III and Class IV riprap in accordance with the Plans and Subsection 611-3.01. Existing subgrade material excavated to key in the replaced riprap shall be embanked at the toe of the riprap slope.

611-5.01 BASIS OF PAYMENT. Add the following:

Salvage and Replace Existing Riprap consists of salvaging existing riprap, stockpiling and resetting stones meeting class III and class IV specifications, and delivering smaller stone material to the Homer Maintenance Station. Keying replaced stones into the existing slope is subsidiary.

Add the following Pay Items:

Pay Item No.	Pay Item	Pay Unit
611(1A)	Rip Rap, Class 1A	Cubic Yard
611(1B)	Rip Rap, Class IV	Cubic Yard
611(3)	Salvage and Replace Existing Riprap	Station

55260-040914

SECTION 615

STANDARD SIGNS

Special Provisions

615-2.01 MATERIALS. Delete first paragraph of Item 2. Including subitems a., b., c., and replace with:

2. Sign Fabrication. Use Type IV reflective sheeting (for lettering symbols, borders, and background) on sheet aluminum panels for all signs except the following:

   a. Orange Background Signs. Use Type IX fluorescent orange reflective sheeting placed on sheet aluminum panels, except:
      (1) For temporary installations, the reflective sheeting may be placed on aluminum, plastic, or plywood sheet panels.
      (2) For flexible signs, (Roll-Up Signs) use fluorescent reflective sheeting Type VI or better (based on durability and reflectivity, as determined by the Engineer). Roll-Up Sign – 3M Series RS 24, Reflexite Marathon Orange, or approved equal.

   b. Railroad Crossbucks and Vertical Crossbuck Supports. Use white Type VIII or Type IX reflective sheeting for background of sign and stripes.

   c. Non-illuminated Overhead Signs with White Legends on Green Backgrounds. Use Type IX reflective sheeting for legends and background. Create the legend in one of the following ways:
      (1) Cut border and legend from white Type IX reflective sheeting and adhere to a green Type IX background, or
      (2) Cut stencil of border and legend out of green transparent acrylic film and use transparent adhesive to overlay the film on a white Type IX reflective background.

   d. Fluorescent Yellow Green School Area Signs. Use Type VIII or Type IX reflective sheeting for background.

   Reflective Sheeting Warranty. Supply manufacturer's warranty for reflective sheeting including retention of fluorescent yellow green (measured according to ASTM E 2301) for ten years according to the following criteria:

   - Minimum Fluorescent Luminance Factor: $Y_F = 20\%$
   - Minimum Total Luminance Factor: $Y_T = 35\%$

   The warranty shall stipulate: If the sheeting fails to meet the minimum fluorescence values within the first 7 years from the date of fabrication, the manufacturer shall, at the manufacturer's expense, restore the sign surface to its original effectiveness. If the reflective sheeting fails to meet the minimum fluorescence values within the 8^{th} through the 10^{th} year from the date of fabrication, the manufacturer shall, at the manufacturer's expense, provide enough new replacement sign sheeting to the Department to restore the sign surface to its original effectiveness.

CR6151-091311

615-3.01 CONSTRUCTION REQUIREMENTS.

7. Add the following after the first paragraph:

   Deliver salvaged signs panels, posts, and hardware to the State Maintenance Yard, located in Homer.

CR6152-091311

615-4.01 METHOD OF MEASUREMENT. Replace the 3rd paragraph, "Delineators," with:

Delineators. By each, complete in place. A single delineator consists of one post equipped with three reflectors.

CR6153-091311

SECTION 618

SEEDING

Special Provisions

618-1.01 DESCRIPTION. Replace the 1st sentence with: Establish a perennial stand of grass or other specified living vegetative cover, by clearing, applying soil stabilization material(s) and seeding the area(s) shown in the Plans, including new and disturbed area(s), and area(s) identified by the Engineer.

618-2.01 MATERIALS. Add the following to the list of material specifications:

Soil Stabilization Material	Section 727 (Stabilization Material)
Topsoil	Section 726 (In this specification, topsoil is included when referencing Stabilization Material)

CR6181-092012

Replace Subsection 618-3.01 with the following:

618-3.01 SURFACE PREPARATION. Clear area(s) to be seeded; make the area(s) reasonably free of ruts, holes, and humps. Clear area(s) of stones 4 inches in diameter and larger and of weeds, plant growth, sticks, stumps, and other debris or irregularities that might interfere with the application of stabilization material, the seeding operation, growth of cover, or subsequent maintenance of the vegetative-covered areas.

Apply stabilization material after clearing is complete, refer to 618-3.02.

Mix the seed with the stabilization material before applying the material (not including topsoil), or seed the stabilization material immediately after the material is applied for the best results as recommended by the supplier/manufacturer.

Prepare the stabilization material by grooving the material in a uniform pattern that is perpendicular to the fall of the slope. Use one or more of the following grooving methods with associated equipment before the application of seed:

1. Manual raking with landscaping rakes;
2. Mechanical track walking with track equipment; or
3. Mechanical raking with a scarifying slope board. Form one inch wide grooves spaced no more than six inches apart.

Rounding the top and bottom of slopes to facilitate tracking or raking and to create a pleasant appearance is acceptable, but disrupting drainage flow lines is not.

Topsoil shall be applied to a depth of 4 inches prior to applying seed. If compost is used for stabilization, apply at a depth of 2 inches.

55260/56176-121113

618-3.02 SEEDING SEASONS. Replace the 1st sentence with the following: Seed disturbed areas after permanent cessation of ground disturbing activities in that area, within the time period specified in the Alaska Department of Environmental Conservation (ADEC) Alaska Pollutant Discharge Elimination System (APDES) Construction General Permit (CGP) for Alaska, Section 4.4 Final Stabilization, and Section 641 Erosion, Sediment, and Pollution Control.

Seed between May 15 and August 15, or obtain written approval from the Engineer to seed at a different date.

CR6183-101711

618-3.03 APPLICATION. Replace the first three sentences with the following: Seed, seeding, reseeding includes the application of seed, fertilizer and stabilization material.

Apply seed mix, fertilizer, and stabilization material at the rate specified. If the seed mix, fertilizer and stabilization material are not included in the Plans or Specifications, including their application rates, use the recommendations of the ADNR and the Revegetation Manual for Alaska.

Do not seed areas of bedrock, plant beds, and areas indicated in the plans as "no seeding."

Add the following:

Apply seed and stabilization material in one application when using the hydraulic method. Apply fertilizer with the hydraulic method. Include the fertilizer with the seed and stabilization material or apply separately.

TABLE 618-1
APPLICATION RATES

Component	Ingredients	Application Rate (per MSF)
Seed	Slender Wheatgrass (Wainwright) Red Fescue (Arctared) Annual Ryegrass (Lolium)	0.75 lbs. 0.60 lbs. 0.15 lbs. Total = 1.50 lbs.
Soil Stabilizer[a.]		
Slope ≤ 3:1	Mulch	46 lbs.
Slope >3:1	Mulch with tackifier	45-58 lbs.
Fertilizer	20-20-10	12 lbs.

a. Soil Stabilizer/Stabilization Material. Refer to Section 619 and 727 for additional soil stabilization and soil stabilization materials.

Do not remove required tags from seed bags.

Upon the Engineer's approval, Nortran Tufted Hairgrass may be used as a substitute for Slender Wheatgrass (Wainwright) if Slender Wheatgrass (Wainwright) is commercially unavailable. If this substitution is made, apply at the same application rate.

CR6181-092012

Where Beach Wild Rye is called for in the Plans, the seed component shall consist of Beach Wildrye (Elymus arenarius 'Reeve') at 1.6 pounds per MSF and Lupine (Lupinus arcticus) at 0.4 pounds per MSF, for a total application rate of 2 pounds per MSF. Soil stabilizer and fertilizer application rates shall be as listed in Table 618-1.

55260/56176-112213

Replace Subsection 3.04 with the following:

618-3.04 MAINTENANCE. Maintain seeded areas in a satisfactory condition for the term of the Contract, including warranty obligations.

Maintenance includes but is not limited to:

1. Protecting seeded areas against traffic by approved warning signs or barricades and against erosion.

2. Repairing surfaces gullied or otherwise damaged following seeding. Fill erosion gullies 4 inches deep

and greater filling the gully to surrounding grade including the portions less than 4 inches deep. Apply and prepare the stabilization material for seeding. Seed repaired area(s). Refer to Subsections 618-3.01 & 3.03.

3. Reseeding areas not showing evidence of satisfactory growth within 3 weeks of seeding and after repairs are complete. Reseed bare patches of soil more than 10 square feet in area. Contact ADNR for advice or corrective measures, when seeded areas are not showing evidence of satisfactory growth.

4. Watering seeded areas for growth of vegetative cover. If in the opinion of the Engineer, too little or too much water is being applied, adjust the amount of water as directed.

Add Subsections 618-3.05:

618-3.05 ACCEPTANCE. The Engineer will perform a visual inspection of the vegetative mat considering each station and each side of the road a separate area. Acceptance of the vegetative mat requires a minimum of 70% cover density in the inspection area, gullies repaired and reseeded, and no bare patches of soil more than 10 square feet in area.

Repair/reseed areas that are not accepted.

Add Subsection 618-3.06:

618-3.06 PERIOD OF ESTABLISHMENT. For each area accepted, the establishment period extends one complete growing season following the date of acceptance. Employ all possible means to preserve/maintain the new vegetative mat in a healthy and vigorous condition to ensure successful establishment. Maintain the vegetative mat, according to Subsection 618-3.04, to not less than the requirements for acceptance, Subsection 618-3.05.

618-4.01 METHOD OF MEASUREMENT. Delete the 3rd paragraph, "Seeding by the Pound," and replace with:

Seeding by the Pound. By the weight of dry seed acceptably seeded and maintained.

Add the following:

M Gal is equal to 1000 gallons.

618-5.01 BASIS OF PAYMENT. Delete the 1st sentence: "Mulching will be paid for under Section 619".

Delete paragraph beginning: "Seeding by the Pound" and replace with:

Seeding by the Pound. Pay Item 618(2), Seeding: Payment is for established vegetative mat. Stabilization material preparation (seed, fertilizer, stabilization material and the water required for all hydraulic applications) are subsidiary. Maintenance including: 1. Protection, 2. Repairs, 3. Reseeding, is also subsidiary. Repairs and reseeding include, but are not limited to: fill, stabilization material and preparation for seeding, seed, fertilizer, and the water required for hydraulic application.

Add new pay description:

Water for Seeding.

- Water for hydraulic application is subsidiary to Pay Items 618(1) and 618(2), and includes, but is not limited to: the initial application of seed, fertilizer, and stabilization material and the reapplication for repairs and reseeding.
- Water applied for growth of vegetative mat (Subsection 618-3.04.4 Watering), for the term of the Contract, including warranty obligations, is paid under Pay Item 618(3).

Add the following:

Stabilization materials are paid under Section 619 and 620 Pay Items, except as noted for "Seeding by the Acre", "Seeding by the Pound" and warranty obligations, Subsection 105-1.16.

55260/56176-121113

Special Provision

Replace Section 619 with the following:

SECTION 619

SOIL STABILIZATION

619-1.01 DESCRIPTION. Furnish, install, and maintain materials to stabilize the soil. Control erosion, sediment, and pollution.

619-1.02 RELATED SECTIONS, REFERENCE ORGANIZATIONS, AND STANDARD DOCUMENTS.

1. Alaska Department of Transportation and Public Facilities (ADOT&PF):

   Standard Specifications for Highway Construction, 2004 Edition.
   - Seeding ..... Section 618
   - Topsoil ..... Section 620
   - Planting Trees and Shrubs ..... Section 621
   - Silt Fence ..... Section 633
   - Erosion, Sediment, and Pollution Control ..... Section 641
   - Soil Stabilization Material ..... Section 727

2. American Association of State Highway and Transportation Officials (AASHTO):

   Standard Practice for:
   - Compost for Erosion/Sediment Control (Filter Berms and Filter Socks) R51-10
   - Compost for Erosion/Sediment Control (Compost Blankets) R52-10

3. United States Composting Council (USCC):
   - Testing Methods for the Examination of Compost and Composting (TMECC)
   - Seal of Testing Assurance Program (STA) documents

4. Erosion Control Technology Council (ECTC)
   - Hydraulic Erosion Control Products (HECPs) Specification Chart
     Table 1, Performance Chart for Standard HECPs
   - Rolled Erosion Control Products (RECPs) Specification Chart
     Table 1, Rolled Erosion Control - Temporary
     Table 2, Rolled Erosion Control - Permanent

5. National Transportation Product Evaluation Program (NTPEP)
   - Testing and Evaluation of Products Materials and/or Devices

6. Texas DOT/Texas Transportation Institute (TTI) Hydraulics and Erosion Control Laboratory

619-1.03 SUBMITTALS. Submit stabilization and erosion, sediment and pollution control performance testing results with certifications for each material, Section 619-2.01 Materials. Submit a sample of each material to the Engineer 7 days before the scheduled installation.

1) Test compost, all applications, no more than 90 days before installation.
2) At a minimum, certificate will include the name of the manufacturer, product name, style number or similar, chemical composition of the material, the fibers, netting, yarn and similar and the weed free status of the material.
3) Organic materials shall be accompanied with all applicable health certificates and permits.
4) Furnish a Material Safety Data Sheet (MSDS) that demonstrates the product is not harmful to plants, animals, and aquatic life.

619-2.01 MATERIALS. Select stabilization materials, individually or a combination of, matched to the project applications/conditions (sheet flow, concentrated flow, slope, length of slope, access, etc.) providing performance and functional longevity meeting the most restrictive requirements of the Construction General Permit (CGP), the approved Stormwater Pollution Prevention Plan (SWPPP) and Section 641 Erosion, Sediment and Pollution Control.

1) Mulch ..... Subsection 727-2.01
   - Dry Erosion Control, Stabilization Products
   - Hydraulic Erosion Control Products (HECPs)
2) Matting ..... Subsection 727-2.02
   - Rolled Erosion Control Products (RECPs)
3) Sediment Retention Fiber Rolls (SRFRs) ..... Subsection 727-2.03
   - Filter Socks
   - Compost Socks
   - Coir Logs
4) Compost ..... Subsection 727-2.04
5) Tackifier ..... Subsection 727-2.05
6) Soil Binders (Polyacrylamide (PAM)) ..... Subsection 727-2.06
7) Geotextile-Encased Check Dams and Sediment Barriers ..... Subsection 727-2.07
8) Sandbag ..... Subsection 727-2.08
9) Manufactured Inlet Protection System ..... Subsection 727-2.09
10) Clear Plastic Covering ..... Subsection 727-2.10
11) Staples ..... Subsection 727-2.11
12) Other stabilization materials submitted to and approved by the Engineer.

Include on the packaging the manufacturer's name, the content, the air dry-weight and the guaranteed chemical analysis of the contents. Ship and deliver to the site in the original, unopened containers.

CONSTRUCTION REQUIREMENTS

619-3.01 GENERAL. Stabilization may include individual or a combination of materials, including but not limited to temporary seeding, mulch, tackifier, staples, matting, stabilizing emulsions, soil binders, dustless sweeping, dust palliatives, and others.

1. Material Storage and Protection. Store materials elevated off the ground and covered protecting them from construction and or damage from the environment including but not limited to:
   - Precipitation
   - Extended ultraviolet radiant including sunlight
   - Chemicals that are strong acids or other
   - Flames and welding sparks
   - Excess temperatures
   - Other environmental conditions that may damage the materials

2. Fabrication.
   a. Sandbags. Sand bags shall measure 15 inches by 30 inches. Place approximately 1.0 cubic foot of select Material, Type B, in each sandbag sack. Close the open end of the sandbag as recommended by the fabric manufacturer.

619-3.02 SURFACE PREPARATION. Clear all areas to be stabilized of stones 4 inches in diameter and larger and of weeds, plant growth, sticks, stumps, and other debris or irregularities that might interfere with the stabilization operation, growth of cover (where vegetative cover is part of the stabilization operation) or subsequent maintenance of the vegetative-covered area(s).

Smooth the surface of the area(s) to be stabilized; make the areas reasonably free of ruts, holes, and humps; trackwalk if required by the manufacturer; apply the stabilization material to each area.

If specified, apply topsoil to the area to be stabilized before application of the stabilizing material. Section 618 and 620.

619-3.03 APPLICATION. Apply stabilization material, including rate of application, according to the specifications. If not specified, apply according to the manufacturer's requirements. Where manufacturer requirements conflict with the specification, except where the Engineer directs otherwise, apply the material according to the requirements of the manufacturer.

If seeding is specified, except where seed is included in the stabilization material, complete the application of stabilization materials within 24 hours after seed is placed.

Do not use vehicles or equipment which cause rutting or displacement of the subgrade or topsoil.

1. Temporary Seeding. Annual Ryegrass per Subsection 724-2.02, Table 724-1. Apply at a rate of 1/2 lb/1000 sq. ft., minimum, on level ground to a maximum of 1 1/2 lb/1000 sq. ft., maximum, on sloping ground and highly erodible soils. Prepare surface and place seed as noted under Subsection 619-3.02 Surface Preparation and Section 618 Seeding. Confirm application of temporary seeding with the Engineer.

2. Tacking Agents - Tackifiers. Apply tacking agents according to the manufacturer's installation instructions matched to the application providing functional longevity, erosion control effectiveness, and vegetative establishment.

3. Soil Binders. Apply soil binders according to the manufacturer's installation instructions.

   a. Using Polyacrylamide (PAM) and PAM with Short-Term Mulch:
   Apply PAM on bare soils.

   Apply PAM and PAM with short-term mulch only where sediment control is in place and complete.

   Do not apply PAM and PAM with short-term mulch on saturated ground during rainfall.

   b. Using Moderate-Term Mulch:
   Apply moderate-term mulch according to manufacturer's installation instructions. If the curing period to achieve maximum performance is greater than the time period before precipitation is predicted, or the soil is saturated, do not apply the moderate-term mulch except as approved by the Engineer.

   c. Using Long-Term Mulch:
   Apply long-term mulch according to the manufactures installation instructions.

4. Erosion Control Blankets (ECBs). Select blankets, as specified by the manufacturer, to match the slope; and installed according to the manufacturer's instructions rolled out on well prepared soils to assure intimate contact and anchored with staples, stakes and or anchor trenches. Temporary erosion control blankets with 60 percent or greater open area may be installed prior to seeding. Place blankets with less than 60 percent open area immediately after the seeding operation.

   Staple matting/ECBs as recommended by the manufacturer for the application.

5. Compost Blankets. Construct compost blankets according to AASHTO R 52-10 and as specified. Use coarse compost and place over bare soil a blanket of 2 inch minimum thickness, except as otherwise specified. Apply material either by hand spreading and or pneumatically. Compost will have no free water visible or produce dust when handled. Place compost before seeding or mix seed with compost.

6. Check Dams. Place check dams as soon as possible and practicable or when and where if directed by the Engineer. Place the check dams perpendicular to channels and construct of a height sufficient to maximize detention while keeping the water in the channel. Place and install check dams according to the Plans and anchor to maintain in effective position.

   a. Sandbag. Place the initial row in tight contact with the ditchline for the length of the dam. Place each following row centered across the joint between the bags of the lift/row below.

7. Stabilized Construction Entrance.
   Temporary stabilized construction entrance shall be constructed according to the Plans, prior to beginning any clearing, grubbing, earthwork, or excavation.

   When the stabilized entrance no longer prevents track out of sediment or debris, the Contractor shall either rehabilitate the existing entrance to original condition, or construct a new entrance.

   When the Plans require a tire wash in conjunction with the stabilized entrance, the Contractor shall include details for the tire wash and the method for containing and treating the sediment-laden runoff as part of the SWPPP. All vehicles leaving the site shall stop and wash sediment from their tires.

8. Sediment Control Barriers. Sediment control barriers shall be installed according to the Plans or manufacturer's recommendations in the areas of clearing, grubbing, earthwork, or drainage prior to starting those activities.

   a. Sandbag. Place the initial row in tight contact with the surface perpendicular to the slope. Place each following row centered across the joint between the bags of the lift/row below.

   b. Sediment Retention Fiber Rolls.

   c. Silt Fence.

   d. Compost Berm. Construct compost berms according to AASHTO R 51-10. Use coarse compost.

9. Turf Reinforcement Mats. According to manufacturers installation instructions.

619-3.04 MAINTENANCE. Maintain stabilized areas in a satisfactory condition for the term of the Contract, including warranty obligations. Inspect as required by the CGP, approved SWPPP, and Section 641 Erosion, Sediment and Pollution Control and correct any deficiencies immediately. Remove and dispose of temporary measures, including trapped sediment and contaminants, off project at approved locations. Materials manufactured as degradable may be left in place when approved by the Engineer.

Maintenance includes but is not limited to:

   a. Protecting stabilized areas against traffic by approved warning signs or barricades.

   b. Repairing surfaces gullied or otherwise damaged following application of stabilization material(s).

   Where seeding is included as a part of the soil stabilization:

   c. Reseeding, as required by Section 618 Seeding. Reapply the stabilization materials correcting the problems of the initial application.

   d. Watering, where vegetative growth is part of the soil stabilization, according to Section 618 Seeding.

The Engineer will perform inspection of the stabilization as required in the CGP, Section 641, and the SWPPP. Make repairs as required by same and as directed.

619-4.01 METHOD OF MEASUREMENT. Section 109, measured on the slope of the ground surface.

619-5.01 BASIS OF PAYMENT. Water, maintenance, repair, removal, and disposal of temporary stabilization materials are subsidiary.

Seeding is paid under Section 618 Pay Items, topsoil under Section 620 Pay Items, silt fence under Section 633 Pay Items and temporary erosion, sediment, and pollution control under 641 Pay Items.

CR619-092612

Compost is subsidiary to Pay Item 618(4) Seeding.

55260-073113

Payment will be made under:

Pay Item No.	Pay Item	Pay Unit
619(1)	Mulching	Square Yard
619(2)	Matting	Square Yard
619(3)	Compost	Square Yard
619(4)	Turf Reinforcement Mat	Square Yard
619(5)	Sediment Retention Fiber Rolls (SRFRs)	Linear Foot
619(6)	Check Dam and Sediment Barrier - Geotextile	Linear Foot
619(8)	Compost Berm	Linear Foot
619(9)	Sandbags	Each
619(10)	Manufactured Inlet Protection System	Each
619(11)	Sandbag Inlet Protection System	Each

CR619-092612

Special Provisions

Replace Section 639 with the following:

SECTION 639

DRIVEWAYS

639-1.01 DESCRIPTION. Construct approaches, residential or commercial driveways at the locations shown in the Plans.

639-2.01 MATERIALS. Use materials that conform to the standards for the main roadway.

639-3.01 CONSTRUCTION. Construct driveways and approaches to the dimensions shown on the Plans.

639-4.01 METHOD OF MEASUREMENT. By the number of driveways and approaches constructed as shown on the Plans or as directed. Pavement removal and excavation required beyond the limits of the adjacent mainline will be subsidiary.

639-5.01 BASIS OF PAYMENT. At the contract unit price shown in the bid schedule. The contract unit price for driveways and approaches shall be full compensation for furnishing equipment and labor necessary to complete the work as specified.

Materials required to construct driveways and approaches will be paid for separately under the respective items listed in the bid schedule.

Native material meeting the minimum requirements of Selected Material, Type C will not be paid for directly, but will be considered subsidiary to 639 Items.

Payment will be made under:

Pay Item No.	Pay Item	Pay Unit
639(6)	Approach	Each

CR58-050902

SECTION 640

MOBILIZATION AND DEMOBILIZATION

Special Provisions

640-1.01 DESCRIPTION. Add the following:

6. Comply with the Alaska Department of Labor and Workforce Development (DOLWD) requirements for Worker Meals and Lodging, or Per Diem; as described in their May 10, 2013 memo WHPL #197 (A4) and the State Laborer's and Mechanic's Minimum Rates of Pay (current issue). On Federal-aid projects, PL 109-59, 119 STAT. 1233, Sec. 1409(c) also applies.

   Ensure subcontractors comply with the Federal and State DOLWD requirements.

   Ensure facilities meet the Alaska Administrative Code 8 AAC 61.1010 and 8 AAC 61.1040 *Occupational Safety and Health Standards,* 18 AAC *31 Alaska Food Code,* and U.S. Code of Federal Regulations 29 CFR Section 1910.142 *Temporary Labor Camps.*

   Do not consider the cost of Meals and Lodging, or Per Diem in setting wages for the worker or in meeting wage requirements under AS 23.10.065 or AS 36.05.

640-4.01 METHOD OF MEASUREMENT. Delete the numbered paragraph 3 and substitute the following:

3. The remaining balance of the amount bid for Mobilization and Demobilization will be paid after all submittals required under the Contract are received and approved.

Add the following:

4. Progress payments for Worker Meals and Lodging, or Per Diem will be computed as equivalent to the percentage, rounded to the nearest whole percent, of the original Contract amount earned.

640-5.01 BASIS OF PAYMENT. Add the following Pay Item:

Payment will be made under:

Pay Item No.	Pay Item	Pay Unit
640(4)	Worker Meals and Lodging, or Per Diem	Lump Sum

CR6401-051013

Special Provisions

Replace Section 641 with the following:

SECTION 641

EROSION, SEDIMENT, AND POLLUTION CONTROL

641-1.01 DESCRIPTION.

Provide project administration and Work relating to control of erosion, sedimentation, and discharge of pollutants, according to this section and applicable local, state, and federal requirements, including the Construction General Permit.

641-1.02 DEFINITIONS.

These definitions apply only to Section 641.

Active Treatment System Operator. The Contractor's qualified representative who is responsible for maintaining and operating an active treatment system (as defined in the CGP) for storm water runoff.

Alaska Certified Erosion and Sediment Control Lead (AK-CESCL). A person who has completed training, testing, and other requirements of, and is currently certified as, an AK-CESCL from an AK-CESCL Training Program (a program developed under a Memorandum of Understanding between the Department and others). The Department recognizes AK-CESCLs as "qualified personnel" required by the CGP. An AK-CESCL must be recertified every three years.

Alaska Department of Environmental Conservation (ADEC). The state agency authorized by EPA to administer the Clean Water Act's National Pollutant Discharge Elimination System.

Alaska Pollutant Discharge Elimination System (APDES). A system administered by ADEC that issues and tracks permits for storm water discharges.

Best Management Practices (BMPs). Temporary or permanent structural and non-structural devices, schedules of activities, prohibition of practices, maintenance procedures, and other management practices to prevent or minimize the discharge of pollutants to waters of the United States. BMPs also include, but are not limited to, treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from material storage.

Clean Water Act (CWA). Federal Water Pollution Control Amendments of 1972, as amended (33 U.S.C. 1251 et seq.).

Consent Decree. The decree entered by the United States District Court for the District of Alaska on September 21, 2010, regarding compliance with the CWA and implementation of the CGP, to which the United States and the Department are parties.

Construction Activity. Physical activity by the Contractor, Subcontractor, or utility company; that may result in erosion, sedimentation, or a discharge of pollutants into storm water. Construction Activity includes soil disturbing activities (e.g. clearing, grubbing, grading, excavating); and establishment of construction materials or equipment storage or maintenance areas (e.g. material piles, borrow area, concrete truck chute washdown, fueling); and industrial activities that may discharge storm water and are directly related to the construction process (e.g. concrete or asphalt batch plants).

Construction General Permit (CGP). The permit authorizing storm water discharges from Construction Activities, issued and enforced by ADEC. It authorizes stormwater discharges provided permit conditions and water quality standards are met.

Corp of Engineers Permit (COE Permit). A U.S. Army Corp of Engineers Permit for construction in waters of the US. Such permit may be issued under Section 10 of the Rivers and Harbors Act of 1899, or Section 404 of the Clean Water Act.

Electronic Notice of Intent (eNOI). The electronic Notice of Intent submitted to ADEC, to obtain coverage under the CGP.

Electronic Notice of Termination (eNOT). The electronic Notice of Termination submitted to ADEC, to end coverage under the CGP.

Environmental Protection Agency (EPA). A federal agency charged to protect human health and the environment.

Erosion and Sediment Control Plan (ESCP). The Department's project specific document that illustrates measures to control erosion and sediment on the project. The ESCP provides bidders with the basis for cost estimating and guidance for developing an acceptable Storm Water Pollutant Prevention Plan (SWPPP).

Final Stabilization. Is defined in this section as it is defined in the CGP.

Hazardous Material Control Plan (HMCP). The Contractor's detailed project specific plan for prevention of pollution from storage, use, transfer, containment, cleanup, and disposal of hazardous material (including, but are not limited to, petroleum products related to construction activities and equipment). The HMCP is included as an appendix to the SWPPP.

Inspection. An inspection required by the CGP or the SWPPP, usually performed together by the Contractor's SWPPP Manager and Department's Stormwater Inspector.

Municipal Separate Storm Sewer System (MS4) Permit. An ADEC storm water discharge permit issued to certain local governments and other public bodies, for operation of storm water conveyances and drainage systems. See CGP for further definition.

Multi-Sector General Permit (MSGP). The Alaska Pollutant Discharge Elimination System General Permit for storm water discharges associated with industrial activity.

Operator(s). The party or co-parties associated with a regulated activity that has responsibility to obtain permit coverage under the CGP. "Operator" for the purpose of the CGP and in the context of storm water associated with construction activity, means any party associated with a construction project that meets either of the following two criteria:

1. The party has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or

2. The party has day to day operational control of those activities at a project which are necessary to ensure compliance with a SWPPP for the site or other permit conditions (e.g. they are authorized to direct workers at a site to carry out activities required by the SWPPP or comply with other permit conditions).

Pollutant. Any substance or item meeting the definition of pollutant contained in 40 CFR § 122.2. A partial listing from this definition includes: dredged spoil, solid waste, sewage, garbage, sewage sludge, chemical wastes, biological materials, wrecked or discarded equipment, rock, sand, cellar dirt and industrial or municipal waste.

Project Zone. The physical area provided by the Department for Construction. The Project Zone includes the area of highway or facility under construction, project staging and equipment areas, and material and disposal sites; when those areas, routes and sites, are provided by the Department by the Contract and are directly related to the Contract.

Material sites, material processing sites, disposal sites, haul routes, staging and equipment storage areas; that are furnished by the Contractor or a commercial operator, are not included in the Project Zone.

Records. Any record, report, information, document, or photograph required to be created or maintained pursuant to the requirements of the Consent Decree, the CGP, the CGP storm water requirements of the Clean Water Act; and applicable local, state, and federal laws and regulations regarding document preservation.

Spill Prevention, Control, and Countermeasure Plan (SPCC Plan). The Contractor's detailed plan for petroleum spill prevention and control measures that meet the requirements of 40 CFR 112.

Spill Response Field Representative. The Contractor's representative with authority and responsibility for managing, implementing, and executing the HMCP and SPCC Plan.

Storm Event. A rainfall event that produces more than 0.5 inch of precipitation in 24 hours and that is separated from the previous storm event by at least 3 days of dry weather.

Storm Water Pollution Prevention Plan (SWPPP). The Contractor's detailed project specific plan to minimize erosion and contain sediment within the Project Zone, and to prevent discharge of pollutants that exceed applicable water quality standards. The SWPPP includes, but is not limited to, amendments, records of activities, inspection schedules, and reports, qualifications of key personnel, and all other documentation, required by the CGP and this specification, and other applicable local, state, and federal laws and regulations.

Storm Water Pollution Prevention Plan Two (SWPPP2). The Contractor's detailed project specific plan to comply with CGP or MSGP requirements, for Contractor construction-related activities outside the Project Zone.

Subcontractor Spill Response Coordinator. The subcontractor's representative with authority and responsibility for coordinating the subcontractor's activities in compliance with the HMCP and SPCC Plan.

Subcontractor SWPPP Coordinator. The subcontractor's representative with authority to direct the subcontractor's work, and who is responsible for coordination with the Superintendent and SWPPP Manager, and for the subcontractor's compliance with the SWPPP.

Superintendent. The Contractor's duly authorized representative in responsible charge of the work. The Superintendent has responsibility and authority for the overall operation of the Project and for Contractor furnished sites and facilities directly related to the Project.

SWPPP Amendment. A revision or document that adds to, deletes from, or modifies the SWPPP.

SWPPP Manager. The Contractor's qualified representative who conducts Inspections, updates SWPPP records, and has authority to suspend work and to implement corrective actions required for CGP compliance.

SWPPP Preparer. The Contractor's qualified representative who is responsible for developing the initial SWPPP.

Utility Spill Response Coordinator. The Utility's representative with authority and responsibility for coordinating the Utility's activities in compliance with the HMCP and SPCC Plan.

Utility SWPPP Coordinator. The Utility's representative with authority to direct the Utility's work, and who is responsible for coordination with the Superintendent and SWPPP Manager, and for the Utility's compliance with the SWPPP.

641-1.03 PLAN AND PERMIT SUBMITTALS.

For plans listed in Subsection 108-1.03.5 (SWPPP and HMCP) use the Contractor submission and Department review deadlines identified in Subsection 641-1.03.

Partial and incomplete submittals will not be accepted for review. Any submittal that is re-submitted or revised after submission, but before the review is completed, will restart the submittal review timeline. No additional Contract time or additional compensation will be allowed due to delays caused by partial or incomplete submittals, or required re-submittals.

1. Storm Water Pollution Prevention Plan. Submit an electronic copy and three hard copies of the SWPPP to the Engineer for approval. Deliver these documents to the Engineer at least 21 days before beginning Construction Activity. Organize and bind the SWPPP and related documents for submittal according to the requirements of Subsection 641-2.01.2.

   The Department will review the SWPPP submittals within 14 days after they are received. Submittals will be returned to the Contractor, and marked as either "rejected" with reasons listed or as "approved" by the Department. When the submittal is rejected, the Contractor must revise and resubmit the SWPPP. The 14 day review period will restart when the contractor submits an electronic copy and three hard copies of the revised SWPPP to the Engineer for approval.

   After the SWPPP is approved by the Department, the Contractor must sign and certify the approved SWPPP. See Item 4 for further SWPPP submittal requirements.

2. Hazardous Material Control Plan. Submit an electronic copy and three hard copies of the HMCP, as an appendix to the SWPPP, to the Engineer for approval. The HMCP submittal and review timeline, and signature requirements are the same as the SWPPP.

3. Spill Prevention, Control, and Countermeasure Plan. When a SPCC Plan is required under Subsection 641-2.03, submit an electronic copy and three signed hard copies of the SPCC Plan to the Engineer. Deliver these documents to the Engineer at least 21 days before beginning Construction Activity. The Department reserves the right to review the SPCC Plan and require modifications.

4. CGP Coverage. The Contractor is responsible for permitting of Contractor and subcontractor Construction Activities related to the Project. Do not use the SWPPP for Construction Activities outside the Project Zone where the Department is not an operator. Use a SWPPP2 for Construction Activities outside the Project Zone.

   After Department approval of the SWPPP and prior to beginning Construction Activity, submit an eNOI with the required fee to ADEC for coverage under the Construction General Permit (CGP). Submit a copy of the signed eNOI and ADEC's written acknowledgement (by letter or other document), to the Engineer as soon as practicable and no later than three days after filing eNOI or receiving a written response.

   Do not begin Construction Activity until the conditions listed in Subsection 641-3.01.1 are completed.

   The Department will submit an eNOI to ADEC for Construction Activities inside the Project Zone. The Engineer will provide the Contractor with a copy of the Department's eNOI and ADEC's written acknowledgment (by letter or other document), for inclusion in the SWPPP.

   Before Construction Activities occur, transmit to the Engineer an electronic copy of the approved and certified SWPPP, with signed Delegations of Signature Authorities, SWPPP Certifications, both permittee's signed eNOIs and ADEC's written acknowledgement.

5. Ending CGP Coverage. Submit an eNOT to ADEC within 30 days after the Engineer has determined the conditions listed in Subsection 641-3.01.6 have been met. Submit a copy of the signed eNOT and ADEC's acknowledgement letter to the Department within three days of filing the eNOT or receiving a written response.

6. ADEC SWPPP Review. When CGP Part 2.1.3, requires ADEC SWPPP review:
   a. Transmit a copy of the Department-approved SWPPP to ADEC using delivery receipt confirmation;
   b. Transmit a copy of the delivery receipt confirmation to the Engineer within seven days of receiving the confirmation; and
   c. Retain a copy of delivery receipt confirmation in the SWPPP.

7. Local Government SWPPP Review. When local government or the CGP Part 2.1.4, requires local government review:
   a. Transmit a copy of the Department-approved SWPPP and other information as required to local government, with the required fee. Use delivery receipt confirmation;
   b. Transmit a copy of the delivery receipt confirmation to the Engineer within seven days of receiving the confirmation;
   c. Transmit a copy of any comments by the local government to the Engineer within seven days of receipt;
   d. Amend the SWPPP as necessary to address local government comments and transmit SWPPP Amendments to the Engineer within seven days of receipt of the comments;
   e. Include a copy of local government SWPPP review letter in the SWPPP; and
   f. File a notification with local government that the project is ending.

8. Modifying Contractor's eNOI. When required by The CGP Part 2.7, modify your eNOI to update or correct information. Reasons for modification include a change in start or end dates, small changes in number of acres to be disturbed, change in decision to use or not use treatment chemicals, or change in location of SWPPP Records.

   The Contractor must submit an eNOT and then submit a new eNOI instead of an eNOI modification when: the operator has changed, the original eNOI indicates disturbed area less than five acres and the project will disturb more than five acres, or a project over five disturbed acres grows by more than 50%.

641-1.04 PERSONNEL QUALIFICATIONS.

Provide documentation in the SWPPP that the individuals serving in these positions meet the personnel qualifications.

The SWPPP Preparer must meet at least one of the following qualifications:
   a. Current certification as a Certified Professional in Erosion and Sediment Control (CPESC);
   b. Current certification as AK-CESCL, and at least two years experience in erosion and sediment control, as a SWPPP Manager or SWPPP writer, or equivalent. Provide documentation including project names, project timelines, and work responsibilities demonstrating the experience requirement; or
   c. Professional Engineer registered in the State of Alaska with current certification as AK-CESCL.

   For Projects disturbing more than 20 acres, the SWPPP Preparer must also have completed a SWPPP Preparation course.

The Superintendent must meet the following qualifications:
   a. Current certification as AK-CESCL; and
   b. Duly authorized representative, as defined in the CGP, Appendix A, Part 1.12.3.

The SWPPP Manager must have current certification as AK-CESCL and must meet the CGP experience, training, and authority requirements identified for the Storm Water Lead and Storm Water Inspector positions as defined in the CGP, Appendix C, Qualified Person.

The Active Treatment System (ATS) operator must have current certification as AK-CESCL, and be knowledgeable in the principals and practices of treatment systems in general, and the operation of the project-specific ATS. The ATS operator must have at least three months field experience with ATS, or completion of an ATS manufacturer's training course, or completion of system operator's certification course.

The Department accepts people having any of the following certificates as equivalent to AK-CESCL, if the certificates are current according to the sponsoring organization's policies:

a. CPESC, Certified Professional in Erosion and Sediment Control; or
b. CISEC, Certified Inspector in Sediment and Erosion Control.

641-1.05 SIGNATURE/CERTIFICATION REQUIREMENTS AND DELEGATIONS.

1. eNOI and eNOT. The eNOI and eNOT must be signed and certified by a responsible corporate officer according to CGP Appendix A, Part 1.12.2. Signature and certification authority for the eNOI and eNOT cannot be delegated.

2. Delegation of Signature Authority for Other SWPPP Documents and Reports. Use Form 25D-108 to delegate signature authority and certification authority to the Superintendent position, according to CGP Appendix A, Part 1.12.3, for the SWPPP, Inspection Reports and other reports required by the CGP. The Superintendent position is responsible for signing and certifying the SWPPP, Inspection Reports, and other reports required by the CGP, except the eNOI and eNOT.

   The Engineer will provide the Department's delegation Form 25D-107, which the Contractor must include in the SWPPP.

3. Subcontractor Certification. Subcontractors must certify that they have read and will abide by the CGP and the conditions of the project SWPPP.

4. Signatures and Initials. Handwrite signatures or initials on CGP documents and SWPPP forms, wherever a signature or initial is required.

641-1.06 RESPONSIBILITY FOR STORM WATER PERMIT COVERAGE.

1. The Department and the Contractor are jointly responsible for permitting and permit compliance within the Project Zone.

2. The Contractor is responsible for permitting and permit compliance outside the Project Zone. The Contractor has sole responsibility for compliance with ADEC, COE and other applicable federal, state, and local requirements, and for securing all necessary clearances, rights, and permits. Subsection 107-1.02 describes the requirement to obtain permits, and to provide permit documents to the Engineer.

3. An entity that owns or operates, a commercial plant (as defined in Subsection 108-1.01.3) or material source or disposal site outside the Project Zone, is responsible for permitting and permit compliance. The Contractor has sole responsibility to verify that the entity has appropriate permit coverage. Subsection 107-1.02 describes the requirement to obtain permits, and to provide permit documents to the Engineer.

4. The Department is not responsible for permitting or permit compliance, and is not liable for fines resulting from noncompliance with permit conditions:
   a. For areas outside the Project Zone;
   b. For Construction Activity and Support Activities outside the Project Zone; and
   c. For commercial plants, commercial material sources, and commercial disposal sites.

641-1.07 UTILITY.

Relocation Coverage. A Utility company is not an Operator when utility relocation is performed concurrently with the Project, as outlined in Section 105-1.06. The Department maintains operational control over the Utility's plans and specifications for coordination with project construction elements, and the Contractor has day-to-day control over the various utility construction activities that occur in support of the Project. A Utility company is considered a subcontractor for concurrent relocation.

After the Contractor has an active NOI for the Project, a Utility Company performing advance relocation work under a separate SWPPP no longer has Operator status and files the NOT for the Utility Company's SWPPP covering only the completed utility work. Remaining utility relocation work is included in and performed under the Project SWPPP.

641-2.01 STORM WATER POLLUTION PREVENTION PLAN (SWPPP) REQUIREMENTS.

1. SWPPP Preparer and Pre-Construction Site Visit.

   Use a SWPPP Preparer to develop the SWPPP and associated documents, according to the requirements of the CGP and COE permit. The SWPPP Preparer must put their name, qualifications (including the expiration date of any certifications), title and company name in the SWPPP.

   The SWPPP Preparer must conduct a pre-construction inspection at the Project site before construction activity begins. If the SWPPP Preparer is not a Contractor employee, the SWPPP Preparer must visit the site accompanied by the Contractor. Give the Department at least seven days notice of the site visit, so that the Department may participate.

   During the pre-construction inspection, the SWPPP Preparer must identify, or if a draft of the SWPPP has already been prepared verify that the SWPPP fully addresses and describes:
   - Opportunities to phase construction activities;
   - Appropriate BMPs and their sequencing; and
   - Sediment controls that must be installed prior to beginning Construction Activities.

   Document the SWPPP Preparer's pre-construction inspection in the SWPPP on Form 25D-106, SWPPP Pre-Construction Site Visit, including the names of attendees and the date.

2. Developing the SWPPP.

   Use the Department's ESCP, Environmental commitments, and other Contract documents as a starting point for developing the SWPPP. The approved SWPPP replaces the ESCP.

   Develop the SWPPP with sections and appendices, according to the current DOT&PF SWPPP template. Include information required by the Contract and the CGP.

   Obtain the following forms after they have been completed by the Department and include them in the SWPPP:
   - ☐ SWPPP Delegation of Signature Authority – DOT&PF (25D-107)
   - ☐ SWPPP Certification for DOT&PF (25D-109)
   - ☐ SWPPP Delayed Action Item Report (25D-113)

   Use the following Department forms for recording information in the SWPPP:
   - ☐ SWPPP Amendment Log (25D-114)
   - ☐ SWPPP Certification for Contractor (25D-111)
   - ☐ SWPPP Construction Site Inspection Report (25D-100)
   - ☐ SWPPP Corrective Action Log (25D-112)
   - ☐ SWPPP Daily Record of Rainfall (25D-115)
   - ☐ SWPPP Delegation of Signature Authority – Contractor (25D-108)
   - ☐ SWPPP Grading and Stabilization Activities Log (25D-110)
   - ☐ SWPPP Pre-Construction Site Visit (25D-106)
   - ☐ SWPPP Project Staff Tracking (25D-127)
   - ☐ SWPPP Subcontractor Certification (25D-105)
   - ☐ SWPPP Training Log (25D-125)

   SWPPP Template and Forms are available online at:
   http://www.dot.state.ak.us/stwddes/dcsconst/pop_constforms.shtml

   Compile the SWPPP in three ring binders with tabbed and labeled dividers for each section and appendix.

3. SWPPP Considerations and Contents.

The SWPPP must provide erosion and sediment control measures for all Construction Activity within the Project Zone. Construction activity outside the Project Zone must have permit coverage, using a separate SWPPP2, and separate Contractor Inspections.

The SWPPP must consider the activities of the Contractor and all subcontractors and utility companies performing work in the Project Zone. The SWPPP must describe the roles and responsibilities of the Contractor, subcontractors, utility companies, and the Department with regard to implementation of the SWPPP. The SWPPP must identify all operators for the Project, including utility companies performing Construction Activity, and identify the areas:

a. Over which each operator has operational control; and
b. Where the Department and Contractor are co-operators.

For work outside the Project Zone, the SWPPP must identify the entity that has stormwater permit coverage, the operator, and the areas that are:

a. Dedicated to the Project and where the Department is not an operator; and
b. Not dedicated to the project, but used for the project.

Develop the SWPPP according to the requirements of the CGP and this specification. Account for the Contractor's construction methods and phasing. Identify the amount of mean annual precipitation.

Comply with the CGP Part 1.4 .2 Allowable Non-Storm Water Discharges. List locations where authorized non-storm water will be used, including the types of water that will be used on-site.

Include the Department's Antidegradation Analysis in the SWPPP if storm water from the Project Zone discharges into receiving water that is considered high quality water and that constitutes an outstanding national resource, according to CGP Part 2.1.5.

There are special requirements in the CGP Part 3.2, for storm water discharges into an impaired water body, and they may include monitoring of storm water discharges. For Projects meeting the permit criteria, the Department will initiate a monitoring program for the storm water within the Project Zone, and will provide the required information and reports for inclusion in the SWPPP. The Contractor is responsible for monitoring and reporting outside the Project Zone.

Preserve natural topsoil unless infeasible. Delineate the site according to CGP Part 4.1. Use stakes, flags, or silt fence, etc. to identifying areas where land disturbing activities will occur and areas that will be left undisturbed. Minimize the amount of soil exposed during Construction activity according to CGP Part 4.1.2.

Comply with CGP Part 4.3, requirements for dewatering for trenches and excavations.

The SWPPP must identify specific areas where potential erosion, sedimentation, or pollution may occur. The potential for wind erosion must be addressed. The potential for erosion at drainage structures must be addressed.

Describe methods and time limits, to initiate temporary or permanent soil stabilization. For areas with mean annual precipitation of:

a. 40 inches or less, initiate stabilization as soon as practicable and within 14 days; or
b. Greater than 40 inches, initiate stabilization as soon as practicable and within seven days.

Within seven days of initiating final stabilization, either complete final stabilization or continue maintenance of work until final stabilization is complete.

Include in the "Stabilize Soils" section of the SWPPP, a description of how you will minimize the amount of disturbed and unstabilized ground in the fall season. Identify anticipated dates of fall freeze-up and spring thaw. Describe how you will stabilize areas when it is close to or past the seasonal time of snow cover or frozen conditions, and before the first seasonal thaw. Include a plan for final stabilization.

Plans for Active Treatment Systems must be submitted to DEC for review at least 14 days prior to their use and the Operator of the ATS identified in the SWPPP. Any use of treatment chemicals must be identified on the NOI.

The SWPPP must provide designated areas for equipment and wheel washing, equipment fueling and maintenance, chemical storage, staging or material storage, waste or disposal sites, concrete washouts, paint and stucco washouts, and sanitary toilets. These activities must be done in designated areas that are located, to the extent practicable, away from drain inlets, conveyance channels, and waters of the US. No discharges are allowed from concrete washout, paint and stucco washout; or from release oils, curing compounds, fuels, oils, soaps, and solvents. Equipment and wheel washing water that doesn't contain detergent may be discharged on-site if it is treated before discharge.

Design temporary BMPs for a 2 year 24 hour precipitation amount. Describe BMPs in the SWPPP and in SWPPP Amendments, including source controls, sediment controls, discharge points, and temporary and permanent stabilization measures. Describe the design, placement, installation, and maintenance of each BMP, using words, and drawings as appropriate. Describe the design capacity of sediment basins (including sediment ponds and traps). Provide a citation to the BMP Manual or publication used as a source for the BMP, including the title of the BMP Manual or publication, the author (individual or agency), and date of publication. If no published source was used to select or design a BMP, then the SWPPP or SWPPP amendment must state that "No BMP manual or publication was used for this design."

Describe the sequence and timing of activities that disturb soils and of BMP implementation and removal. Phase earth disturbing activities to minimize unstabilized areas, and to achieve temporary or final stabilization quickly. Whenever practicable incorporate final stabilization work into excavation, embankment, and grading activities.

Identify the inspection frequency in the SWPPP:

- For areas where the mean annual precipitation is 15 inches or less, inspect at least once every 14 days during construction and within 24 hours of the end of a storm event that resulted in a discharge.
- For areas where the mean annual precipitation is between 15 to 40 inches, inspect once every seven days.
- For areas where the mean annual precipitation is 40 inches or greater, inspect twice every seven days.

Linear Project Inspections, described in CGP Part 6.5, are not applicable to this project.

The SWPPP must cite and incorporate applicable requirements of the Project permits, environmental commitments, COE permit, and commitments related to historic preservation. Make additional consultations or obtain permits as necessary for Contractor specific activities which were not included in the Department's permitting and consultation.

The SWPPP is a dynamic document. Keep the SWPPP current by noting installation, modification, and removal of BMPs, and by using amendments, SWPPP amendment logs, Inspection Reports, corrective action logs, records of land disturbance and stabilization, and any other records necessary to document storm water pollution prevention activities and to satisfy the requirements of the Consent Decree, CGP and this specification. See Subsection 641-3.03 for more information.

4. Recording Personnel and Contact Information in the SWPPP.

Identify the SWPPP Manager as the Storm Water Lead and Storm Water Inspector positions in the SWPPP. Document the SWPPP Manager's responsibilities in Section 2.0 Storm Water Contacts, of the SWPPP template and:

a. Identify that the SWPPP Manager does not have authority to sign inspection reports (unless the SWPPP Manager is also the designated project Superintendent).

b. Identify that the SWPPP Manager cannot prepare the SWPPP unless the SWPPP Manager meets the Contract requirements for the SWPPP Preparer.

Include in the SWPPP, Records of the AK-CESCL cards or certificates for the Superintendent and SWPPP Manager, and for any acting Superintendent and acting SWPPP Managers. If the Superintendent or SWPPP Manager is replaced permanently or temporarily, by an acting Superintendent or acting SWPPP Manager, record in the SWPPP (use Form 25D-127) the names of the replacement personnel, the date of the replacement. For temporary personnel record their beginning and ending dates.

Provide 24 hour contact information for the Superintendent and SWPPP Manager. The Superintendent and SWPPP Manager must have 24 hour contact information for all Subcontractor SWPPP Coordinators and Utility SWPPP Coordinators.

Include in the SWPPP, Records of the AK-CESCL cards or certificates of ATS operators. Record the names of ATS operators and their beginning and ending dates, on Form 25D-127.

The Department will provide Records of AK-CESCL cards or certificates for the Project Engineer, Stormwater Inspectors, and Monitoring Person (if applicable), and names and dates they are acting in that position. Include the Department's Records in the SWPPP Appendix. Include the department's Storm Water Inspector and Storm Water Monitoring Person (if applicable) in section 2.0 of the SWPPP.

641-2.02 HAZARDOUS MATERIAL CONTROL PLAN (HMCP) REQUIREMENTS.

Prepare the HMCP for prevention of pollution from storage, use, containment, cleanup, and disposal of all hazardous material, including petroleum products related to construction activities and equipment. Include the HMCP as an appendix to the SWPPP. Compile Material Safety Data Sheets in one location and reference that location in the HMCP.

Designate a Contractor's Spill Response Field Representative with 24 hour contact information. Designate a Subcontractor Spill Response Coordinator for each subcontractor. The Superintendent and Contractor's Spill Response Field Representative must have 24 hour contact information for each Subcontractor Spill Response Coordinator and the Utility Spill Response Coordinator.

List and give the location and estimated quantities of hazardous materials (Including materials or substances listed in 40 CFR 117 and 302, and petroleum products) to be used or stored on the Project. Hazardous materials must be stored in covered storage areas. Include secondary containment for all hazardous material storage areas.

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

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

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

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

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

641-2.03 SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN (SPCC Plan) REQUIREMENTS.

Prepare and implement an SPCC Plan when required by 40 CFR 112; when both of the following conditions are present on the Project:

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

Reference the SPCC Plan in the HMCP and SWPPP.

641-2.04 RESPONSIBILITY AND AUTHORITY OF THE SUPERINTENDENT AND SWPPP MANAGER.

The Superintendent is responsible for the overall operation of the Project and all Contractor furnished sites and facilities directly related to the Project. The Superintendent shall sign and certify the SWPPP, Inspection Reports, and other reports required by the CGP, except the NOI and NOT. The Superintendent may not delegate the task or responsibility of signing and certifying the SWPPP submitted under Subsection 641-1.03.1, Inspection Reports, and other reports required by the CGP.

The Superintendent may assign certain duties to the SWPPP Manager those duties may include:

a. Ensuring Contractor's and subcontractor's compliance with the SWPPP and CGP;
b. Ensuring the control of erosion, sedimentation, or discharge of pollutants;
c. Directing and overseeing installation, maintenance, and removal of BMPs;
d. Performing Inspections; and
e. Updating the SWPPP including adding amendments and forms.

When Bid Item 641(7) is part of the Contract, the SWPPP Manager must be available at all times to administer SWPPP requirements, and be physically present within the Project Zone or the project office, for at least eight hours per day when construction activities are occurring.

The Superintendent and SWPPP Manager shall be knowledgeable in the requirements of this Section 641, the SWPPP, CGP, BMPs, HMCP, SPCC Plan, environmental permits, environmental commitments, and historic preservation commitments.

The Superintendent and SWPPP Manager shall have the Contractor's complete authority and be responsible for suspending construction activities that do not conform to the SWPPP or CGP.

641-2.05 MATERIALS.

Use materials suitable to withstand hydraulic, wind, and soil forces, and to control erosion and trap sediments according to the requirements of the CGP and the Specifications.

Use the temporary seed mixture specified by special provision, or use annual rye grass if no temporary seed mix is specified.

Use soil stabilization material as specified in Section 727.

Use silt fences as specified in Section 729.

Use straw that is certified as free of noxious weed by the United States Department of Agriculture, Natural Resources Conservation Service, Local Soil, and Water Conservative District. Alaska Weed Free Forage Certification Program must be used when available. Hay may not be substituted for straw.

Use Oregon Scientific RGR126 wireless rain gauge with temperature, or Taylor 2751 Digital Wireless Rain Gauge with Thermometer, or approved equivalent.

641-2.06 CONTRACTOR REQUIREMENTS.

The Contractor must be familiar with the requirements of the CGP and Consent Decree because Contractor's employees will be conducting duties that relate to compliance with the CGP and the Consent Decree. A copy of the Consent Decree is available on the Department's Statewide Environmental Office web page.

641-3.01 CONSTRUCTION REQUIREMENTS.

Comply with the SWPPP and the requirements of the CGP.

1. Before Construction Activity may Begin.

   The following actions must be completed before Construction Activity begins:
   a. The SWPPP Preparer must visit the Project, the visit must be documented in the SWPPP, and the SWPPP must be developed (or amended) with findings from the visit;
   b. The SWPPP must be approved by the Engineer;
   c. The Contractor must be authorized to begin by the Engineer;
   d. The Project eNOIs for the Department and for the Contractor, as well as any other eNOIs if there are additional operators, must be listed as Active Status on the ADEC website;
   e. The Department approved SWPPP must be submitted to ADEC and Local Government (when required); and
   f. The Contractor has transmitted to the Engineer an electronic copy of the approved SWPPP.

   You may begin Winter Construction activity according to CGP Part 4.10.3, provided actions a through c above is completed before winter construction activity begins.

   Post notices containing the following information:
   a. Copy of all eNOIs related to this project;
   b. Name and 24 hour phone number of SWPPP Manager; and
   c. Location of the SWPPP.

   Post notices on the outside wall of the Contractor's project office, and near the main entrances of the construction project. Protect postings from the weather. Locate postings so the public can read them without obstructing construction activities or the traveling public (for example, at an existing pullout). Do not use retroreflective signs for the SWPPP posting. Do not locate SWPPP signs in locations where the signs may be confused with traffic control signs or devices. Update the notices if the listed information changes.

   Install an outdoor rain gauge in per manufacturer's guidance in a readily accessible location on the Project.

   Delineate the site for both land disturbing activities and areas that will be left undisturbed. Install sediment controls and other BMPs that must be placed prior to the initiation of Construction Activity.

2. During Construction.

Before subcontractors or utility companies begin soil disturbing activities, provide to them copies of applicable portions of the SWPPP, and require them to sign a SWPPP Subcontractor Certification, Form 25D-105. Include SWPPP Subcontractor Certifications as an appendix to the SWPPP. Ensure subcontractors and utility companies understand and comply with the SWPPP and the CGP. Inform subcontractors and utility companies of SWPPP amendments that affect them in a timely manner. Coordinate with subcontractors and utility companies doing work in the Project Zone so BMPs, including temporary and permanent stabilization are installed, maintained, and protected from damage.

Provide on-going training to employees and subcontractors, on control measures at the site and applicable storm water pollution prevention procedures. Training must be specific to the installation, maintenance, protection, and removal of control measures. Training must be given at a frequency that will be adequate to ensure proper implementation and protection of control measures, and no less frequently than once a month during construction activity. Document on the SWPPP Training Log. Form 25D-125, the dates, and attendees to these trainings. Include the SWPPP Training Log as an appendix to the SWPPP.

Notify the Engineer immediately if the actions of any utility company or subcontractor do not comply with the SWPPP and the CGP.

Comply with Subsection 107-1.11 Protection and Restoration of Property and Landscape. Concrete washout must be fully contained.

Fuel the equipment in designated areas. Place absorbent pads or other suitable containment under fill ports while fueling, under equipment during maintenance or repairs, and under leaky equipment.

Comply with requirements of the HMCP and SPCC Plan, and all local, state, and federal regulations that pertain to the handling, storage, containment, cleanup, and disposal of petroleum products or other hazardous materials.

Keep the SWPPP and HMCP current (refer to Subsection 641-2.01.3, SWPPP Considerations and Contents).

3. Pollutant and Hazardous Materials Reporting Requirements.

If there has been an incident of non-compliance with the CGP that may endanger health or the environment, immediately report the incident to ADEC according to the CGP, Appendix A, Part 3.0. Notify the Engineer immediately and to the extent possible coordinate reports to ADEC with the Engineer.

The report must include:
a. A description of the noncompliance and its causes;
b. The exact dates and times of noncompliance;
c. If not yet corrected the anticipated time the project will be brought back into compliance; and
d. The corrective action taken or planned to reduce, eliminate and prevent reoccurrence.

If there has been an incident of non-compliance with COE Permits, then notify the Engineer immediately of the non-compliance.

Report spills of petroleum products or other hazardous materials to the Engineer and other agencies as required by law. Use the HMCP and SPCC Plan (if available) for contact information to report spills to regulatory agencies.

4. Corrective Action and Maintenance of BMPs.

Implement maintenance as required by the CGP, SWPPP, and manufacturer's specifications, whichever is more restrictive.

Implement corrective action:
a. If an incident of non-compliance with the SWPPP or CGP is identified;
b. If an Inspection or the Engineer identifies the SWPPP or any part of the SWPPP is ineffective in preventing erosion, sedimentation or the discharge of pollutants;
c. If a required BMP was not installed according to the SWPPP schedule or phasing, or was installed incorrectly, or was not installed according to the CGP Part 4.0;
d. If a BMP is not operating as intended, has not been maintained in an effective operation condition, or is unable to effectively perform the intended function;
e. If a prohibited discharge of pollutants, as specified in CGP Part 4.6, is occurring or will occur; or
f. If there is accumulation of sediment or other pollutants, that is in or near any storm water conveyance channels, or that may enter a discharge point or storm sewer system. If there is accumulation of sediment or other pollutants that is being tracked outside the project zone.

Implement corrective actions so that they comply with the following time requirements:
a. For conditions that are easily remedied (i.e. removal of tracked sediment, maintenance of control measure, or spill clean-up), initiate corrective action within 24 hours and complete as soon as possible;
b. For all other conditions, meet both requirements:
   (1) Corrective action is completed in time to protect water quality; and
   (2) Corrective action is completed no later than the Complete-by-Date that was entered in an Inspection Report (see Subsection 641-3.03.2 for more information).

If a corrective action is not implemented within the time requirements of this section, document the situation in the SWPPP, notify the Engineer, and implement corrective action as soon as possible.

If a corrective action could affect a subcontractor, notify the subcontractor within three days of taking the corrective action. Require in your written subcontract, that subcontractors must notify the Contractor within 24 hours of becoming aware of a condition that requires a corrective action.

5. Stabilization.

Stabilization may be accomplished using temporary or permanent measures. Initiate stabilization of disturbed soils, erodible stockpiles, disposal sites, and of erodible aggregate layers so that all of the following conditions are satisfied:
a. As soon as practicable;
b. As soon as necessary to avoid erosion, sedimentation, or the discharge of pollutants; and
c. As identified in the SWPPP.

Land may be disturbed and stabilized multiple times during a project. Coordinate work to minimize the amount of disturbed soil at any one time. Do not disturb more soil than you can stabilize with the resources available.

Temporarily stabilize from wind and water erosion portions of disturbed soils, portions of stockpiles, and portions of disposal sites, that are not in active construction. Temporary stabilization measures may require a combination of measures including but not limited to vegetative cover, mulch, stabilizing emulsions, blankets, mats, soil binders, non-erodible cover, dust palliatives, or other approved methods.

When temporary or permanent seeding is required, provide a working hydro seeding equipment located within 100 miles of the project by road; with 1,000 gallon or more tank capacity, paddle agitation of tank, and the capability to reach the seed areas with an uniform mixture of water, seed, mulch and tackifier. If the project is located in an isolated community, the hydro-seeder must be located at the project.

Before applying temporary or permanent seeding, prepare the surface to be seeded to reduce erosion potential and to facilitate germination and growth of vegetative cover. Apply seed and maintain seeded areas. Reseed areas where growth of temporary vegetative cover is inadequate to stabilize disturbed ground.

Apply permanent seed according to Sections 618 and 724, within the time periods allowed by the CGP and the contract, at locations where seeding is indicated on the plans and after land-disturbing activity is permanently ceased.

When installing a culvert or other drainage structure where stream bypass is not used, install temporary or permanent stabilization concurrently or immediately after placing the culvert or drainage structure in a manner that complies with the SWPPP, applicable project permits and prevents discharge of pollutants. Install temporary and permanent stabilization:

a. At the culvert or drainage structure inlet and outlet; and
b. In the areas upstream and downstream, that may be disturbed by the process of installing the culvert, culvert end walls, culvert end sections, or drainage structure.

Before deactivating a stream bypass or stream diversion used for construction of a bridge, culvert, or drainage structure, install permanent stabilization:

a. At the inlet and outlet of the culvert, drainage structure, or bridge;
b. In the area upstream and downstream of the culvert, drainage structure, or bridge, that is disturbed during installation or construction of the culvert, drainage structure, or bridge; and
c. Under the bridge.

Within seven days of initiating final stabilization, either complete final stabilization or continue maintenance of work until final stabilization is complete.

6. Ending CGP Coverage and BMP Maintenance.

The Engineer will determine the date that all the following conditions for ending CGP coverage have been met within the Project Zone:

a. Land disturbing activities have ceased;
b. Final Stabilization has been achieved (including at Department furnished material sources, disposal sites, staging areas, equipment areas, etc.); and
c. Temporary BMPs have been removed.

After the Engineer has determined the conditions for ending CGP coverage have been met, the Department will:

a. Send written notice to the Contractor with the date that the conditions were met;
b. Submit an eNOT to ADEC; and
c. Provide a copy of the eNOT and ADEC's acknowledgement letter to the Contractor.

The Contractor is responsible for ending permit coverage within the Project Zone, by submitting an eNOT to ADEC within 30 days of meeting the conditions for ending CGP coverage. The Contractor is responsible for BMP maintenance and SWPPP updates until permit coverage is ended.

If the Contractor's CGP eNOI acreage includes Support Activities and any other areas where the Department is not an Operator, the Contractor may not be able to file an eNOT at the same time as the Department. In this case, the Contractor must amend the SWPPP and separate SWPPP2(s), to indicate the Department's CGP coverage has ended, and the Department is no longer an Operator within the Project Zone.

The Contractor must indicate in the SWPPP the areas that have reached Final Stabilization, and the dates land disturbing activities ended and Final Stabilization was achieved. The Contractor must submit an eNOT to ADEC, and insert copies of the Department's and the Contractor's eNOTs with ADEC's acknowledgement letters in the appendix of the SWPPP.

The Contractor must submit a copy of each signed eNOT and ADEC's acknowledgement letter to the Department within three days of filing the eNOT or receiving a written response.

The Contractor is responsible for coordinating local government inspections of work and ending permit coverage with local government. See Subsection 641-1.03.5 for more information.

7. Transmit final SWPPP.

   Transmit one copy of the final SWPPP, including all amendments, appendices, and maps, to the Engineer; when the project eNOTs are filed, or within 30 days of the Department's eNOT being filed, whichever is sooner. Transmittal must be by both electronic and hard copy.

641-3.02 SWPPP DOCUMENTS, LOCATION ON-SITE, AVAILABILITY, AND RECORD RETENTION.

The SWPPP and related documents maintained by the Contractor are the Record for demonstrating compliance with the CGP and the Consent Decree. Copies of SWPPP documents transmitted to the Engineer under the requirements of this specification are informational and do not relieve the Contractor's responsibility to maintain complete records as required by the CGP and this specification.

Keep the SWPPP, HMCP, and SPCC Plan at the on-site project office. If there is not an on-site project office, keep the documents at a locally available location that meets CGP requirements and is approved by the Engineer. Records may be moved to another office for record retention after the eNOTs are filed. Records may be moved to another office during winter shutdown. Update on-site postings if records are relocated during winter shutdown. Provide the Department with copies of all Records.

Retain Records and a copy of the SWPPP, for at least three years after the date of eNOT. If EPA or ADEC inspects the project, issues a Notice of Violation (NOV), or begins investigation for a potential NOV before the retention period expires, retain the SWPPP and all Records related to the SWPPP and CGP until at least three years after EPA and/or ADEC has determined all issues related to the investigation are settled.

The SWPPP and related documents must be made available for review and copy, to the Department and other regulatory agencies that request them. See CGP Parts 5.10, 6.6 and 9.4.

641-3.03 SWPPP INSPECTIONS, AMENDMENTS, REPORTS, AND LOGS.

Perform Inspections, prepare Inspection Reports, and prepare SWPPP Amendments in compliance with the SWPPP and the CGP. Update SWPPP Corrective Action Log, SWPPP Amendment Log, SWPPP Grading and Stabilization Activities Log, and SWPPP Daily Record of Rainfall forms. For active projects, update the Records daily.

1. Inspection during Construction.

   Conduct Inspections according to the schedule and requirements of the SWPPP and CGP.

   Inspections required by the CGP and SWPPP must be performed by the Contractor's SWPPP Manager and the Department's Stormwater Inspector jointly, unless impracticable. For this paragraph, "impracticable" means when both inspectors must fly to a remote area in the winter or when one inspector is sick or unable to travel to the site due to weather. When this is the case, the Operator who conducts the Inspection must provide a copy of the Inspection Report to the other Operator within three days of the Inspection date and document the date of the report transmittal.

2. Inspection Reports.

   Use only the DOT&PF SWPPP Construction Site Inspection Report, Form 25D-100 to record Inspections. Changes or revisions to Form 25D-100 are not permitted; except for adding or deleting data fields that list: Location of Discharge Points and Site Specific BMPs. Complete all fields included on the Inspection Report form; do not leave any field blank.

Unless otherwise directed by the Engineer, insert a Complete-by-Date for each corrective action listed that complies with:
a. In time to protect water quality;
b. less than seven calendar days after the date the inspection was performed; and
c. before the next scheduled inspection.

Provide a copy of the completed, unsigned Inspection Report to the Engineer by noon on the day following the inspection.

The Superintendent must review, correct errors, and sign and certify the Inspection Report, within three days of the date of Inspection. The Engineer may coordinate with the Superintendent to review and correct any errors or omissions before the Superintendent signs the report. Corrections are limited to adding missing information or correcting entries to match field notes and conditions present at the time the Inspection was performed. Deliver the signed and certified Inspection Report to the Engineer on the same day the Superintendent signs it.

The Engineer will sign and certify the Inspection Report and will return the original to the Contractor within three working days.

The Engineer may make corrections after the Superintendent has signed and certified the Inspection Report. The Engineer will initial and date each correction. If the Engineer makes corrections, the Superintendent must recertify the Inspection Report by entering a new signature and date in the white space below the original signature and date lines. Send a copy of the recertified Inspection Report to the Engineer on the day it is recertified.

If subsequent corrections to the certified Inspection Report are needed, document the corrections in an addendum that addresses only the omitted or erroneous portions of the original Inspection Report. The Superintendent and the Engineer must both sign and certify the addendum.

3. Inspection before Seasonal Suspension of Work.

Conduct an Inspection before seasonal suspension of work to confirm BMPs are installed and functioning according to the requirements of the SWPPP and CGP.

4. Reduced Inspection Frequencies.

Conduct Inspections according to the inspection schedule indicated in the approved SWPPP. Any change in inspection frequency must be approved by the Engineer, and beginning and ending dates documented as an amendment to the SWPPP.

Inspection frequency may be reduced to at least one Inspection every 30 days if approved by the Engineer and the entire site is temporarily stabilized.

When work is suspended due to freezing conditions, the Engineer may suspend inspection requirements after fourteen days of freezing conditions if:
a. Soil disturbing activities are suspended; and
b. Soil stabilizing activities are suspended.

Inspections must resume according to the normal inspection schedule identified in the SWPPP, at least 21 days before anticipated spring thaw.

The Engineer may waive requirements for updating the Grading and Stabilization Activities Log and Daily Record of Rainfall during seasonal suspension of work. If so, resume collecting and recording weather data on the Daily Record of Rainfall form one month before thawing conditions are expected to result in runoff. Resume recording land disturbance and stabilization activities on the Grading and Stabilization Activities Log when Construction Activity resumes.

5. Stabilization before Seasonal Thaw.

   Construction Activities within the Project Zone must be stabilized with appropriate BMPs prior to seasonal thaw. Seasonal thaw is the annual (first) recurrence of snow and ice melting after a prolonged period of freezing conditions.

6. Inspection before Project Completion.

   Conduct Inspection to ensure Final Stabilization is complete throughout the Project, and temporary BMPs that are required to be removed are removed. Temporary BMPs that are biodegradable and are specifically designed and installed with the intent of remaining in place until they degrade, may remain in place after project completion.

7. Items and Areas to Inspect.

   Conduct Inspections of the areas required by the CGP and SWPPP.

8. SWPPP Amendments and SWPPP Amendment Log.

   The Superintendent and the SWPPP Manager are the only persons authorized to amend the SWPPP and update the SWPPP Amendment Log, Form 25D-114. The Superintendent or the SWPPP Manager must sign and date amendments to the SWPPP and updates to the SWPPP Amendment Log.

   SWPPP Amendments must be approved by the Engineer.

   Amendments must occur:
   a. Whenever there is a change in design, construction operation, or maintenance at the construction site that has or could cause erosion, sedimentation or the discharge of pollutants that has not been previously addressed in the SWPPP;
   b. If an Inspection identifies that any portion of the SWPPP is ineffective in preventing erosion, sedimentation, or the discharge of pollutants;
   c. Whenever an Inspection identifies a problem that requires additional or modified BMPs
   d. Whenever a BMP is modified during construction or a BMP not shown in the original SWPPP is added;
   e. If the Inspection frequency is modified (note beginning and ending dates); or
   f. When there is a change in personnel who are named in the SWPPP, according to Subsection 641-2.01.4.

   Do not record removal of BMPs as amendments to the SWPPP. See Subsection 641-3.03.9 for documenting removal of BMPs.

   Amend the SWPPP narrative as soon as practicable after any change or modification, but in no case, later than seven days following identification of the need for an amendment. Every SWPPP Amendment must be signed and dated. Cross-reference the amendment number with the Corrective Action Log or SWPPP page number, as applicable. When a BMP is modified or added, describe the BMP according to Subsection 641-2.01.3.

   Keep the SWPPP Amendment Log current. Prior to performing each scheduled Inspection, submit to the Engineer a copy of the pages of the Amendment Log that contain new entries since the last submittal. Include copies of any documents amending the SWPPP.

   Keep the SWPPP Amendment Log as an appendix to the SWPPP.

9. Site Maps.

   Document the installation, routine maintenance, and removal of BMPs by making notes on the SWPPP Site Maps. Include the date and the recording person's initials by these notes. Identify areas where Construction Activities begin, areas where Construction Activities temporarily or permanently cease, and areas that are temporarily or permanently stabilized.

10. Corrective Action Log.

    The Superintendent and SWPPP Manager are the only persons authorized to make entries on the SWPPP Corrective Action Log, Form 25D-112. Document the need for corrective action within 24 hours of either:
    a. Identification during an inspection; or
    b. Discovery by the Department's or Contractor's staff, a subcontractor, or a regulatory agency inspector.

    Modification or replacement of a BMP, installation of a new BMP not shown in the original SWPPP, or overdue maintenance (after sediment accumulated in sediment basins (including sediment traps and ponds) exceeds 50% of design capacity; or after sediment accumulates to more than half the above ground height on silt fences, check dams, or berms) is a corrective action and must be documented on the Corrective Action Log. Do not record removal of BMPs on the Corrective Action Log.

    Within 24 hours of discovery, update the Corrective Action Log with the date of discovery and proposed corrective action. If discovered during an inspection, update log with inspection date and proposed corrective actions noted on the Inspection Report.

    After the corrective action has been accomplished, note in the Corrective Action Log the action taken and if a SWPPP amendment was needed. Date and initial the entry.

    Keep the Corrective Action Log current and submit a copy to the Engineer prior to performing each scheduled SWPPP Inspection.

    Keep the Corrective Action Log as an appendix to the SWPPP.

11. Grading and Stabilization Activities Log.

    The Superintendent and SWPPP Manager are the only persons authorized to date and initial entries on the SWPPP Grading and Stabilization Activities Log, Form 25D-110. Use the SWPPP Grading and Stabilization Activities Log, to record land disturbance and stabilization activities.

    Keep the Grading and Stabilization Activities Log current and submit a copy to the Engineer prior to performing each scheduled SWPPP Inspection. Keep the Grading and Stabilization Activities Log organized and completed to demonstrate compliance with the CGP Part 4.4.

    Keep the Grading and Stabilization Activities Log as an appendix to the SWPPP.

12. Daily Record of Rainfall.

    Use SWPPP Daily Record of Rainfall, Form 25D-115, to record weather conditions at the Project. Update the form daily and include the initials of the person recording each day's entry. Submit a copy to the Engineer prior to performing each scheduled Inspection. Keep the Daily Record of Rainfall as an appendix to the SWPPP.

641-3.04 FAILURE TO PERFORM WORK.

The Engineer has authority to suspend work and withhold monies, for an incident of non-compliance with the CGP, Consent Decree, or SWPPP, that may endanger health or the environment or for failure to perform work related to this Section 641. If the suspension is to protect workers, the public, or the environment from imminent harm, the Engineer may orally order the suspension of work. Following an oral order of suspension, the Engineer will promptly give written notice of suspension. In other circumstances, the Engineer will give the Contractor written notice of suspension before suspension of work. A notice of suspension will state the defects or reasons for a suspension, the corrective actions required to stop suspension, and the time allowed to complete corrective actions.

If the Contractor fails to take the corrective action within the specified time, the Engineer may:

a. Suspend the work until corrective action is completed;
b. Withhold monies due the Contractor until corrective action is completed;
c. Assess damages or equitable adjustments against the Contract Amount; and
d. Employ others to perform the corrective action and deduct the cost from the Contract amount.

Reasons for the Engineer to take action under this section include, but are not limited to, the Contractor's failure to:

a. Obtain appropriate permits before Construction Activities occur;
b. Perform SWPPP Administration;
c. Perform timely Inspections;
d. Update the SWPPP;
e. Transmit updated SWPPP, Inspection Reports, and other updated SWPPP forms to the Engineer;
f. Maintain effective BMPs to control erosion, sedimentation, and pollution in accordance with the SWPPP, the CGP, and applicable local, state, and federal requirements;
g. Perform duties according to the requirements of this Section 641; or
h. Meet requirements of the CGP, SWPPP, or other permits, laws, and regulations related to erosion, sediment, or pollution control.

No additional Contract time or additional compensation will be allowed due to delays caused by the Engineer's suspension of work under this subsection.

641-3.05 ACCESS TO WORK.

The Project, including any related off-site areas or support activities, must be made available for inspection, or sampling and monitoring, by the Department and other regulatory agencies. See CGP Part 6.6.

641-4.01 METHOD OF MEASUREMENT.

Section 109 and as follows:

Item 641(1), 641(3) and 641(7), are lump sum.

Items 641(2), 641(4) and 641(5), will be measured on a contingent sum basis as specified by the Directive authorizing the work.

Item 641(6) will be measured on a contingent sum basis with withholding determined by the Department.

TABLE 641-1 BMP VALUES - (Reserved)

Liquidated Damages assessed according to Table 641-2 are not an adjustment to the Contract amount. These damages charges are related to Contract performance but are billed by the Department independent of the Contract amount. An amount equal to the Liquidated Damages may be withheld for unsatisfactory performance, from payment due under the Contract, until the Contractor remits payment for billed Liquidated Damages.

TABLE 641-2 Version B
EROSION, SEDIMENT, AND POLLUTION CONTROL – LIQUIDATED DAMAGES

Code	Specification Subsection Number and Description	Deductable Dollars	Cumulative Deductable Dollars
A	641-1.04 Failure to have a qualified (AK-CESCL or equivalent) Superintendent or SWPPP Manager	Calculated in Code B or F	
B	Failure to meet SWPPP requirements of: (1) 641-2.01.1 Name of SWPPP Preparer and Date of Pre-Construction Inspection (2) Not Applicable (3) 641-3.03.8 Sign and Date SWPPP amendments with qualified person. 641-2.01.4 SWPPP Include approving person's name and AK-CESCL expiration date. (4) 641-3.02 Records maintained at project and made available for review	$750 per omission	
C	641-2.01.3 and 641-303.8 Failure to either reference a BMP manual or publication, or state that no BMP manual or publication was used	$250 per omission	
D	641-3.03.5 Failure to stabilize a Project prior to Seasonal Thaw	$5,000 per Project per year	
E	641-2.01.1 Failure to conduct pre-construction inspections before Construction Activities	$2,000 per Project	
F	641-3.03. Failure to conduct and record CGP Inspections 641-3.03.1 Personnel conducting Inspections and Frequency 641-3.03.2 Inspection Reports, use Form 25D-100, completed with all required information according to the Consent Decree paragraph 7.c, parts (1) through (11)	$750 per Inspection	
G	641-3.01.4 Failure to timely accomplish BMP maintenance and/or repairs, In effect until BMP maintenance and/or repairs is completed.	$500 per Project per day	Not to exceed $250,000 per year for all projects
H	641-3.01.3 Failure to provide to the Engineer and ADEC a timely oral endangerment report of violations or for a deficient oral endangerment report	$750 for the first day the report is late or deficient	Additional $750 for every 14 day period without the required information
I	641-3.01.3 Failure to provide to the Engineer and ADEC a timely written endangerment report of violations or for a deficient written endangerment report	$750 for the first day the report is late or deficient	Additional $750 for every 14 day period without the required information
J	641-3.04 Failure to comply with the most restrictive requirements of the CGP, approved SWPPP, or Section 641, except as listed above	$750 per occurrence for the first day of noncompliance	Additional $750 for every day the deficiency remains uncorrected

641-5.01 BASIS OF PAYMENT.

See Subsection 641-3.04 Failure to Perform Work, for additional work and payment requirements.

Item 641(1) Erosion, Sediment, and Pollution Control Administration. At the Contract lump sum price for administration of all work under this Section. Includes, but is not limited to, SWPPP and HMCP and SPCC Plan preparation, agency fees for SWPPP reviews, SWPPP amendments, pre-construction Inspections, Inspections, monitoring, reporting, and Record keeping or copying Records related to the SWPPP and required by the CGP, and Record retention.

Item 641(2) Temporary Erosion, Sediment, and Pollution Control. At the contingent sum prices specified for all labor, supervision, material, equipment, and incidentals to install, maintain, remove, and dispose of approved temporary erosion, sedimentation, and pollution control BMPs required to implement the SWPPP and SPCC Plan.

Item 641(3) Temporary Erosion, Sediment, and Pollution Control. At the Contract lump sum price for all labor, supervision, material, equipment, and incidentals to install, maintain, remove, and dispose of temporary erosion, sedimentation, and pollution control BMPs identified in the SWPPP and SPCC Plan.

Item 641(4) Temporary Erosion Sediment and Pollution Control Additives. At the contingent sum prices specified in the Directive to authorize the work, for all labor, supervision, materials, equipment, and incidentals for extra, additional, or unanticipated work, to install, maintain, remove and dispose of temporary erosion, sedimentation, and pollution control BMPs. All additional Erosion, Sediment, and Pollution Control Administration necessary due to this item will not be paid for separately but will be subsidiary to other bid items.

Item 641(5) Temporary Erosion Sediment and Pollution Control by Directive. At the contingent sum prices specified in the Directive using time and materials to authorize the work, for all labor, supervision, materials, equipment, and incidentals to install, maintain, remove and dispose of temporary erosion, sedimentation, and pollution control BMPs. Prices for this item will by time and materials according to Subsection 109-1.05, or by mutual agreement between the Engineer and Contractor. All additional Erosion, Sediment, and Pollution Control Administration necessary due to this item will not be paid for separately but will be subsidiary to other bid items.

Item 641(6) Withholding. The Engineer may withhold an amount equal to Liquidated Damages, assessed according to Section 641, from payment due the Contractor. Liquidated Damages for violations of the Contract, CWA, CGP, or Consent Decree are determined by the Engineer according to Table 641-2. The Engineer may withhold payment due the Contractors until the Contractor pays the Liquidated Damages to the Department.

The Department will not release performance bonds until Liquidated Damages assessed according to Section 641 are paid to the Department, and all requirements according to Subsection 103-1.05 are satisfied.

Item 641(7) SWPPP Manager. At the Contract lump sum price for a SWPPP Manager that conforms to this specification. When Item 641(7) appears in the Bid Schedule, the SWPPP Manager must be a different person than the superintendent, and must be physically present during construction activity with duties and authority as described in Subsection 641-2.04. When Item 641(7) does not appear in the Bid Schedule, the SWPPP Manager is subsidiary to Item 641(1).

Subsidiary Items. Temporary erosion, sediment, and pollution control measures that are required outside the Project Zone are subsidiary. Work required by the HMCP and SPCC Plan including hazardous material storage, containment, removal, cleanup and disposal, are subsidiary to Item 641(1) Erosion, Sediment and Pollution Control Administration.

Work under other pay items. Work that is paid for directly or indirectly under other pay items will not be measured and paid for under Section 641.

This work includes but is not limited to:

a. Dewatering;
b. Shoring;
c. Bailing;
d. Permanent seeding;
e. Installation and removal of temporary work pads;
f. Temporary accesses;
g. Temporary drainage pipes and structures;
h. Diversion channels;
i. Settling impoundment; and
j. Filtration.

Permanent erosion, sediment, and pollution control measures will be measured and paid for under other Contract items, when shown on the bid schedule.

Work at the Contractor's Expense. Temporary erosion, sediment, and pollution control measures that are required due to carelessness, negligence, or failure to install temporary or permanent controls as scheduled or ordered by the Engineer, or for the Contractor's convenience, are at the Contractor's expense.

Payment will be made under:

Pay Item No.	Pay Item	Pay Unit
641(1)	Erosion, Sediment, and Pollution Control Administration	Lump Sum
641(2)	Temporary Erosion, Sediment, and Pollution Control	Contingent Sum
641(3)	Temporary Erosion, Sediment, and Pollution Control	Lump Sum
641(4)	Temporary Erosion, Sediment, and Pollution Control Additives	Contingent Sum
641(5)	Temporary Erosion, Sediment, and Pollution Control by Directive	Contingent Sum
641(6)	Withholding	Contingent Sum
641(7)	SWPPP Manager	Lump Sum

CR641-041312

SECTION 642

CONSTRUCTION SURVEYING AND MONUMENTS

Special Provisions

642-3.01 GENERAL. Add No. 11:

11. Before work on the project starts, stake and reference the existing centerline on both sides of the roadway alignment. Stake the existing centerline on tangents at 100 ft, and 50 ft intervals on curves from the beginning and ending of super-elevation changes when the roadway is no longer at normal crown. Stake sign locations at proper offset. Stakes shall be a minimum of 1" x 2" x 2'-0" and be offset 4 to 8 ft from the shoulder on both sides of the roadway. Extend lath stakes a minimum of 2 ft above ground. Show the offset distance to centerline and the station from the beginning of the project. Maintain staking until the final roadway striping is completed. Staking accuracy work requires an electronic distance measuring instrument (DMI) be installed in the Contractor's vehicle. Calibrate the DMI to roadway alignments as stationed in the Plans before beginning work. Record the calibration and staking information in the field book.

    Install a reference sign every 500 ft. These reference signs shall meet the following requirements:

    1. mounted with the base a minimum of 5 ft above the shoulder,
    2. located a minimum of 10 ft from the edge of shoulder,
    3. marked with the station from the beginning of the project, in 6 inch high permanent black lettering with a letter proportion height to width ration of 1:0.6 and a stroke width to height ratio of 1:6, on an orange background.

CR6421-090413

Add No. 12:

12. Document the Station at the beginning and ending of existing passing zones before work that will remove or obliterate the existing striping. Measure, as outlined below, sight distance for passing zones after the base course layer or pavement milling has been accepted. Use Table 642-1 to establish Minimum Passing Sight Distance. Move forward alongside the centerline or edge of traveled way in order to spot check and discover locations where the Minimum Passing Sight Distance drops below what is required for 10 MPH over the posted speed limit. Record the sight distance for each station location that falls below the posted speed limit plus 10 MPH. Continue to record the sight distance for each station location until the sight distance drops below what is required for the posted speed limit. Stations observed to exceed the values required for posted speed limit plus 10 MPH are not required to be recorded. If recorded mark them as "Pass" or "+." Mark stations observed to fall below the values required for the posted speed limit as “Fail” or “-.”

    Measure from the roadway edge of traveled way, using a 3.5 ft object height (or “instrument height”) at 100 ft station marks looking ahead to a 3.5 ft target height at the edge of traveled way for opposing traffic. Provide a list of each station result for each direction of travel along the roadway edge of traveled way. Certify and record the results on standard “letter” sized paper and provide a copy to the Engineer at least 14 days before laying out final pavement markings.

The Engineer will forward one copy of the existing and proposed sight distance measurements on the form provided herein, to the Regional Traffic Engineer. Table 642-1 does not automatically ensure passing striping will be provided. The Regional Traffic Engineer's office will take up to 14 days to review and approve pass/no pass striping against operating speeds for the roadway before installation, using Table 642-1 and the Alaska Traffic Manual as a guide. No pass zones shall be at least 500 ft in length. Passing striping shall be no less than 400 ft minimum and long enough to meet the distances in Table 642-1. Establish no passing zones at all at-grade railroad crossings. Passing striping will not extend into a segment of road without minimum sight distance.

TABLE 642-1
PASSING SIGHT DISTANCE

Operating Speed (mph)	Minimum Passing Sight Distance (ft)
25	450
30	500
35	550
40	600
45	700
50	800
55	900
60	1000
65	1100
70	1200

Passing Sight Distance Survey Table.

ROAD NAME: _____

Stationing: From _____ To _____

Surveyor: _____ Date: _____

Project Station	Posted Speed Limit	Direction of Travel	Sight Distance Ahead	Existing Striping: Pass or No-Pass	Engineer's Striping Requirement

Other Notes:

1. _____
2. _____
3. _____
4. _____
5. _____

Accepted By: _____ Date: _____
DOT/PF Project Engineer

CR6422-010114

Standard Modifications

642-3.04 OFFICE ENGINEERING. Delete third sentence and replace with:

Perform the work by, or under the responsible charge of, a person registered in the State of Alaska as a Professional Land Surveyor or a Professional Engineer.

E53-050107

642-4.01 METHOD OF MEASUREMENT. Add the following:

Pay Item 642(16) Passing Sight Distance Measurement. By the number of stations of the project measured separately along centerline, once for each direction, only after the certified and recorded results have been accepted by the Engineer.

642-5.01 BASIS OF PAYMENT. Add the following Pay Item:

Pay Item No.	Pay Item	Pay Unit
642(16)	Passing Sight Distance Measurement	Station

CR6422-010114

SECTION 643

TRAFFIC MAINTENANCE

Special Provisions

643-1.01 DESCRIPTION. Add the following:

Additional work:

- Illuminate construction activities listed in Table 643-3, Night Work Illumination Level, and Area of Coverage, during hours of night work on roads open to the public inside the project limits.

643-1.02 DEFINITIONS. Add the following paragraphs after paragraph titled "Construction Phasing Plan":

Balloon Light: Light surrounding's by a balloon-like enclosure kept inflated by pressurized air or helium, and producing uniform light through 360 horizontal degrees. The top half of the balloon enclosure shall be constructed of an opaque material.

Night Work: Work occurring between sunset and sunrise on all days, except the "No Lighting Required" period shown in Table 643-2, Night Work Lighting Requirements.

TABLE 643-2
NIGHT WORK LIGHTING REQUIREMENTS

Latitude (degrees)	No Lighting Required		Nearby Cities
	Start	End	
< 61	Lighting Required All Year		Everything South of Hope
61	June 11	July 1	Anchorage, Valdez, Girdwood
62	June 2	July 13	Wasilla, Palmer, Glennallen, Talkeetna
63	May 27	July 17	Cantwell, Paxson, McGrath
64	May 22	July 21	Delta Junction, Nome, Tok
65	May 18	July 25	Fairbanks
66	May 14	July 29	Circle
67	May 10	August 2	Coldfoot, Kotzebue
68	May 7	August 6	Galbraith Lake
69	May 3	August 9	Happy Valley
70	April 30	August 12	Deadhorse
71	April 27	August 15	Barrow
72	April 24	August 19	

ES14-031506

643-1.03 TRAFFIC CONTROL PLAN. Replace the last paragraph with the following:

A waiver may be requested, in writing, of regulation 17 AAC 25 regarding oversize and overweight vehicle movements inside the project limits. If the waiver is approved, movements of oversize and overweight vehicles in or near traffic inside the project limits will be done according to the provisions of an approved Traffic Control Plan. Maintain a minimum 12 foot lateral separation between the nonstreet legal vehicles and the motoring public. The Traffic Control Plan shall specify the traffic control devices required for these operations.

Add the following:

Road Closures and Major Traffic Sequencing (events). Submit a written request to the Engineer for review and approval of each proposed event and event date. Allow 7 days for the Engineer to review any proposed event or subsequent changes/corrections. The proposed event date will be no less than 14 days from the date of written approval.

CR6431-010114

643-1.04 WORKSITE SUPERVISOR.

1. Qualifications. Replace with the following:

   Qualifications. The Worksite Traffic Supervisor shall be knowledgeable and experienced regarding the requirements of the ATM and the implementation of those requirements. The Worksite Traffic Supervisor shall be familiar with the Plans, the Specifications, your proposed operations, and certified as one of the following:

   a. Traffic Control Supervisor, American Traffic Safety Services Association (ATSSA)

   b. Work Zone Safety Specialist, International Municipal Signal Association (IMSA)

   Certify according to Form 25D-124 that the Worksite Traffic Supervisor is competent and capable, and has the authority to perform the duties and responsibilities in accordance with this Section.

   Worksite Traffic Supervisors shall maintain current certification and be able to show their certification anytime they are on the project.

CR6432-110410

2. Duties. Add the following:

I. Supervise lighting of Night Work.

ES14-031506

Add No. 3:

3. Authority. The Worksite Traffic Supervisor shall have the Contractor's authority to stop work and implement immediate corrective action to unsafe traffic control, in locations where unsafe traffic control is present.

643-2.01 MATERIALS.

4. Portable Concrete Barriers. Replace with the following:

   Portable Concrete and Steel F Shape Barriers. Use Portable Concrete and Steel F Shape Barriers that conform to the Plans. For each direction of traffic, equip each barrier section with at least two side-mounted retroreflective reflectors or a continuous 4-inch wide horizontal retroreflective stripe mounted 6 inches below the top of the barrier. Place the individual reflectors 2-foot or less from each end and space not more than 10-foot apart. Use yellow reflectors or stripe if you use barriers at centerline. Use white reflectors or stripe if you use barriers on the roadway shoulder.

CR6431-010114

   Add the following:

   Use reflective sheeting that meets AASHTO M 268 Type III, IV or V.

10. Temporary Crash Cushions. Replace with the following:

    Temporary Crash Cushions. Must have FHWA Acceptance letter for National Cooperative Highway Research Program (NCHRP) 350 or Manual for Assessing Safety Hardware (MASH), Test Level 3. Use reflective sheeting that meets AASHTO M 268 Type III, IV or V. Application of crash cushion must be appropriate for the intended use and be installed per manufacturer's recommendation. Temporary crash cushions used as rail or barrier end treatments must be redirective. Temporary crash cushions that are barrels or barricade filled with sand or water are considered nonredirective and may only be used when the forecasted temperature during their use is above 32 degrees Fahrenheit.

CR6432-110410

12. Portable Changeable Message Board Sign. Replace with the following:

    Portable Changeable Message Board Sign. Use new truck or trailer mounted portable changeable message board signs with self contained power supply for the sign and with:
    a. Message sign panel large enough to display 3 lines of 18 inch high characters.
    b. Eight character display per message module.
    c. Fully programmable message module.
    d. Remote control cellular, wireless radio frequency (RF), landline.
    e. Waterproof, lockable cover for the controller keyboard.
    f. Capacity for electric/hydraulic sign raising or lowering.
    g. Radar over speed detection.
    h. Variable flash and sequence rates.
    i. Light emitting diode (LED) display, using Institute of Transportation Engineers (ITE) amber/yellow
    j. The capacity for a minimum of 150 pre-programmed messages.
    k. Battery-Pack Operation Duration: minimum of 55 hours under full load.
    l. Power chords shall comply with the National Electrical Code (NEC) Article 600.10 Portable and Mobile Signs, paragraph 600.10(c) (2) ground fault circuit interrupter (GFCI). The chord will have integral GFCI protection located either in the attachment plug or 12 inches or less from the plug.

CR6431-010114

13. Plastic Safety Fence. Replace a., b., and c. with the following:

    a. "Safety Fence" by Jackson Safety, Inc., Manufacturing and Distribution Center, 5801 Safety Drive NE, Belmont, Michigan, 49306. Phone (800) 428-8185.
    b. "Flexible Safety Fencing" by Carsonite Composites, LLC, 19845 U.S. Highway 76, Newberry, South Carolina, 29108. Phone (800) 648-7916.
    c. "Reflective Fencing" by Plastic Safety Systems, Inc., 2444 Baldwin Road, Cleveland, Ohio 44104. Phone (800) 662-6338.

16. Flagger Paddles. Replace the last sentence with the following:

    Use reflective sheeting that meets AASHTO M 268 Type VIII or IX. Use background colors of fluorescent orange on one side and red on the other side.

Add No. 17:

17. Truck Mounted Attenuator (TMA). The TMA shall be mounted on a vehicle with a minimum weight of 15,000 pounds and a maximum weight per the manufacturer's recommendations. The TMA shall comply with NCHRP 350 or MASH, Test Level 3 requirements.

CR6432-110410

Add No. 18:

18. Flexible Markers. Refer to Subsection 606-2.01 Materials.

CR6431-010114

Standard Modification

Replace Subsection 643-2.02 CRASHWORTHINESS with the following:

643-2.02 CRASHWORTHINESS. Submit documentation, by the method indicated, that the following devices comply with the requirements of National Cooperative Highway Research Program (NCHRP) Report 350 or Manual for Assessing Safety Hardware (MASH), Test Level 3 on the given schedule.

Submit documentation of compliance to the Engineer before installing devices on the project.

Work Zone Traffic Control Device Compliance with NCHRP 350 or MASH		
Category	**Devices**	**Method of Documentation**
1	Cones, candles, drums w/o attachments, delineators	Manufacturer's Certification for devices exceeding height and weight limits
2	Barricades, portable sign supports, drums w/lights, other devices weighing less than 100 pounds but not included in category 1	FHWA acceptance letter indicating acceptance at Test Level 3 (when no test level is specified in the letter; it is implied that the tests were run for Test Level 3),
3	Truck mounted attenuators, redirective and nondirective temporary crash cushions	FHWA acceptance letter indicating acceptance at Test Level 3 (when no test level is specified in the letter; it is implied that the tests were run for Test Level 3),
	Portable concrete barriers	FHWA acceptance letter specifying the Test Level required in the Plans or Specifications.

Category 1 devices that exceed the following weights and heights require certification that they meet the evaluation criteria of NCHRP Report 350 or MASH, Test Level 3. This certification may be a one-page affidavit signed by the vendor. Documentation supporting the certification (crash tests and/or engineering analysis) must be kept on file by the certifying organization. No certification is required for devices within the weight and height limitations.

Device	Composition	Weight	Height
Cones	Rubber	20 lb.	36 in.
	Plastic	20 lb.	48 in.
Candles	Rubber	13 lb.	36 in.
	Plastic	13 lb.	36 in.
Drums	Hi Density Plastic	77 lb.	36 in.
	Lo Density Plastic	77 lb.	36 in.
Delineators	Plastic or Fiberglass	N/A	48 in.

E77-100410

643-3.01 GENERAL CONSTRUCTION REQUIREMENTS. Add the following:

Immediately notify the Engineer of any traffic related accident that occurs within the project limits as soon as you, an employee, or a subcontractor becomes aware of the accident.

E90-100410

Add the following:

Where construction activity encroaches onto the safe route in a traffic control zone, station a flagger at the encroachment to assist pedestrians and bicyclists past the construction activity.

Maintain business access(s) during flagging operations.

CR6431-010114

643-3.02 ROADWAY CHARACTERISTICS DURING CONSTRUCTION. Add the following:

Maintain traffic on paved surfaces.

Pave lanes next to the median first. Pave lanes next to exit and entrance ramps last. Place temporary 12:1 sloped wedge of asphalt concrete against the abrupt pavement edge on lanes next to exit and entrance ramps. Do not open the roadway to traffic until slope wedges are in place.

CR6435-041413

Standard Modification

Replace Subsection 643-3.03 PUBLIC NOTICE with the following:

643-3.03 PUBLIC NOTICE. Make sure the Worksite Traffic Supervisor gives a minimum of 3 days notice before major changes, delays, lane restrictions, or road closures to local officials and transportation organizations, including but not necessarily limited to:

- Alaska Carriers Association
- Alaska Trucking Association
- Alaska State Troopers
- Division of Measurement Standards
- Local Police Department
- Local Fire Department
- Local Government Traffic Engineer
- School and Transit Authorities
- Local Emergency Medical Services
- Local Media (newspapers, radio, television)
- Railroads (where applicable)
- U.S. Postal Service
- Major Tour Operators

Provide local traffic enforcement and maintenance agencies 24 hour notice before shutting down a traffic signal system. Provide notice as required by utility companies before repairing or replacing a utility.

Provide the Alaska State Troopers, local police and fire department with the radio frequencies used on the project and the 24-hour telephone numbers of the Worksite Traffic Supervisor and the Project Superintendent. Tell them to use these numbers to alert you when emergency vehicles must pass through the project. When notified of emergencies, use all equipment and make every necessary effort to expedite rapid passage.

Additional notices may be given through the Navigator System for selected projects. Check the special provisions for those requirements.

E78-100410

643-3.04 TRAFFIC CONTROL DEVICES. Replace paragraphs 6 and 7 with the following:

Use only traffic control devices that meet the requirements of the "Acceptable" category in the American Traffic Safety Services Association (ATSSA) "Quality Guidelines for Temporary Traffic Control Devices" and meet crashworthiness requirements per Section 643-2.02.

Immediately replace any devices provided under this Section that are lost, stolen, destroyed, inoperable or deemed unacceptable while used on the project. Stock repair parts for each Temporary Crash Cushion used on the project. Repair damaged crash cushions within 24 hours.

Maintain pre-existing roadside safety hardware at an equivalent or better level than existed prior to project implementation until the progress of construction necessitates removing the hardware. All existing hazards that are currently protected with roadside safety hardware or new hazards which result from project improvements shall be protected or delineated as required in the Plans, Specifications, and approved TCPs until permanent roadside safety hardware is installed. All temporary roadside safety hardware shall meet NCHRP 350 or MASH, Test Level 3 unless otherwise noted.

CR6432-110410

Replace paragraph 8 with the following:

Items paid under this Section remain the Contractor's property unless stated otherwise. Remove them after completing the project.

1. Embankments. Add the following:

   Close trenches and excavations at the end of each continuous work shift, except as indicated by the Engineer.

2. Adjacent Travel Lane Paving. Replace 2. With the following:

   Limit pavement-edge and lane-edge drop-offs as specified in Section 401. When paving is deeper than 1 inch and you cannot finish paving adjacent travel lanes or paved shoulders to the same elevation before the end of the paving shift, install one of the following, as appropriate: CW8-11 (Uneven Lanes), CW8-9 (Low Shoulder), CW14-3 (no Passing Zone), R4-1 (Do Not Pass), and R4-2 (Pass with Care). If the Section is longer than 1/2 mile, place additional signs every 1500 feet.

3. Fixed Objects. Add the following:

   Remove obstructions greater than 4 inches above the nominal foreslope grade at the end of each continuous work shift.

Replace paragraph three with the following:

If you cannot meet the preceding restrictions because of land features or lack of right-of-way, place vehicles, equipment, material stockpiles, and other items deemed by the Engineer to be fixed objects as far away as practical but at least 15 feet from the edge of traveled way, as approved by the Engineer. Use drums or Type II barricades with flashing warning lights to delineate vehicles, equipment, material stockpiles, and other fixed objects. These traffic control devices are subsidiary.

4. Flagging. Replace with the following:

   Furnish trained and competent flaggers and all necessary equipment, including lighting of the flagging position during nighttime operations, to control traffic through the traffic control zone. The Engineer will approve each flagging operation before it begins and direct adjustments as conditions change.

Flaggers must be certified as one of the following:

a. Flagging Level I Certification by IMSA (International Municipal Signal Association)
b. Flagger Certification by ATSSA (American Traffic Safety Services Association)
c. Traffic Control Supervisor, ATSSA
d. Work Zone Safety Specialist, IMSA
e. ATSSA Flagging Instructor

Flaggers shall maintain current flagger certification. Flaggers must be able to show their flagger certification anytime they are on the project.

Flaggers must maintain their assigned posts at all times, unless another qualified flagger relieves them, or the approved traffic control plan terminates the flagging requirements. Remove, fully cover, or lay down flagger signs when no flagger is present. Keep the flaggers' area free of encumbrances, keep the flagger vehicle well off the roadway and not close to the flagger station, so that flaggers can be seen easily.

Provide approved equipment for two-way radio communications between flaggers when flaggers are not in plain, unobstructed view of each other.

Obtain the Engineer's written approval before flagging signalized intersections. When you flag a signalized intersection, either turn off and cover the traffic signal or place it in the All-Red Flash mode. Coordinate changing traffic signal modes and turning off or turning on traffic signals with the agency responsible for signal maintenance and operation and the Engineer. Get their written approval in advance. Only uniformed police officers are permitted to direct traffic in an intersection with an operating traffic signal.

6. Street Sweeping and Power Brooming. Replace with the following:

Keep free of loose material paved portions of the roadway and haul routes open to the public, including sections of roadway off the project where the Contractor's operations have deposited loose material. Use equipment for brooming and sweeping as recommended by the manufacturer and the following:

Dirt, dust and construction materials, mobilized as a result of power brooming and or sweeping, shall not be pushed, ejected, thrown or drift beyond the lesser of, 2 feet from the equipment perimeter or the edge of the paved surface.

All equipment shall operate to typical industry standards. Maintain equipment to operate as designed by the manufacturer. Equipment will employ safety equipment, warning lights, and other as required by the Specifications and these Special Provisions.

Sweeper and Broom Options: Table 643-4, Traffic Control Rate Schedule, Street Sweeping.

a. Regenerative Sweeper: Sweeper that blows a stream of air at the paved surface causing fine particles to rise and be caught through a vacuum system.
b. Vacuum Sweeper: Sweeper that creates a vacuum at the paved surface sucking dirt, dust, and debris into the collection system.
c. Mechanical Broom Sweeper: Sweeper designed to pick up and collect larger size road debris, stones and litter, etc. In addition to the requirements noted in these Specifications, use of a mechanical broom sweeper requires the Engineer to approve the sweeper for the intended use.
d. Power Broom: Power brooming that wets, pushes and or ejects loose material directly into an attached collection/pickup container may be used when approved by the Engineer. The added moisture will be contained to the paved roadway surface.

   Dry Power Brooming is not permitted. Power brooming without direct/immediate means of collection/pickup is not permitted.

CR6431-010114

Add No. 9:

9. Truck Mounted Attenuator (TMA). TMAs are mounted on the rear of work vehicles. TMA shall be mounted on a vehicle with a minimum weight of 15,000 pounds and a maximum weight in accordance with the manufacturer's recommendations. TMA shall have an adjustable height so that it can be placed at the correct elevation during usage and to a safe height for transporting. Approach ends of TMAs shall have impact attenuator markings in accordance with the MUTCD. Do not use a damaged attenuator in the work. Replace at your expense, an attenuator damaged from an impact during work.

Add No. 10:

10. Parallel Guardrail Terminal. The price listed in the Traffic Control Rate Schedule, Table 643-4, will be full compensation for the purchase, installation, maintenance during construction, removal, and salvaging the Parallel Guardrail Terminal unit(s). Deliver the salvaged unit(s) to the nearest ADOT & PF Maintenance & Operations yard or as directed by the Engineer.

CR6432-110410

643-3.05 AUTHORITY OF THE ENGINEER. Replace the first sentence with:

When existing conditions adversely affect the public's safety or convenience, the Contractor will receive an oral notice. A written notice will follow the oral notice according to Subsection 105-1.01, Authority of the Engineer.

Add the following after the second sentence:

In no case shall this time exceed 24 hours.

CR6431-010114

643-3.06 TRAFFIC PRICE ADJUSTMENT. Add the following in the 2nd paragraph after the 2nd sentence:

Temporary crash cushions required to protect motorists from incomplete guardrail installations, as described in Section 606-5.01 is also an unauthorized lane reduction.

CR6432-110410

Add the following after the 3rd paragraph:

Failure to maintain an acceptable infrastructure or traffic control plan will result in a price adjustment equal to 100 percent of the applicable rate shown in Table 643-1, Adjustment Rates, for the time the roadway or pedestrian facility is in an unacceptable condition.

Replace Table 643-1 with the following:

TABLE 643-1
ADJUSTMENT RATES

Published ADT	Dollars/Minute of Delay/Lane
0 – 5,000	$ 30
5,000 +	$ 40

CR6431-010114

643-3.08 CONSTRUCTION SEQUENCING. Replace the last sentence with:

Maintain at least one lane of traffic at all times.

Unless otherwise determined by the Engineer and on an approved Traffic Control Plan (TCP), do not restrict traffic during the times listed below.

1. Monday through Thursday: 0600 hrs to 2000 hrs
2. Weekends: 1200 hrs Friday to 2000 hrs Sunday
3. Around any Holiday:
    a. If a holiday falls on Sunday, Monday, or Tuesday, the above stipulations apply from 1200 hrs on the Friday before the holiday to 0300 hrs on the day after the holiday.
    b. If a holiday falls on Wednesday, the above stipulations apply from 1200 hrs on the Tuesday before the holiday to 0300 hrs on the Thursday after the holiday.
    c. If a holiday falls on Thursday, Friday, or Saturday, the above stipulations apply from 1200 hrs on the day before the holiday to 0300 hrs on the Monday after the holiday.

Lane restrictions, if allowed shall be conducted so that no more than a 5 minute accumulated stopped delay, 20 vehicles, or 1/8 mile (660 feet) of traffic is detained, whichever occurs first, before releasing the detained motorists. During paving operations, a 10 minute stopped delay, 40 vehicles, or 1/4 mile (1320 feet) of traffic detained, will be allowed for motorists, except school buses. If a queue of traffic develops at a stop, the entire queue must be emptied to include the last car that entered the queue at the time the queue was released.

Obtain the local school bus schedule and coordinate work efforts to ensure the school buses are not delayed through the construction zone. This plan shall be submitted, as a TCP, to the Engineer for approval before the implementation of the school bus coordination plan.

CR6436-041413

643-3.09 INTERIM PAVEMENT MARKING. In the second paragraph, delete the words:

"or cover them with black removable preformed marking tape."

Replace the first sentence in the last paragraph with the following:

Do not place final pavement markings until traffic has traveled over the seal coat or surface treatment for at least 15 days and no more than 21 days, as directed by the Engineer.

CR6437-041413

Add the following Subsection 643-3.10:

643-3.10 LIGHTING OF NIGHT WORK. Illuminate the night work areas specified in Table 643-3, Night Work Illumination Level, and Area of Coverage, to the light levels specified.

Table 643-3 does not provide a comprehensive list of operations that require lighting. Provide lighting for other operations when necessary.

TABLE 643-3
NIGHT WORK ILLUMINATION LEVEL AND AREA OF COVERAGE

Type of Work/Equipment	Lighting Configuration
Paving, Milling, Striping, Pavement Marking Removal, Rumble Strip Installation	At least two machine mounted balloon lights with a cumulative wattage of at least 4000 watts. Provide additional lights or wattage if necessary to provide complete coverage.
Rolling, Pavement Sweeping	At least four sealed beam halogen lamps in the front and four in the back. Each should be at least 55 watts.
Flagging	Two balloon lights of at least 2000 watts each located within 30 feet of the normal flagger location. Locate one on the right side of the road beyond the flagger and the other on the left side of the road in front of the flagger.
Truck Crossings (meaning where haul vehicles cross or enter a road): 1) Roads with ADTs over 10,000 2) That are controlled by portable signals or flaggers	Two Balloon lights of at least 2000 watts each located on the main road, one on the far right side of the intersection, the other on the near left. Locate lights within 30 feet of the edges of the side street. If there is a flagger at the crossing, locate the lights to also meet the requirements for flagging.

Use balloon lighting as the main light sources. Do not use floodlights without prior approval by the Engineer. When approved, install floodlighting in a manner that minimizes glare for motorists, workers, and residents living along the roadway. Locate, aim louver, and/or shield light sources to achieve this goal.

The Engineer shall be the sole judge of when glare is unacceptable, either for traffic or for adjoining residences. When notified of unacceptable glare, modify the lighting system to eliminate it.

If the Contractor fails to provide the lighting equipment specified in Table 643-3 or provides lighting that creates unacceptable glare at any time, the Contractor shall cease the operations that require illumination until the condition is corrected.

Lighting equipment shall be in good operating condition and in compliance with applicable OSHA, NEC, and NEMA codes.

Provide suitable brackets and hardware to mount lighting fixtures and generators on machines and equipment. Design mountings so lights can be aimed and positioned as necessary to reduce glare. Locate mounting brackets and fixtures so they do not interfere with the equipment operator or overhead structures. Connect fixtures securely in a manner that minimizes vibrations.

Ensure ground, trailer, and equipment mounted light towers are sturdy and freestanding without the aid of guy wires. Towers shall be capable of being moved to keep pace with the construction operation.

Position ground and trailer mounted towers and trailers to minimize the risk of being impacted by traffic on the roadway or by construction traffic or equipment.

Raise trailer or equipment mounted lights to maximum height, except do not exceed the clearance required for overhead objects such as trees, aerial utilities, or bridges. Aim and adjust lights to provide the required light levels. Provide uniform illumination on the hopper, auger, and screed areas of pavers. Illuminate the operator's controls on machines uniformly.

Furnish each side of nonstreet legal equipment with a minimum of 75 square inches high intensity retroreflective sheeting in each corner, so at least 150 square inches of sheeting is visible from each direction. Provide red sheeting on the rear of the equipment and yellow sheeting elsewhere.

Existing street and highway lighting and conventional vehicle headlights do not eliminate the need for the Contractor to provide lighting meeting the requirements of Table 643-3.

Provide sufficient fuel, spare lamps, spare generators, and qualified personnel to ensure that required lights operate continuously during nighttime operations. Ensure generators have fuel tanks of sufficient capacity to permit operation of the lighting system for a minimum of 12 hours. In the event of failure of the lighting system, discontinue the operation until the required level and quality of illumination is restored.

Maintain a supply of at least 20 emergency flares for use in the event of emergency or unanticipated situations. Comply with local noise ordinances.

Provide NCHRP 350-compliant breakaway bases for post mounted electroliers located within the clear zone.

ES14-031506

Standard Modification

Add the following Subsection 643-3.11:

643-3.11 HIGH VISIBILITY GARMENTS. Ensure all workers within project limits wear outer garments that are highly visible and comply with the following requirements:

1. Standards. Use high visibility garments conforming to the requirements of ANSI/ISEA 107-2004, Class 2 for tops or Class E for bottoms, and Level 2 retroreflective material.

2. Labeling. Use garments labeled in conformance with Section 11.2 of ANSI/ISEA 107-2004.

3. Tops. Wear high visibility vests, jackets, or coverall tops at all times.

4. Bottoms. Wear high visibility pants or coverall bottoms during nighttime work (sunset to sunrise). Worksite traffic supervisors, employees assigned to traffic control duties, and flaggers wear high visibility pants or coverall bottoms at all times.

5. Outer Raingear. Wear raingear tops and bottoms conforming to requirements in this Subsection, 643-3.11.

6. Exceptions. When workers are inside an enclosed compartment of a vehicle, they are not required to wear high visibility garments.

7. Condition. Furnish and maintain vests, jackets, coveralls, rain gear, hard hats, and other apparel in a neat, clean, and presentable condition. Maintain retroreflective material to Level 2 standards.

Payment for high visibility garments for workers is subsidiary to other traffic Pay Items.

E90-100410

643-4.01 METHOD OF MEASUREMENT.

2. Traffic Control Device Items. Replace the second sentence with the following:

   Special Construction signs are measured by the total area of legend bearing sign panel, as determined under Subsection 615-4.01 and compensation for a 24 hour period shall be made under Construction Signs in the Traffic Control Rate Schedule, Table 643-4.

CR6431-010114

Add No. 16:

16. Reserved.

CR6433-110812

Add No. 17:

17. Hotline Road Report. No measurement required to provide a 24 hour toll free (1-800 ###-####) "Hotline Road Report" telephone with a prerecorded message, and weekly notices with daily updates. Work will be subsidiary to Pay Item 643(1) or 643(2), Traffic Maintenance.

643-5.01 BASIS OF PAYMENT.

7. Flagging and Pilot Car. Add the following:

   The Engineer will pay for Item 643(15) Flagging on a contingent sum basis at the rate of $52.00/hour. The Engineer does not require a change order/directive for the flagging Pay Item. Flagging associated with Change Order work will be paid at the prices according to Subsection 109-1.05 Compensation for Extra Work.

11. Traffic Control. Add the following:

   The Engineer does not require a change order/directive for Pay Item 643(25), Traffic Control.

12. Portable Changeable Message Board Sign. Add the following:

   Two Portable Changeable Message Board Signs used for Permanent Construction Signing will be paid for under Item 643(3) Permanent Construction Signs. Additional portable changeable message board signs will be paid for under 643(25), Traffic Control.

CR6431-010114

Add No. 16:

16. Reserved.

CR6433-110812

Add No. 17:

17. Work Zone Illumination. Payment for work zone illumination is subsidiary to other items.

ES14-031506

Add No. 18:

18. High Visibility Garments. Payment for high visibility garments for workers is subsidiary to other Pay Items.

CR6431-010114

Add No. 19:

19. Pavement Breaks. Temporary hot mix asphalt at pavement breaks, as noted in Subsection 643-3.02.2. Gravel Surface Not Specified is subsidiary to Pay Item 401(1A).

CR6435-041413

Add No. 20:

20. Temporary Pavement Markings. Except where specified as an individual Pay Item (Interim Pavement Markings) temporary pavement markings are subsidiary to Section 670 Pay Items.

CR6437-041413

Add the following:

TABLE 643-4
TRAFFIC CONTROL RATE SCHEDULE

Traffic Control Device	Pay Unit	Unit Rate
Construction Signs	Each/Day	$6.50
Special Construction Signs	Square Foot	$28.00
Type II Barricade	Each/Day	$3.30
Type III Barricade	Each/Day	$11.00
Traffic Cone or Tubular Marker	Each/Day	$1.10
Drums	Each/Day	$3.30
Sequential Arrow Panel	Each/Day	$55.00
Portable Concrete or Steel F Shape Barrier (12.5 foot long or $8/foot for other lengths)	Each	$100.00
Temporary Crash Cushion / Sand or Water Filled Barrels or Barrier (all required per end)	Each	$1250.00
Temporary Crash Cushion / Redirective	Each	$2500.00
Pilot Car	Hour	$70.00
Watering	M-Gallon	$26.40
Street Sweeping: Regenerative Sweeper, Vacuum Sweeper, Mechanical or Power Broom with Vacuum	Hour	$183.00
40,000 GVW Truck with Crash Attenuator	Hour	$130.00
Plastic Safety Fence	Lineal Foot	$1.00
Portable Changeable Message Board Sign	Calendar Day	$130.00
Temporary Sidewalk Surfacing	Square Foot	$2.00
Flexible Markers (Flat Whip, Reflective)	Each	$60.00
Temporary Guardrail	Lineal Foot	$25.00

CR6431-010114

Delete Pay Item 643(12).

CR6434-110812

Replace Pay Item 643(15) with the following:

Pay Item No.	Pay Item	Pay Unit
643(15)	Flagging	Contingent Sum

CR6431-010114

SECTION 644

SERVICES TO BE FURNISHED BY THE CONTRACTOR

Special Provisions

644-2.01 FIELD OFFICE. Delete this subsection in its entirety and substitute the following:

Furnish and maintain a suitable office for the Engineer, available for occupancy from 2 weeks before beginning work, through 30 days after issuance of the notice of project completion as defined in Subsection 105-1.15. The following office requirements shall be met:

1. A minimum of 1000 square feet of floor area. The office area shall be divided so that it contains an office room separated by a closable door. The office room shall have a minimum of 160 square feet of floor area.
2. A thermostatically controlled interior heating system with necessary fuel.
3. Adequate electrical lighting and 120 volt, 60 hertz power, with a minimum of 6 electrical outlets.
4. A minimum of 100 square feet of window area and adequate ventilation.
5. Adequate parking for a minimum of 16 vehicles, with one handicap parking space meeting the requirements of Americans with Disabilities Act Accessibility Guidelines (ADAAG).
6. Attached indoor plumbing with sanitary lavatory facilities and potable drinking water provided.
7. Provide engineering communication services to the field office, Subsection 644-2.08.
8. If a part of the Contractor's building, it shall be completely partitioned off from the balance of the structure and provided with a separate outside door equipped with a lock.
9. Located within 3 miles of the project.
10. Weekly janitorial service consisting of emptying trash receptacles, vacuuming office area, and cleaning restrooms and counter areas.
11. Provide one mobilization and one demobilization of the Engineer's office equipment and furniture.

CR644FOCOM-080511

Standard Modifications

644-2.02 FIELD LABORATORY. Add the following to the end of the second sentence of the first paragraph:

through one week after Project Completion.

E44-012707REV

Replace 2.g. with the following:

g. 500 gallon capacity tank with a pressure pump or a commercial pressurized system.

Replace 6.a. with the following:

a. Supply 240 volt, 60 hertz power, a 100 pound propane bottle, and a 500 gallon capacity water tank with a pressure pump or a commercial pressurized system for a State provided portable asphalt lab at a location designated by the Engineer.

Add the following:

7. Provide one mobilization and one demobilization of the Engineer's laboratory equipment from Anchorage.

CR644LAB-071009

Standard Modifications

Add the following subsection:

644-2.08 ENGINEERING COMMUNICATION. Engineering Communications, minimum service includes:

a. Three phone/facsimile lines (different phone numbers for each line)
b. High speed internet service with modem (DSL or Cable)

CR644FOCOM-080511

644-4.01 BASIS OF PAYMENT. Add the following:

Pay Item 644(10) Engineering Communications. Usage services including long distance calls made by State personnel and the Internet service provider will be reimbursed by the State. Payment for communication usage services shall be based on paid receipts to the service provider plus 15%.

Connection fees (initial connection) local calls, providing equipment and disconnection are subsidiary to Pay Item 644(1) Field Office and as such are paid by the Contractor.

Payment will be made under:

Pay Item No.	Pay Item	Pay Unit
644(10)	Engineering Communications	Contingent Sum

CR644FOCOM-080511

Standard Modifications

Add the following Pay Items:

Lump Sum Items. Payment for lump sum items will be made as follows:

1. A percentage of the lump sum amount, to be determined by the Engineer, will be paid as full compensation for furnishing the facility at the site.

2. The balance of the lump sum amount will be prorated over the anticipated active construction period with a portion included as part of each interim payment, for maintenance, repairs, providing all utilities, and for removing it from the site. If anticipated construction period changes, the final increment will be held until final payment.

E44-012707REV

Special Provision

Add the following Section:

SECTION 645

TRAINING PROGRAM

645-1.01 DESCRIPTION. This Training Special Provision implements 23 CFR 230, Subpart A, Appendix B.

As part of the Equal Employment Opportunity Affirmative Action Program, the Contractor shall provide on-the-job training aimed at developing full journey status in the type of trade or job classification involved. The number of individuals to be trained and the number of hours of training to be provided under this contract will be as shown on the bid schedule.

645-2.01 OBJECTIVE. Training and upgrading of minorities and women toward journey status is the primary objective of this program. The Contractor shall enroll minorities and/or women, where possible, and document good faith efforts prior to the hire of non-minority males in order to demonstrate compliance with this Training Special Provision. Specific good faith efforts required under this Section for the recruitment and employment of minorities and women are found in the Federal EEO Bid Conditions, Form 25A-301, items 6.b, 6.c, 6.d, 6.e, 6.i, 6.j and 6.l, located in the "green pages" of this document.

645-3.01 GENERAL. The Contractor shall determine the distribution of the required number of apprentices/trainees and the required number of hours of training among the various work classifications based upon the type of work to be performed, the size of the workforce in each trade or job classification, and the shortage of minority and female journey workers within a reasonable area of recruitment.

Training will be provided in the skilled construction crafts unless the Contractor can establish prior to contract award that training in the skilled classifications is not possible on a project; if so, the Department may then approve training either in lower level management positions such as office engineers, estimators, and timekeepers, where the training is oriented toward construction applications, or in the unskilled classifications, provided that significant and meaningful training can be provided. Some offsite training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

Credit for offsite training hours indicated above may only be made to the Contractor where the apprentices/trainees are concurrently employed on the project and the Contractor does one or more of the following: contributes to the cost of the training, provides the instruction to the apprentice/trainee, or pays the apprentice's/trainee's wages during the offsite training period.

Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

Prior to award of the contract, the Contractor shall submit Form 25A-311, Training Utilization Report, indicating the training program to be used, the number of apprentices/trainees to be trained in each selected classification, the number of hours of training to be provided, and the anticipated starting time for training in each of the classifications.

Training must begin within 2 weeks of the anticipated start date(s); unless otherwise authorized by a Directive. Such authorization will be made only after submission of documentation by the Contractor, and approval by the Engineer, of efforts made in good faith which substantiate the necessity for a change.

Contractors may use a training program approved by the U.S. Department of Labor, Bureau of Apprenticeship & Training (USDOL/OA), or one developed by the Contractor and approved prior to contract award by the Alaska Department of Transportation and Public Facilities (ADOT&PF) Training Program Representative, using Form 25A-310.

The minimum length and type of training for each classification will be established in the training program selected by the Contractor. Training program approval by the Department for use under this section is on a project by project basis.

It is expected that each apprentice/trainee will begin training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project as long as training opportunities exist or until training has been completed. It is not required that apprentices/trainees be continuously employed for the duration of the contract.

If, in the judgment of the Contractor, an apprentice/trainee becomes proficient enough to qualify as a journey worker before the end of the prescribed training period and the Contractor employs that individual as a journey worker in that classification for as long as work in that area remains, the individual's training program will be considered completed and the balance of training hours required for that apprentice/trainee shall be waived.

The Contractor shall furnish each ADOT&PF training program trainee a copy of the program (Form 25A-310) to be followed during training on the project, and with written certification showing the type and length of training completed on the project. Existing USDOL/BAT apprentices should already have a copy of their program. No employee shall be employed for credit as an apprentice/trainee in a classification in which that employee has previously worked at journey status or has previously completed a training course leading to journey status.

The Contractor shall periodically review the training and promotion potential of minority and women employees and shall encourage eligible employees to apply for such training and promotion.

The Contractor shall provide for the maintenance of records and the furnishing of periodic reports documenting the progress of each apprentice/trainee. The Contractor must submit Form 25A-313 by the 15th of each month and provide each ADOT&PF trainee written evaluation reports for each unit of training provided as established on Form 25A-310.

645-3.02 WAGES. Trainees in ADOT&PF approved training programs will be paid prevailing Davis-Bacon fringe benefits plus at least 60 (but less than 100) percent of the appropriate minimum journey rate specified in the contract for the first half of the training period, at least 75 (but less than 100) percent for the third quarter of the training period, and at least 90 (but less than 100) percent for the last quarter of the training period. Trainee wages shall be identified on Form 25A-310. Apprentices in USDOL/BAT training programs shall be paid in accordance with their approved program. Beginning wages of each trainee/apprentice enrolled in a Section 645 Training Program on the project shall be identified on Form 25A-312.

645-3.03 SUBCONTRACTS. In the event the Contractor subcontracts a portion of the work, he shall determine how many, if any, of the apprentices/trainees are to be trained by the subcontractor. Any such subcontracts shall include this Section 645, Form 25A-311 and Form 25A-310, where appropriate. However, the responsibility for meeting these training requirements remains with the Contractor; compliance or non-compliance with these provisions rests with the Contractor and sanctions and/or damages, if any, shall be applied to the Contractor in accordance with subsection 645-5.01, Basis of Payment.

645-4.01 METHOD OF MEASUREMENT. The Contractor will be credited for each approved apprentice/trainee employed on the project and reimbursed on the basis of hours worked, as listed in the certified payrolls. There shall be no credit for training provided under this section prior to the Contractor's submittal and approval by the Engineer of Form 25A-312 for each apprentice/trainee trained under this Section. Upon completion of each individual training program, no further measurement for payment shall be made.

645-5.01 BASIS OF PAYMENT. Payment will be made at the contract unit price for each hour of training credited. Where a trainee or apprentice, at the discretion of the Contractor, graduates early and is employed as a journey worker in accordance with the provisions of subsection 645-3.01, the Contractor will receive payment only for those hours of training actually provided.

This payment will be made regardless of any other training program funds the Contractor may receive, unless such other funding sources specifically prohibit the Contractor from receiving other reimbursement.

Payment for training in excess of the number of hours specified on the approved Form 25A-311, may be made only when approved by the Engineer through Change Order.

Non-compliance with these specifications shall result in the withholding of progress payments until good faith efforts documentation has been submitted and acceptable remedial action has been taken.

Payment will be at the end of the project following the completion of all training programs approved for the project. No payment or partial payment will be made to the Contractor if he fails to do any of the following and where such failure indicates a lack of good faith in meeting these requirements:

1. provide the required hours of training (as shown on the approved Form 25A-311)

2. train the required number of trainees/apprentices in each training program (as shown on the approved Form 25A-311), or

3. hire the apprentice/trainee as a journey worker in that classification upon completion of the training program for as long as work in that area remains.

Failure to provide the required training damages the effectiveness and integrity of this affirmative action program and thwarts the Department's federal mandate to bring women and minorities into the construction industry. Although precise damages to the program are impractical to calculate, they are at a minimum, equivalent to the loss to the individuals who were the intended beneficiaries of the program. Therefore, where the Contractor has failed, by the end of the project, to provide the required number of hours of training and has failed to submit acceptable good faith efforts documentation which establishes why he was unable to do so, the Contractor will be assessed an amount equal to the following damages to be deducted from the final progress payment:

Number of hours of training not provided, times the journey worker hourly scale plus benefits. The journey worker scale is that for the classification identified in the approved programs.

Payment will be made under:

Pay Item No.	Pay Item	Pay Unit
645(1)	Training Program, 1 Trainees/Apprentices	Labor Hour

S99-092112

SECTION 646

CPM SCHEDULING

Special Provisions

646-2.01 SUBMITTAL OF SCHEDULE. Replace this Subsection with the following:

Submit a detailed initial CPM Schedule at the preconstruction conference for the Engineer's acceptance as set forth below.

The construction schedule for the entire Project shall not exceed the specified contract time. Allow the Engineer 14 days to review the initial CPM Schedule. Revise promptly. The finalized CPM Schedule must be completed and accepted before beginning work on the Project.

646-3.01 REQUIREMENTS AND USE OF SCHEDULE. Delete No. 2.

2. 60-Day Preliminary Schedule.

Delete the first sentence of No. 3. Schedule Updates. and substitute the following:

Hold job site progress meetings with the Engineer for the purpose of updating the CPM Schedule. Meet with the Engineer monthly or as deemed necessary by the Engineer.

CR261-121302

Add the following:

Failure to provide the initial CPM Schedule, 60 Day Preliminary Schedule, or CPM Schedule Updates as required may result in a schedule price adjustment of $500 per calendar day from Item 646 (2) Schedule Price Adjustment

646-5.01 BASIS OF PAYMENT.

Add the following Pay Item:

Pay Item No.	Pay Item	Pay Unit
646(2)	Schedule Price Adjustment	Contingent Sum

55260/56176-11313

Special Provisions

Add the following Section:

SECTION 647

EQUIPMENT RENTAL

647-1.01 DESCRIPTION. This item consists of furnishing construction equipment, operated, fueled and maintained, on a rental basis for use in construction of extra or unanticipated work at the direction of the Engineer. Construction equipment is defined as that equipment actually used for performing the items of work specified and shall not include support equipment such as, but not limited to, hand tools, power tools, electric power generators, welders, small air compressors and other shop equipment needed for maintenance of the construction equipment.

The work is to be accomplished under the direction of the Engineer, and the Contractor's operations shall at all times be in accordance with the Engineer's instructions. These instructions by the Engineer shall be to the Contractor's supervisory personnel only, not to the operators or laborers. In no case shall these instructions by the Engineer be construed as making the Department liable for the Contractor's responsibility to prosecute the work in the safest and most expeditious manner.

647-2.01 EQUIPMENT FURNISHED. In the performance of this work, the Contractor shall furnish, operate, maintain, service, and repair equipment of the numbers, kinds, sizes, and capacities set forth on the Bid Schedule or as directed by the Engineer. The operation of equipment shall be by skilled, experienced operators familiar with the equipment.

The kinds, sizes, capacities, and other requirements set forth shall be understood to be minimum requirements. The number of pieces of equipment to be furnished and used shall be, as the Engineer considers necessary for economical and expeditious performance of the work. The equipment shall be used only at such times and places as the Engineer may direct.

Equipment shall be in first class working condition and capable of full output and production. The minimum ratings of various types of equipment shall be as manufactured and based on manufacturer's specifications. Alterations will not be considered acceptable in achieving the minimum rating. Equipment shall be replaced at any time when, in the opinion of the Engineer, their condition is below that normal for efficient output and production.

Equipment shall be fully operated, which shall be understood to include the operators, oilers, tenders, fuel, oil, air hose, lubrication, repairs, maintenance, insurance, and incidental items and expenses.

647-2.02 EQUIPMENT OPERATORS AND SUPERVISION PERSONNEL. Equipment operators shall be competent and experienced and shall be capable of operating the equipment to its capacity. Personnel furnished by the Contractor shall be, and shall remain during the work hereunder, employees solely of the Contractor.

The Contractor shall furnish, without direct compensation, a job superintendent or Contractor's representative together with such other personnel as are needed for Union, State, or Federal requirements and in servicing, maintaining, repairing and caring for the equipment, tools, supplies, and materials provided by the Contractor and involved in the performance of the work. Also, the Contractor shall furnish, without direct compensation, such transportation as may be appropriate for the personnel.

647-3.01 CONSTRUCTION REQUIREMENTS. The performance of the work shall be according to the instructions of the Engineer, and with recognized standards and efficient methods.

The Contractor shall furnish equipment, tools, labor, and materials in the kinds, number, and at times directed by the Engineer and shall begin, continue, and stop any of the several operations involved in the work only as directed by the Engineer.

Normally, the work is to be done when weather conditions are reasonably favorable, 6 days per week, Mondays through Saturdays, except holidays.

The Engineer will begin recording time for payment each shift when the equipment begins work on the project. The serial number and brief description of each item of equipment listing in the bid schedule and the number of hours, or fractions thereof to the nearest one quarter hour, during which equipment is actively engaged in construction of the project shall be recorded by the Engineer. Each day's activity will be recorded on a separate sheet or sheets, which shall be verified and signed by the Contractor's representative at the end of each shift, and a copy will be provided to the Contractor's representative.

647-4.01 METHOD OF MEASUREMENT. The number of hours of equipment operation to be paid for shall be the actual number of hours each fully operated specified unit of equipment, or each fully operated specified combination of units of equipment, is actually engaged in the performance of the specified work on the designated areas in accordance with the instruction of the Engineer. The pay time will not include idle periods, and no payment will be made for time used in oiling, servicing, or repairing of equipment, or in making changeovers of parts to the equipment. Travel time to or from the project, will not be authorized for payment. Hours paid shall be supported by certified payroll.

647-5.01 BASIS OF PAYMENT.

Payment for Item 647(5) Backhoe, 4WD, 1 cy Bucket, 75 hp Min, 15 ft Depth will be paid on a contingent sum basis on a per hour basis of $150/hour.

This shall be full compensation for furnishing, operating, maintaining, servicing, and repairing the equipment, and for incidental costs related to the equipment. Furnishing and operating of equipment of heavier type, larger capacity, or higher wattage than specified will not entitle the Contractor to any extra compensation.

Payment will be made under:

Pay Item No.	Pay Item	Pay Unit
647(1)	Wide Pad Dozer, 65 hp Min	Contingent Sum
647(2)	Wide Pad Dozer, 65 hp Min	Hour
647(5)	Backhoe, 4WD, 1 cy Bucket, 75 hp Min, 15 ft Depth	Contingent Sum
647(6)	Backhoe, 4WD, 1 cy Bucket, 75 hp Min, 15 ft Depth	Hour

CR15-082405

Special Provisions

Add the following Section:

SECTION 651

EAGLE MONITORING

651-1.01 DESCRIPTION. Engage a Professional Services Contractor to provide a monitor to observe eagle activity at nests in order to comply with this section and Section 107. At the Preconstruction meeting, the Contractor shall provide the names and qualifications of the Professional Services Contract Manager and the onsite eagle monitor.

651-2.01 MATERIALS. A video camera with a minimum 10 power optical zoom lens shall be used to monitor and record nest activity.

CONSTRUCTION REQUIREMENTS

651-3.01 GENERAL REQUIREMENTS. The monitor shall work directly for the contract manager of the professional services contract. The monitor shall be trained by the Professional Services Contract Manager or another qualified representative in the techniques of monitoring and observing eagles. The Professional Services Contract Manager will be responsible for preparing an eagle monitoring plan in conjunction with the Contractors work plan when it involves work within the restricted area or any timing restriction period.

The Professional Services Contract Manager shall meet one of the following criteria.

1. Have a Bachelor of Science degree in biology, environmental science or ecology and be presently working in that profession.

2. Have 2 years experience monitoring and observing eagles or other birds of prey or studying their habitat.

The onsite eagle monitor shall be an employee of the Professional Services Contract Manager and shall be at least 18 years of age and physically able to perform the required work.

651-4.01 METHOD OF MEASUREMENT. Item 651(1) Eagle Monitoring will be measured in the manner specified in the directive authorizing the work.

651-5.01 BASIS OF PAYMENT. Payment for Item 651(1) Eagle Monitoring will be made on the receipts for authorized monitoring plus 15 percent, and shall be considered full compensation for labor, equipment and materials required to do eagle monitoring.

Payment will be made under:

Pay Item No.	Pay Item	Pay Unit
651(1)	Eagle Monitoring	Contingent Sum

55260-033114

Special Provisions

Add the following Section:

SECTION 669

AUTOMATED TRAFFIC RECORDERS

669-1.01 DESCRIPTION. This work shall consist of reconstruction, refurbishing, and installation of Automated Traffic Recorder (ATR) stations.

ATR consists of inductive loop and piezoelectric sensors connected to a traffic counter. In each traffic lane, two inductive loops are separated by a specific travel distance and buried beneath the pavement. Two piezoelectric sensors are located adjacent each inductive loop, embedded in the pavement surface. Lead wires run in underground conduit from the sensors to a type CBA2 cabinet located at the side of the road. Inside the type CBA2 cabinet, the lead wires connect to the traffic counter. The traffic counter detects the presence and speed of passing vehicles from inductive loop signals. The traffic counter detects axle number and center-to-center axle spacing from piezoelectric signals. Presence, speed and axle passage information is processed by the traffic counter to classify the number and type of vehicles, which is stored for later retrieval. ATRs are operated and maintained by personnel of the Highway Data Section (HDS); main office located at 2200 E. 42nd Ave., Anchorage, phone (907) 269-0876.

ATR stations may be equipped with a Temperature Data Probe (TDP), which consists of temperature sensors connected to a datalogger. Sampled conditions may include air temperature, pavement profile temperatures and subgrade profile temperatures. Temperature sensors send voltage signals to the datalogger. Sensor voltage levels are processed by the datalogger to yield temperature information, which is stored for later retrieval.

ATR stations may be equipped with a snow shield, which consists of a cast concrete base and wood snow shield structure.

The locations of traffic detection sensors and cabinets, shown on the Plans are approximate and the Engineer shall establish the exact locations in the field after consultation with the DOT/PF HDS.

669-1.02 REGULATIONS AND CODE. Use materials and workmanship that conforms to the standards of the Underwriter's Laboratories, Inc. and the National Electrical Safety Code and local safety code requirements, where applicable.

Use electrical equipment that conforms to the standards of the National Electrical Manufacturer's Association, where applicable.

669-2.01 MATERIALS. Unless otherwise stated, provide new materials that meet the following requirements:

1. Wiring. Subsection 660-3.05, Wiring. Use single wire conductors and cables that have clear, distinctive and permanent markings on the outer surface throughout the entire length giving the manufacturer's name or trademark, insulation type-letter designation, conductor size, voltage rating and the number of conductors if a cable. Home run label all wires and cables in each junction box and cabinet; for example, W1SLA (for wire) and GaSLA (for cable) as shown on the Plans.

2. Conduit. Subsection 660-3.03, Conduit. Use galvanized rigid metal for conduits, except for PVC conduit forming the inductive loops. Provide grounding bushings with plastic-sleeves to minimize the potential for insulation damage during wire pulls.

3. Junction Boxes. Subsection 660-3.04, Junction Boxes. Label the covers of all junction boxes used for loops or sensor wires 'TRAFFIC'. Label the covers of all junction boxes used to provide electrical service to ATR installations 'ELECTRIC'. Keep junction boxes for 120V/240V electrical service completely separate from junction boxes containing loop or sensor wiring

4. Terminal Blocks. Mount Terminal Blocks horizontally as shown in the plans. Use terminal blocks with nickel, silver or cadmium plated brass binder-head screw terminals. Use barrier type terminal blocks rated 600 VAC at 20 Amps, sized for 12-18 AWG wire with removable shorting bars in each position and with integral type marking strips.

5. Presence Loops. Use UL listed IMSA specification #51-5-1984 single conductor PVC nylon with tube jacket, type THHN, #14 AWG conductors for detector presence loops.

   Use twisted pairs of 18 AWG stranded tinned copper wire for multiple pair loop lead-in cable. Each twisted pair shall have its own 20AWG tinned copper drain wire. An aluminum foil shield shall surround each individual bundle of twisted pair and drain wire. Multiple pair loop lead-in cable shall have an overall PVC or PE outer jacket.

6. Electrical Load Centers. Use NEMA Type 3R Electrical Load Centers and provide a 120/240V 100 amp single-phase, three-wire-circuit electrical service.

7. Style CBA1 Cabinets. Cabinets shall meet or exceed a UL 50, NEMA Type 3R rating. CBA1 cabinet shall be a Hoffman #131JF, 20X17X15 or equal. Construct the cabinet and hinged door from 5052-H32 or better unpainted sheet aluminum alloy with a minimum thickness of 1/8 inch and a smooth grain finish on the exterior. Corbin #2 Key Lock. One (1) adjustable shelf. Drip Shield. Interior has four (4) instruct channels for installing adjustable shelves. Grounding points included on body and door. Door latching mechanism is a single point PowerGlide padlocking handly system which secures the door in the middle. A door stay is included at the botton of the door with three positions: 90, 120, and 180 degrees. Ensure that welds are neatly formed and free of cracks, blowholes and other irregularities. Ensure inside and outside edges of the cabinet are free of burrs. Design the cabinet with a sloped top to prevent the accumulation of water on its top surface.

8. Style CBA2 Cabinets. Cabinets shall meet or exceed a NEMA Type 3R rating. Cabinets shall be third party certified as an assembly. Style CBA2 cabinets shall meet the following requirements:

   a. Cabinet Dimensions. Unless otherwise shown on the Plans, the cabinet shall be 48 inches high, 27 inches wide, and 16 inches deep.

   b. Cabinet Construction. Construct the cabinet and door from 5052-H32 or better unpainted sheet aluminum alloy with a minimum thickness of 1/8 inch and a smooth grain finish on the exterior. Ensure that welds are neatly formed and free of cracks, blowholes and other irregularities. Ensure inside and outside edges of the cabinet are free of burrs. Design the cabinet with a sloped top to prevent the accumulation of water on its top surface.

   c. Door. Use double flanged door opening on four sides to prevent dirt and liquids from entering the enclosure when the door is opened. Provide a door restraint to prevent door movement in windy conditions. Provide a cabinet door that encompasses at least 80% of the cabinet frontal surface area and is hinged on the right side when facing the cabinet. Furnish the door with a gasket that satisfies the physical properties found in UL508 table 21.1 and forms a weather tight seal between the cabinet and the door. Use a hinge that is continuous and made of stainless steel or at least 2.2 mm thick aluminum. Securely weld the hinge along a quarter, or more, of its length or bolt the cabinet using stainless steel bolts and non-slip nuts.

   d. Latch/Lock. Use a 3 point draw roller type latching mechanism. Use either stainless steel or cadmium plated, Type II Class 1 or better center catch and pushrods. Use rollers with a minimum diameter of ¾ inch and made of nylon. Furnish a stainless steel operating handle with a ¾ inch shank. Use a Corbin #2 lock keyed lock that matches existing HDS cabinets. Furnish two keys with each lock.

   e. Ventilation. Provide ventilation using louvered vents in the front door with a removable air filter. Ensure louvers satisfy the NEMA rod entry test for 3R ventilated cabinets. Provide filters that cover the vents and are held firmly in place with bottom and top

brackets and a spring-loaded top clamp. Vent exhaust air out between the top of the cabinet and the door.

f. Shelves. Mount adjustable equipment shelves on "C" factory mounting channels inside of cabinet and support them on both sides. Mount 2 vertical channels on both sides of the cabinet and on the back, for a total of 6 inside each CBA2 cabinet. Construct shelves from 5052-H32 or better sheet aluminum alloy with a minimum thickness of 1/8 inch. Provide a shelf with a minimum depth of 10 inches. Ensure that shelves are adjustable to within 4 inches of the bottom and to within 8 inches of the top of the cabinet.

g. Keyboard Tray. Mount a retractable tray as shown in the Plans.

h. Circuit Breaker Panel. Ensure the circuit breaker panel conforms to the UL67 and NEMA PB1 standards. Use a MLO, single-phase, 3 wire configuration circuit breaker panel rated at 70 Amp (minimum) 120/240 Volts, in a NEMA Type 2 enclosure with separate neutral and ground buses. Unless shown otherwise in the Plans, or described herein, provide two 20 amp single pole type circuit breakers with a minimum short-circuit interrupting rating of 10,000 AIC. Circuit breaker #1 will serve the utility and equipment receptacles, and circuit breaker #2 will serve the thermostatically controlled outlet, cooling fan, and cabinet light.

i. Transient Voltage Surge Protection. Provide transient voltage surge protection, rated at a minimum 500 Volts at 3000 Amps integral to the circuit breaker panel, or integral to each individual circuit breaker.

j. Interior Light. Provide a fluorescent, 120-volt single-tube lamp interior light fixture rated at 13 watts minimum with ballast that will start the lamp at temperatures of 0°F. Provide a single pole, illuminated toggle switch, mounted inside of the cabinet door to control the light.

k. Cooling Fan. Provide a thermostatically controlled fan in the top of the cabinet that operates at a settable high temperature limit and exhausts air through a filtered and hooded vent at the top front of the cabinet. Set an integral thermostat at a temperature lower than the thermostat noted in Item "m" below so that the auxiliary thermostat controls the fan, and not any integral thermostat.

l. Thermostatically Controlled Outlet. Ensure that a thermostatically controlled single duplex outlet operates at a settable low temperature limit.

m. Thermostats. Provide remote bulb-type thermostats with SPDT contacts, rated for 16 amps @ 120 VAC for combined motor and resistive loads, for the thermostatically controlled outlet and cooling fan. Use Tradeline T6031A1029 (equal or better), White-Rogers, Johnson Controls, or Sunne brand thermostats. Ensure the thermostats for the "Thermostatically Controlled Outlet" have a contact that closes on lowering temperature and set at 50°F. Provide a thermostat for the "Cooling Fan" that has a contact that closes on rising temperature and set at 90°F. Mount sensing bulbs as shown on the Plans.

n. Conduit, Raceway and Layup. Provide EMT, liquid tight metal flex or metal clad conduit for wiring in 120V equipment including circuit breaker panel boards, lights, vent fans, and power receptacles. Terminate other low voltage wiring on terminal blocks and neatly train within the cabinet using wiring duct or ties.

o. Certification. The Cabinet Assembly consists of the cabinet itself and high voltage (greater than 24 volts) components that are permanently installed, including the circuit breaker panel, receptacles, light and fan as shown on the Plans or described herein. Obtain certification that the cabinet and associated permanently installed equipment, as a unit, complies with recognized applicable national standards through an authorized local or national testing agency or fabrication shop that complies with ANSI Z34.1-1987 "Third-Party Certification Programs for Products, Processes, and Services", including but not

limited to; Electrical Testing Laboratories (ETL), Underwriters Laboratories (UL), Canadian Standards Association (CSA), Electro Test Incorporated (ETI), or other certified testing agency recognized by the Labor Standards & Safety Division of the State of Alaska Department of Labor.

p. Ground Temperature Probe. To be provided by AKDOT, Highway Data Section for installation.

q. Ambient Air Temperature Sensor. To be provided by AKDOT, Highway Data Section for installation.

r. Heater. Portable heater rated 1200-1500 watts @ 120 VAC, fan forced, cord connected electric heater. Broan Model 6201 or equal. Single stage thematically controlled heater connection power cord, rated 16 at 120 VAC. 30oF to 100oF range. Sure-stat Cat #T118P or equal.

14. Piezoelectric Sensor, Class II. Locate 10 foot long piezoelectric sensor as shown in the plans.

1. Center Core. 16 gauge, flat, braided, silver plated copper wire.

2. Piezoelectric Material. Highly compressed piezoelectric copolymer, P(VDF-TrFE).

3. Outer Sheath. 0.406 mm thick brass, CDA-260, ASTM B 587-88.

4. Final Dimensions. ¼ inch wide x 1/16 inch thick; ±0.13 mm.

5. Insulation. Insulation resistance between core and shield: > 500M ohms.

6. Piezoelectric Coefficient: ≥ 20 pC/N – nominal.

7. Passive Signal Cable. RG 58 type with an underground/direct burial rated outer jacket. The OD of the cable is 1/5 inch. The nominal capacitance of the cable is 89 pF/m.

15. Concrete. Class A concrete meeting the requirements of Section 501.

16. Treated Lumber. As indicated on the Plans.

669-3.01 CONSTRUCTION REQUIREMENTS.

1. Wiring.

a. Referenced Requirements. Subsection 660-3.05, Wiring.

b. Termination. Terminate unused pairs at junction boxes within splices. Terminate unused pairs in terminal blocks at cabinets. Terminate and solder conductors, including unused spares to "spade" type terminal lugs at terminal blocks.

c. Relief. Provide at least 2 feet of slack cable for wiring in each junction box and at least 6 feet of slack cable available in the equipment cabinet before the terminal block.

d. Labeling. Label wiring in junction boxes and at terminal blocks.

2. Conduit.

a. Referenced Requirements. Subsection 660-3.03, Conduit, or as indicated on the Plans.

b. Pull Cords. Leave nylon pull cords in all conduits larger than 1 inch and in spare conduits.

c. Bushings. Ensure that plastic or plastic-sleeved bushings are in place before wire pulls are

performed.

3. Junction Boxes.

   a. Referenced Requirements. Subsection 660-3.04, Junction Boxes, or as indicated on the Plans.

   b. Voltage Limitation. Junction boxes used for ATR installations shall not contain wiring of systems at or greater than 24 V or conduits carrying wiring of systems at or greater than 24 V.

4. Terminal Blocks.

   a. Terminal Block Placement. Mount terminal blocks within cabinets so that terminals are easily accessible from the front of the cabinet.

   b. Labeling. Clearly label terminal blocks and wire pairs on the block.

   c. Termination. Terminate and solder conductors, including unused spares to "spade" type terminal lugs

5. Presence Loops.

   a. Placement Design Adherence. The Plans are not schematics; installation of the presence loops shall closely conform to the location and layout of conduit runs shown in the Plans. The contractor shall notify the Project Engineer 14 days prior to saw cutting the pavement for approval of the site layout.

   b. Presence Loop Dimensions. Unless otherwise noted on the plans, form presence loops using four turns of wire, making 6 feet square with a tolerance of ± 1 inch.

   c. Presence Loop Dimensions for On-Ramps and Off-Ramps. Form presence loops in On-Ramps and Off-Ramps using four turns of wire, making a rectangular 8 feet wide and 6 inch long with a tolerance of ± 1 inch.

   d. Lead-in Conduit. Place lead-in conduits straight and perpendicular to the centerline of the road from the edge of pavement to the presence loops.

   e. Presence Loop Alignment. Center presence detector loops in the traffic lane with a tolerance of ± 1 inch.

   f. Presence Loops in Asphalt.

      I. Loop Placement. Locate presence loops 16 feet from leading edge to leading edge unless otherwise noted on the Plans with a tolerance of ± 1 inch. Align presence loops in adjacent lanes within a tolerance of ± 1 inch.

      II. Compaction tests. Compaction test requirements are at the discretion of the Engineer.

6. Piezoelectric Sensors.

   a. Manufacturer's Recommendations: Install piezoelectric sensors according to AVC equipment and piezoelectric sensor manufacturer's recommendations. The piezoelectric sensor manufacturer's representative or a piezoelectric sensor manufacturer-certified installation technician must observe and approve piezoelectric sensor installations.

   b. Placement Design Adherence. The Plans are not schematics; install the piezoelectric sensors as close as possible to the locations and layouts of conduit runs shown in the

Plans.

c. Saw cut Requirement. Install piezoelectric sensors in saw cut slots in final pavement. "Block outs" are not allowed.

d. Coaxial Cable. Run coaxial cables to the equipment cabinet without splices. Terminate on the specified terminal block, with at least 6 feet of slack cable available in the equipment cabinet before the terminal block.

e. Lead-in Conduit. Install lead-in conduits from edge of pavement to the piezoelectric sensors straight and perpendicular to the centerline of the road. Install and cap lead-in conduits for piezoelectric sensors at the sensor end with tape or sealant before paving. Extend lead-in conduits beyond the edge of the pavement. Completing lead-in conduit runs to junction boxes and cabinets may be done before or after paving.

f. Piezoelectric Sensor Placement. Center each piezoelectric sensor in the travel lanes between sensors adjoining inductive loops unless otherwise noted on the Plans or directed by the Engineer. Install piezoelectric sensors with a tolerance of ± 1 inch.

g. Piezoelectric Sensors in New Asphalt. Install piezoelectric sensors in new asphalt pavement only after three days of normal traffic has passed over the final paving.

7. Cabinets.

a. Cabinet Placement and Orientation. Install cabinets out of the Clear Zone with the doors facing away from the road. Unless the orientation is otherwise noted on the plans.

b. Conduit Entry. Install conduit entries for above-ground enclosure through the bottom of the enclosure. No conduit runs shall be cut through the sides or top of above-ground enclosure.

c. Style CBA2 Cabinets Mounting. Mount style CBA2 cabinets on 4 inch GRMC or DN100 galvanized pipe and support with reinforced concrete foundations as shown on the Plans.

8. Utilities.

a. Electrical. Provide and install the Load Center as required per the Plans, specifications and the requirements of the appropriate Electrical Utility. Provide and install wiring from the load center to the equipment in the cabinet. Request inspection of the Load Center by the Department of Labor, Division of Mechanical Inspection (DOL/DMI). After approval of the load center by the DOL/DMI, inform the Engineer as to when electrical service is needed at the load center, with sufficient time to enable the HDS to schedule the installation with the Electrical Utility before commissioning of the equipment. The HDS will make arrangements in writing with the Electrical Utility to establish billing accounts. The Electrical Utility will provide service to the Load Center upon request of the Engineer.

b. Asphalt Pavement Roughness. No transverse seams, joints or roughness within 50 feet of any inductive loops placed in asphalt pavement section is allowed. Test the finished surface of the asphalt with a straightedge 10 feet long. Ensure that the surface does not vary more than ¼ inch from the lower edge of the straightedge within 50 feet of sensors at the ATR installations. At the Engineer's discretion, run an inertial profiler or a profilograph equipped with a chart recorder down each wheelpath of each lane for a distance of 50 feet before and after each ATR installation. HDS will supply the profilograph for the Contractor's personnel to operate. Ensure that the asphalt surface as recorded by the chart recorder does not vary more than ¼ inch in 10 feet.

c. Field Inspection. Notify the Engineer in writing a minimum of 3 working days in advance (excluding Saturday, Sunday and State or Federal Holidays) before installing conduit/wiring, inductive loops, bending plate equipment, piezoelectric cable, axle sensors, and cabinets.

The Engineer shall be present to approve the installation before backfill placement and paving. At the Contractor's expense, correct and allow the Engineer to re-inspect unacceptable installations for completeness prior to backfill placement and paving. The Contractor shall be required to excavate, remove, and replace all installations backfilled or paved without prior approval by the Engineer at the Contractor's expense.

d. DSL. Provide and install the phone line from the NID service box to the cabinet and connect to modem to ensure DSL connection.

669-3.02 ACCEPTANCE TESTING. Perform acceptance testing on ATR installations.

1. General Tests. Perform tests for the ATR installations according to subsection 660-3.01, Installation Details.

2. AVC Acceptance Tests.

a. Scope and Governance. In addition to the General Tests, perform Acceptance Tests on AVC installations. AVC acceptance tests govern acceptance or rejection of the AVC installation.

b. Manufacturer Participation. Observe acceptance tests and assist the AVC counter manufacturer's representative, or an AVC counter manufacturer-certified installation technician.

c. Highway Data Section Participation. Before beginning AVC Acceptance Tests, notify the HDS. Notify in writing, through the Engineer, a minimum of 3 working days before proposed testing (excluding Saturday, Sunday and State or Federal Holidays). Notification includes descriptions of the proposed test vehicles. A representative of the HDS approves descriptions of the proposed test vehicles in writing before testing and be on-site during final acceptance testing. Provide a tabulated listing of each vehicle's gross weight and measured axle spacing to the HDS representative before testing. The HDS representative must approve scheduling of data sampling and testing for each lane.

d. Results Certification. The Highway Data Manager or designated representative shall certify in writing when the installation has met the accuracy requirements of the acceptance tests.

e. Acceptance Test Procedure. Perform the Acceptance Tests as follows:

Acquire a set of test data for the AVC sensor array. Obtain test data by passing test vehicles over the AVC sensors in each lane. Test data consists of 10 valid samples per lane, for each of 3 test vehicles. Test data samples will include FHWA class designation and computed axle spacing for each sensor pass.

To be considered valid, obtain sample data under the following conditions:

The test vehicle must maintain good lane discipline while traversing the entire sensor array.

I. The test vehicle must maintain a constant speed, between 40 mph and the maximum speed limit, while traversing the entire sensor array.

II. Acquire data for a particular lane using the same group of 3 test vehicles.

III. Sample data from successive sensor passes of each test vehicle. Data may not be omitted or included out of order for any 10 samples.

IV. Sensor passes for the 3 classes of vehicles may be intermixed.

V. Sensor passes for multiple lanes may be acquired simultaneously.

f. Accuracy Requirements. The Automated Vehicle Classifier must meet the following requirements separately in each lane:

I. The AVC system correctly assigns FHWA class designation for 9 out of 10 successive sensor passes of each vehicle class.

II. The AVC system computes axle spacing to within 6 inches of the actual measurements, for 9 out of 10 successive sensor passes of each vehicle class.

g. Test Vehicles. Provide, and make arrangements for; test vehicles and drivers as needed for the acceptance testing.

The group of three test vehicles shall consist of one each of the following:

I. A two axle, six wheel, single unit vehicle (FHWA Class 5)

II. A three axle, ten wheel, single unit vehicle (FHWA Class 6)

III. A five axle, eighteen wheel, single trailer vehicle (FHWA Class 9), with high-cube-rated (HCR) trailer

h. Class 5 Vehicles. Class 5 vehicles shall meet the following requirements:

I. Spacing between steering and drive axles of 13 feet to 23 feet

II. Weight on the steering axle between 2,200 lb and 12,000 lb.

III. Weight on the driving axle between 7,000 lbs and 18,000 lb.

i. Class 6 Vehicles. Class 6 vehicles shall meet the following requirements:

I. Spacing between steering axle and the drive axle group of 13 feet to 23 feet

II. Spacing between the drive axles of 4 feet to 6 feet

III. Weight on the steering axle between 6,000 lb. and 12,000 lb

IV. Weight on the drive axle group between 20,000 lb. and 37,500 lb...

j. Class 9 Vehicles. Class 9 vehicles shall meet the following requirements:

I. Spacing between the steering axle and the drive axle group of 13 feet to 23 feet

II. Spacing between the drive axles of 4 feet to 6 feet

III. Spacing between the drive axle group and the trailer axle group of 25 feet to 45 feet

IV. Spacing between the trailer axles of 4 feet to 6 feet

V. Weight on the steering axle between 6,000 lb. and 12,000 lb.

VI. Weight on the trailer axle group between.20,000 lb. and.37,500 lb

k. Vehicle Loading. Ensure that three-test vehicles are loaded with non-shifting material to a minimum of 50% of legal load during testing.

l. Tire Inflation. Ensure that tires on the three-test vehicles are inflated to recommended pressures during testing.

m. Weighing Method. The gross weight of each test vehicle and the weight of each test vehicle's axle groups shall be determined by weighing on a static scale at a scale house operated by the State of Alaska Department of Commerce, Division of Weights and Measures.

An axle group is defined as any two axles whose centers are within 8 feet of each other. The Class 5 and Class 6 test vehicles each have two axle groups. The Class 9 single trailer test vehicle has three axle groups.

669-3.05 DELIVERABLES. Submit deliverables to the HDS before final approval of the work or as otherwise called for herein.

1. Materials Submittal.

a. Format and Contents. Provide a Materials Submittal of proposed equipment and materials for the ATR installations. The Materials Submittal shall consist of three collated copies of an equipment and materials portfolio. Each identical portfolio shall contain information of sufficient detail to determine the suitability of the equipment and materials proposed.

b. Table of Contents. Each portfolio shall include a table of contents listing each item's intended uses, item description, product name, manufacturer, model or part number and reference to associated information within the portfolio.

c. Reference Drawings. The Materials Submittal shall include a detailed shop drawing of each equipment cabinet showing the location of mounted components.

d. Delivery Interval. Deliver Materials Submittal for review and approval of the Highway Data Supervisor within thirty days following award of the Contract.

e. Liability. The State of Alaska will not be liable for any materials purchased, labor performed, equipment used or delay to the work before equipment and materials have been reviewed and approved.

2. Utility Schedule.

a. Provide a Utility Schedule identifying actions required ensuring activation of electrical and telephone service before installation and commissioning of ATR equipment at affected sites. The Utility Schedule shall consist of three collated copies of the lists of action items.

b. A separate list of chronologically and sequentially organized actions will be created for each affected ATR station.

c. On the lists, each action item shall include:

I. A description of the action

II. When the action will occur

III. The name, employer, position title and telephone number of the point of contact for initiating the action

IV. The name, employer, position title and telephone number of the party responsible for completing the action.

d. The Utility Schedule shall be delivered for review and approval of the Highway Data Supervisor within thirty days following award of the Contract.

3. As-Built Plans.

a. Prepare four complete sets of as-built plans, which will be current with the construction. These as-built plans shall detail construction changes made to the ATR design and include the following information on the appropriate sheets:

I. Location and depth of inductive loops, piezo sensors, conduit runs and scales.

II. Locations of equipment cabinets and junction boxes.

III. Station and offset of junction boxes

b. Present three sets of as-built plans to the Engineer, and affix one set to the inside of the cabinet door at the appropriate Automated Traffic Recorder Installation in a waterproof, clear plastic holder.

c. Redlines of full size construction plans will be acceptable as-builts.

4. Photographs.

a. Provide digital photographic prints CD format CD ROMs documenting sensor installations.

b. Deliver photographs and CD ROMs organized in one or more white colored, D-ring style, 3 ring binders with clear insert overlays on fronts and spines. CD ROMs will be placed in CD storage sheets inside the binders.

c. The photographs shall show the inductive loops and conduit in place before covering with gravel and pavement for asphalt pavement sites, or before covering with epoxy compound for concrete pavement sites. The photographs shall include:

I. Two or more overall views of each ATR installation showing placement of the inductive loops.

II. One or more views of each loop showing the loop and the conduit to the nearest junction box.

III. One or more views of each piezo sensor conduit showing the coaxial cable, saw cut, and conduit to the nearest junction box

IV. One or more views of each temperature sensor showing the lead cables, saw cut, and conduit to the nearest junction box

5. Test Results. Written or printed copies of the final results of tests, signed by the Contractor, shall be provided to the Engineer before acceptance of the Automated Traffic Recorder Installation.

6. Manuals. Provide to the Highway Data Manager installation, repair, and operation manuals for Automated Traffic Recording equipment supplied by the Contractor.

7. Materials.

a. Provide to the Highway Data Manager any ATR equipment, sensors, and epoxy grout remaining after installation.

b. Palletize the Deliverable Materials.

c. Group the contents of each pallet by like items.

d. Attach to each pallet a sealed plastic pouch containing complete copies of Material Safety Data Sheets that apply to the contents of that pallet.

e. Provide an itemized list of Deliverable Materials. For each item, the list shall detail:

I. Item description: including nature of the item, brand name, manufacturer name, model number, type number and serial number.

II. Item condition

III. Item quantity

f. Provide complete copies of Material Safety Data Sheets that apply to the Deliverable Materials. Attach Material Safety Data Sheets after the last page of the Deliverable Materials list.

669-4.01 METHOD OF MEASUREMENT. Section 109.

669-5.01 BASIS OF PAYMENT.

Items 669's: The Contract unit price for Automated Traffic Recorder installations shall be full compensation for furnishing equipment, labor and subsidiary materials necessary to complete the work as specified. This includes backfill materials, asphalt concrete pavement, portland cement concrete, pavement markings, load centers, as-built plans, providing the manufacturer's representative, acceptance testing, j-boxes, rigid conduit, traffic control, demolition, planing, loops, striping, and installing ATR OR AVC. Wet cutting with a concrete saw for pieso installations are subsidiary to 669 items.

The contract unit price for Item 669(4-H4) also includes Unclassified Excavation, Aggregate Base Course, concrete, lumber, materials, labor, and equipment necessary to construct the snow shield.

The installation of wiring and service to the Load Center(s) will be paid for under The Utility Agreement for Electrical Service. Installation of wiring and Service to the Network Interface Device(s) (NIDs) will be paid for under the Utility Agreement for Telephone Service.

Withholding: To ensure full compliance under this Section, twenty percent (20%) of the billings for each 669 item shall be withheld until deliverables have been provided to the Engineer as required and approval of the deliverables by the HDS has been received in writing.

Payment will be made under:

Pay Item No.	Pay Item	Pay Unit
669 (4-H1)	Automated Traffic Recorders - Site H1	Lump Sum
669 (4-H2)	Automated Traffic Recorders - Site H2	Lump Sum
669 (4-H3)	Automated Traffic Recorders - Site H3	Lump Sum
669 (4-H4)	Automated Traffic Recorders - Site H4	Lump Sum

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SECTION 670

TRAFFIC MARKINGS

Special Provisions

670-1.01 DESCRIPTION. Add the following:

Furnish, locate and install Pavement Markings as shown on the Plans and as directed.

Pavement Marking Type: Methyl Methacrylate (MMA)

670-2.01 MATERIALS. Replace the material reference,

"Methyl Methacrylate Markings	Subsection 712-2.17", with,
Methyl Methacrylate Pavement Markings	Subsection 712-2.17

Methyl Methacrylate Pavement Markings are a combination of methyl methacrylate, glass beads and anti-skid aggregate.

Replace the last sentence with the following:

Submit a single certification from the manufacturer of the marking material, for each material combination, certifying the combination of marking material, glass beads and anti-skid aggregate, as furnished, provides the durability, retroreflectivity, and skid resistance specified.

670-3.01 CONSTRUCTION REQUIREMENTS. Delete No. 4 and substitute the following:

4. Methyl Methacrylate Pavement Markings (MMA).

   a. General. 15 days before starting work meet with the Engineer for a prestriping meeting. At this meeting, do the following:
      (1) Furnish a striping schedule showing areas and timing of work, placing materials and the Traffic Control Plans to be used.
      (2) Discuss placement of materials, potential problems.
      (3) Discuss work plan at off ramps, on ramps and intersections.
      (4) Discuss material handling procedures.
      (5) Provide copies of the manufacturer's installation instructions and copies of the Material Safety Data Sheets.

   b. Manufacturer's Representative. Provide the services of a manufacturer's representative (the "Manufacturer's Representative"). Ensure the Manufacturer's Representative observes the application of the pavement marking materials. Cooperate with the Manufacturer's Representative and the Engineer to ensure that the materials are placed according to these Specifications and the manufacturer's recommended procedures.

   c. Manufacturer Certified Installers. Install pavement markings using only striping installers certified by the marking materials manufacturer for the specific striping material and method. Submit these certifications to the Engineer at the Preconstruction Conference.

   d. Preparation. Prepare the roadway surface to receive pavement markings according to these Specifications and the manufacturer's recommendations. Clean and dry the roadway surface. Completely remove contaminants such as dirt, loose asphalt, curing agents, surface oils, or existing road marking materials before applying pavement marking material.

e. Equipment.

(1) Grooving Equipment.
Use grooving equipment that produces a dry cut. Use vacuum shrouded equipment or other equally effective containment procedures.

(2) Marking Equipment.
(a) Longitudinal Marking: Use truck mounted application equipment capable of installing a double centerline and a single shoulder line in a single pass. Use automatic bead applicators that place a uniform layer of beads on the lines. Hand units are not permitted.
(b) Other Markings: Use manual or automatic application equipment. Use stencils or extruders to form sharply defined markings.

f. Application. Apply marking material according to these Specifications and the manufacturer's recommendations. Use equipment designed and capable of properly mixing at the place and time of application and approved by the manufacturer for the type of product being installed.

Anti-skid Aggregate. During marking material application, anti-skid aggregate will be evenly distributed and visible throughout the top 20 mils of the marking material mixture, and after the application, in the surface of the cured material.

SURFACE APPLIED

Marking thickness will be measured from the pavement surface.

(1) Longitudinal Markings. Apply markings for lane lines, edge lines, and centerlines to yield a thickness of 60 mils.

(2) Other Markings.
(a) Transverse and Symbol Markings:
Apply marking for symbols, arrows, stop bars, railroad symbols, and cross walks to yield a thickness of 60 mils.
(b) Gore Markings:
Apply diagonal gore markings to yield a thickness of 60 mils.

INLAID

Groove the area(s) designated in the Plans. Install markings in the same work shift as the grooving operation. Markings will be measured flush with the pavement surface.

(1) Longitudinal Markings. Groove the pavement to a depth of N/A mils. Apply markings for lane lines, edge lines, and centerlines to yield a thickness of N/A mils.

(2) Other Markings.
(a) Transverse and Symbol Markings:
Groove the area for inlaid markings to a depth of 250 mils. Apply marking for symbols, arrows, stop bars, railroad symbols, and cross walks to yield a thickness of 250 mils.
(b) Roundabouts:
As designated on the plans, groove the area for inlaid markings in roundabouts to a depth of N/A mils. Apply markings to yield a thickness of N/A mils.
(c) Gore Markings:
Diagonal gore markings will not be inlaid unless shown in the Plans.

g. Disposal of Waste. Waste material(s) are the Contractor's property. This includes grindings and removed marking material. Do not dispose of or store waste material(s) on State property. Dispose of waste material(s) according to applicable Federal, State, and local regulations.

h. Sampling. On the form provided by the Engineer, record the following readings and locations where they were taken using project stationing, and submit them to the Engineer with 24 hours for evaluation. Thickness of material and depth of slot are measured from the surface of the pavement.

SURFACE APPLIED

(1) For surface applied longitudinal applications, measure the thickness of the lines (above the pavement surface) at the time of application, every 500 feet.

(2) For surface applied other markings measure the thickness in three locations for each marking.

INLAID

(1) For inlay longitudinal applications, record the depth of the slot every 500 feet during the grinding operation.

(2) For inlay other markings measure the thickness in three locations for each marking.

Inspect the markings initially, and again two weeks after placement, to ensure the material has cured properly. Remove soft spots or abnormally darkened areas and replace with material meeting specifications.

The Engineer may elect to use the Contractor's readings or perform additional sampling.

Add the following:

Refer to the Survey Field Books identifying the no passing zones (see Subsection 642-3.01)

670-3.04 PAVEMENT MARKING REMOVAL. Add the following:

Coordinate removal work with construction activity. Remove pavement markings the same day permanent markings are applied, unless otherwise directed. Use vacuum shrouded equipment or other equally effective containment procedures.

Replace Subsection 3.06 with the following:

670-3.06 TOLERANCE FOR LANE STRIPING.

1. Length of Stripe. ± 2 inches.
2. Width of Stripe. ± 1/8 inch.
3. Lane Width. ± 4 inches from the width shown on the Plans.
4. Stripes on Tangent. Do not vary more than 1 inch laterally within a distance of 100 feet when using the edge of the stripe as a reference.
5. Stripes on Curves. Uniform in alignment with no apparent deviations from the true curvature.
6. All Stripes. Keep the center of the stripe within planned alignment.
7. Double Stripes. ± 1/4 inch.
8. Thickness of Surface Applied. Minimum specified to a maximum of + 30 mils.
9. Depth of Inlay Slot. Minimum specified to a maximum of + 40 mils.

10. Thickness of Inlaid Marking Material. Fill inlay area completely from the bottom of the inlay to the surface of the pavement.

If it is determined that the material is being placed too thin, the beads are not properly placed, the anti-skid aggregate is not visible, or otherwise not to specification, make immediate adjustments to correct the problem.

Pavement markings applied by any method will be unacceptable if:

1. Marking is not straight or wide enough.
2. Thickness of line is not uniform.
3. Thickness of line is less than specified.
4. Material is uncured.
5. Material blackens or is inconsistent in color.
6. Inlay slot is not the specified depth.
7. Inlay slot is not filled to the specified depth.
8. Edge of the markings is not clear cut and free of overspray.
9. Reflective elements are not properly embedded.
10. Retroreflectivity of the markings is less than specified.
11. Anti-skid aggregate is not visible in the marking material during application and the dried surface.
12. Markings exhibit poor adhesion.
13. Color is not as specified.

Perform repairs using equipment similar to the equipment initially used to place the materials. Do not perform repairs in a "patch work" manner. If more than one repair is required in a single 500 foot section, grind and repair the entire section.

670-4.01 METHOD OF MEASUREMENT. Add the following:

Thickness will be measured from the top of the marking to the top of the pavement surface. Marking material placed in a depression left by pavement line removal will not be included in measuring the thickness of the line.

Delete No. 2.

Delete No. 3 and replace with the following:

3. Each. Pavement markings using letters, numbers, and arrows will be measured on a unit basis with each separate word or symbol constituting a unit. Railroad Markings will be measured by the complete unit shown for each lane of travel.

Add the following No. 4:

4. Foot Basis. Longitudinal pavement markings, transverse, and gore markings, surface applied or inlaid will be measured by the linear foot of 4 inch wide line. Wider striping will be measured in multiples of 4 inches.

670-5.01 BASIS OF PAYMENT. Add the following:

For all phases of construction: There will be no separate payment for:

- Over-runs of material caused by the variation of the gradation of the asphalt
- Additional material required to achieve the thickness specified on open graded pavement

All work and materials associated with pavement markings are subsidiary to 670 items, including but not limited to:

- Milling for installation of the inlaid pavement markings including the removal of millings
- Temporary pavement markings and removal of conflicting markings, including repair of the roadway surface, milled surface or otherwise
- Traffic Control required for the installation of permanent and temporary pavement markings, removal of conflicting markings, and repairs

Replace Item 670(10) with the following:

Payment will be made under:

Pay Item No.	Pay Item	Pay Unit
670(10)	MMA Pavement Markings	Lump Sum
670(10A)	MMA Pavement Markings, Longitudinal Surface Applied	Linear Foot
670(10B)	MMA Pavement Markings, Symbols and Arrow(s) Surface Applied	Each
670(10C)	MMA Pavement Markings, Transverse and Gore Surface Applied	Linear Foot
670(10D)	MMA Pavement Markings, Longitudinal Inlaid	Linear Foot
670(10E)	MMA Pavement Markings, Symbols and Arrow(s) Inlaid	Each
670(10F)	MMA Pavement Markings, Transverse and Gore Inlaid	Linear Foot

Delete Items 670(11) and 670(12).

CR246-110812

Special Provision

Add the following Section:

SECTION 682

UTILITY POTHOLING

682-1.01 DESCRIPTION. Expose subsurface utilities using a vacuum-extract truck. Record the location of the utility(s). Backfill the pothole and dispose of waste materials.

682-2.01 MATERIALS.

Backfill Material:	Aggregate Base Course, Grading D-1	Section 703
Asphalt Patch Material:	Hot Mix Asphalt Type II, Class B	Section 401

682-3.01 CONSTRUCTION. Submit the utility potholing schedule to the Engineer and utility companies not less than 7 days before starting potholing.

Deliver the vacuum-extract truck to the job-site with the debris tank empty.

Expose the subsurface utilities. Log the as-built information, subsection 682-3.02. Backfill the pothole immediately after the Engineer accepts the logged data. Backfill the first 6 inch lift using the excavated material, compact the material. Backfill the balance of the pothole using Aggregate Base Course, Grading D-1, compact the material. In paved areas, use Hot Mix Asphalt Type II, Class B to patch over the pothole, match the thickness of the surrounding pavement.

Dispose of excavations off-site. Before beginning potholing, provide to the Engineer a certificate, signed by the owner or owner's representative, identifying the disposal site and acceptance of the project potholing excavations.

Utilities damaged by the potholing operation require the Engineer to be immediately notified. The Contractor is responsible for the repairs and the associated costs. Contact and coordinate repairs with the utility owner.

682-3.02 AS-BUILTS. Create a utility pothole log, as-built, recording for each pothole: the date of potholing operation, utility type and size, station, offset, elevation, groundwater, and other pertinent data. Survey the utility location using the project horizontal and vertical control; comply with the requirements of Section 642. Submit the completed log to the Engineer within two working days following the completion of the pothole excavation.

682-4.01 METHOD OF MEASUREMENT. The pay unit, contingent sum, is measured by the hour of work performed.

682-5.01 BASIS OF PAYMENT. Pay Item No. 682(1) is paid at $450/hour for the work to pothole; expose the utility(s), backfill the hole, patch disturbed pavement and dispose of excavations. The paid time includes the work; labor, and the fully operated vacuum truck or combination of vacuum truck and other Engineer approved equipment engaged in potholing at the area(s) identified in the Plans and/or identified by the Engineer. The paid time includes the time to empty the vacuum truck of excavation material, including the travel time, from this project only, to a certified disposal site.

Travel time to and from the project, idle time, maintenance and repairs (labor, material and time) are incidental and not included in the measured time.

As-built, utility pothole log, per subsection 682-3.02, will be paid under Section 642.

Potholes for the Contractor's information and potholes not accepted by the Engineer will not be paid for by the Department.

Payment will be made under:

Pay Item No.	Pay Item	Pay Unit
682(1)	Vac-Truck Pothole	Contingent Sum

55260/56176-013114

SECTION 701

HYDRAULIC CEMENT

Special Provision

701-2.03 GROUT. Add to end of last sentence:

from specimens made according to WAQTC TM 12.

CR7011-081210

SECTION 702

ASPHALT MATERIALS

Special Provision

702-2.01 ASPHALT CEMENTS. Meet AASHTO M 320 and the following:

ADDITIONAL REQUIREMENTS FOR PERFORMANCE GRADED ASPHALTS

Replace the column heading, **PG 64-28**, with, **PG 58-34**.

CR7021-102411

SECTION 703

AGGREGATES

Special Provisions

703-2.03 AGGREGATE FOR BASE.

Delete Table 703-2 and substitute the following:

TABLE 703-2
AGGREGATE FOR UNTREATED BASE
(Percent Passing By Weight)

Sieve Designation	Grading C-1	Grading D-1	Grading E-1
1 ½ inch	100	-	-
1 inch	70-100	100	100
3/4 inch	60-90	70-100	70-100
3/8 inch	45-75	50-79	50-85
No. 4	30-60	35-58	35-65
No. 8	22-52	20-47	23-50
No. 30	10-33	10-26	13-31
No. 50	6-23	6-19	10-26
No. 200	0-6	0-6	8-15

Replace Subsection 703-2.04 with the following:

703-2.04 AGGREGATE FOR HOT MIX ASPHALT PAVEMENT. Process and crush aggregate that is free from clay balls, organic matter, other deleterious material, and not coated with dirt or other finely divided mineral matter. Aggregate used must consist of sound, tough, durable rock of uniform quality.

Remove all natural fines passing a No. 4 sieve before crushing aggregates for Type IV, V, and VH mixtures.

Coarse Aggregate. Aggregate retained on the No. 4 Sieve.

Meet the following requirements:

Description	Specification	Type IIA	Type I, IIB, III	Type IV	Type V	Type VH
LA Wear, % max	AASHTO T 96	45	45	45	45	45
Degradation Value, Min	ATM 313	30	30	30	30	30
Sodium sulfate Loss % max (5 cycles)	AASHTO T 104	9	9	9	9	9
Fracture, min %	ATM 305	90, 2 face	80, 1 face	90, 2 face	98, 2 face	98, 2 face
Flat-Elongated Pieces, max % **1:5**	ATM 306	8	8	8	8	8
Absorption, max. %	AASHTO T 85	2.0	2.0	2.0	2.0	2.0
Nordic Abrasion, max %	ATM 312	-	-	-	-	8

Hard Aggregate that meets the Nordic Abrasion values specified may be obtained from, but not limited to, the following sources:

- MS 52-068-2, owned by Granite Construction Incorporated., located at MP 217 on the Parks Highway near Cantwell
- Alaska Lime Co, Jim Caswell, located at MP 216.5 on the Parks Highway near Cantwell
- CalPortland plants located in Dupont Washington
- Jack Cewe Ltd located in Coquitlam British Columbia, Canada

Fine Aggregate. Aggregate passing the No. 4 sieve.

Aggregate shall meet the quality requirements of AASHTO M 29, including S1.1, Sulfate Soundness.

Aggregate for Type II, Class A mix shall not contain more than 10% natural fines (blend sand and mineral filler) added to the crushed aggregate.

Aggregate for Type IV, V, and VH mixes:
- do not blend back natural sand
- shall be non-plastic as determined by WAQTC FOP for AASHTO T 90
- shall have a minimum uncompacted void content (Fine Aggregate Angularity) determined by AASHTO T 304, Method A, of 45%

TABLE 703-3
BROAD BAND GRADATIONS FOR HOT MIX ASPHALT PAVEMENT AGGREGATE
(Percent Passing by Weight)

Sieve	Gradation				
	Type I	Type II	Type III	Type IV	Type V, VH
1 inch	100	-	-	-	-
3/4 inch	80-90	100	-	-	100
1/2 inch	60-84	75-90	100	100	65-90
3/8 inch	48-78	60-84	80-90	80-95	55-80
No. 4	28-63	33-70	44-81	55-70	40-60
No. 8	14-55	19-56	26-70	35-50	≤ 45
No. 16	9-44	10-44	16-59	20-40	≤ 35
No. 30	6-34	7-34	9-49	15-30	≤ 25
No. 50	5-24	5-24	6-36	10-24	≤ 20
No. 100	4-16	4-16	4-22	5-15	≤ 12
No. 200	3-8	3-8	3-8	4-8	3-8

Note:
1. No tolerance is allowed beyond the Broad Band Limits of the No. 200 Sieve.

CR7031-021414

Standard Modification

Add new subsection 703-2.15.

703-2.15 CRUSHED GLASS. Up to 10% by weight crushed glass (cullet) smaller than 3/8-inch may be uniformly blended with natural soil-aggregate material prior to project delivery and placement. Glass cullet must be free of soil, paper, plastic, metals, organic material and other deleterious and hazardous substances. No more than 2.0% debris should be present as determined by Section X3 of AASHTO M318.

Eligible glass products from which glass cullet might be produced include: food and beverage container glass; plain ceramic or china dinnerware; or building window glass.

Prohibited glass products include: automobile windshields or other glass from automobiles; light bulbs of any type; porcelain products; laboratory glass; television, computer or other cathode ray monitor tubes.

Provide documentation certifying that the glass cullet:

1. Showing the origin of the glass products,
2. Does not contain prohibited materials,
3. Meets debris content requirement.

Uniformly blend glass cullet and natural soil-aggregate and meet the following gradation requirements for the type specified:

TABLE 703-13

Type (Section)	Section/Table
Selected material (203-3.03)	Section 703-2.07
Base Course (301)	Table 703-2
Subbase (304)	Table 703-8

For the natural soil-aggregate used in the blend, meet quality requirements as shown in Table 703-1, Section 703-2.07, or Section 703-2.09 for the type specified.

E95-080112

SECTION 710

FENCE AND GUARDRAIL

Standard Modification

Delete Subsection 710-2.04 METAL BEAM RAIL and replace with the following:

710-2.04 METAL BEAM RAIL. Meet AASHTO M 180-00, Class A, Type II. Galvanize the rail per ASTM A653 after factory roll formed and punched.

E83-100410

Delete Subsection 710-2.06 GUARDRAIL POSTS AND BLOCKS and replace with the following:

710-2.06 GUARDRAIL POSTS AND BLOCKS. Furnish posts and blocks, as specified, meeting the following requirements.

1. Wood Posts and Blocks. Use timber with a stress grade of 1200 psi or more. Testing must meet the standards of the West Coast Lumber Inspection Bureau. Use timber for posts and blocks that is either rough sawn (unplaned) or S4S with nominal dimensions indicated. Allowable size tolerance of rough sawn blocks in the direction of the bolt holes is ± 1/4 inch. Only one combination of post and block finish may be used for any one continuous length of guardrail. Treat all timber to meet Section 714.

2. Steel Posts and Blocks. Meet the section and length specified or shown on the Plans. Use copper bearing steel when so specified. Use steel meeting the requirements of ASTM A 36 and galvanized per ASTM A 123.

3. Synthetic Blocks. Product made from alternate materials may be used if accepted by the FHWA for use on the National Highway System.

E84-100410

Delete Subsection 710-2.11 GUARDRAIL TERMINALS and replace with the following:

710-2.11 GUARDRAIL TERMINALS. Meet coating requirements of AASHTO M 180, Class A, Type II. Galvanize after fabrication. Fabrication includes forming, cutting, shearing, punching, drilling, bending, welding, and riveting. Provide one of the following terminal types, as shown on the plans, for single-rail W-beam guardrail. Provide terminals that pass NCHRP 350 or MASH Test Level 3 and meet the following requirements:

1. Controlled Release Terminal. Meet the requirements of Standard Drawing G-25.

2. Parallel Terminal.

   a. Requirements:
      (1) Crashworthiness: Provide terminals that pass NCHRP 350 or Mash Test Level 3.
      (2) Length: 50 feet.
      (3) End Offset: 0 to 2 feet (25:1 or flatter straight taper) offset end as shown on the plans.
      (4) Posts: Use posts that are:
         (a) Steel post with hinge or
         (b) Yielding or breakaway steel post in steel tube

   b. Acceptable models include the following or approved equivalent:
      (1) Sequential Kinking Terminal (SKT) manufactured by Road Systems, Inc., 3616 Old Howard County Airport, Big Spring, Texas 79720, Telephone (432) 263-2435.
      (2) Extruder Terminal (ET-Plus) manufactured by Trinity Highway Products, L.L.C., 950 West 400 South, Centerville, Utah 84014, Telephone (801) 292-4461.

c. Install AASHTO M 268, Type III, IV, or V retro-reflective sheeting (2.0 square feet, minimum) on the end section of parallel terminals consisting of yellow and black bars sloping 45 degrees downward toward the traffic side of the terminal.

3. Buried in Backslope Terminal. Meet the requirements of Standard Drawing G-15.

E85-100410

SECTION 712

MISCELLANEOUS

Standard Modifications

712-2.06 FRAMES, GRATES, COVERS, AND LADDER RUNGS. In Gray iron castings, delete text and replace with:

AASHTO M 306 and AASHTO M 105, Class 35B.

E46-012707

Replace Subsection 712-2.08 with the following:

712-2.08 GLASS BEADS. Submit certifications of compliance as specified in Section 106-1.05 for each lot of glass beads used on the contract. Glass beads shall contain no more than 200 ppm of lead, 200 ppm of antimony, or 200 ppm of arsenic when tested in accordance with EPA 40 CFR 261.4. Glass beads shall meet AASHTO M 247, Type 1, with a moisture resistant coating when tested in accordance with AASHTO TP 97.

E99-051513

Special Provisions

712-2.17 METHYL METHACRYLATE PAVEMENT MARKINGS. Replace No. 1. Quality Requirements: with the following:

1. Quality Requirements: Use a marking material formulated for the application type specified. Use a marking material manufactured from new materials and free from dirt and other foreign material. Use a methyl methacrylate based resin system for part "A". Use benzoyl peroxide system for part "B".

   Extruded or stenciled application: Material formulated for extruded or direct stenciled application with factory intermix beads, and anti skid aggregate and the application of additional surface applied beads.

   Submit a manufacturer certification for both the methyl methacrylate material, glass beads and anti-skid aggregate to ensure that the materials furnished conform to these Specifications.

2. Performance Properties: Add the following:

   I. Color: Yellow, PR-1 Chart, 33538 Federal Yellow. White, minimum daylight reflectance of 84.

712-2.18 GLASS BEADS FOR METHYL METHACRYLATE PAVEMENT MARKINGS. Replace the bead table with the following:

Use the type and quantity of beads specified in writing by the marking material manufacturer required to satisfy the specified performance requirements. The written certification will note the bead coating is compatible with the marking material binder.

1. Bead Manufacturer and Type.

   a. Swarco, Megalux-Beads or
   b. Approved equal beads

   Approved Equal Beads. Equal beads will demonstrate:
   (1) Bead coatings compatible with marking materials. Marking Material Manufacturer will certify compatibility.
   (2) Lasting retro reflectivity.

CR246-010109

SECTION 719

STEEL, GRAY-IRON AND MALLEABLE IRON CASTINGS

Standard Modification

719-2.02 GENERAL REQUIREMENTS. In Gray-Iron Castings, delete text and replace with:

AASHTO M 306 and AASHTO M 105, Class 35B.

E47-012707

SECTION 724

SEED

Special Provision

724-2.02 MATERIALS.

Delete Table 724-1 and replace with the following:

TABLE 724-1
SEED REQUIREMENTS

Species	Sproutable Seed, %, Min.
Arctared Red Fescue	78
Egan American Sloughgrass	67
Norcoast Bering Hairgrass	71
Nortran Tufted Hairgrass	71
Wainwright Slender Wheatgrass	88
Alyeska Polargrass	71
Bluejoint	71
Tilesy Sagebrush	71
Tundra Glaucous Bluegrass	76
Gruening Alpine Bluegrass	72
Nugget Kentucky Bluegrass	76
Beach Wildrye	70
Annual Ryegrass	76
Perennial Ryegrass	76

*Sproutable Seed is the mathematical product of Germination and Purity.

CR7241-101711

SECTION 726

TOPSOIL

Special Provision

Delete Subsection 726-2.01, except for Table 726-1 and replace with the following:

726-2.01 TOPSOIL. Furnish topsoil that is representative of the existing, natural organic blanket of the project area. Perform a quality test, as defined by ATM 203, on the soil to determine the organic content of the soil. Supply the results to the Engineer.

Soil with an organic content of 5 percent or more may be reused and spread on the finished slopes where topsoil is noted on the plans. Remove roots, stumps, unnatural material, and rocks greater than 3 inch in diameter from the organic material before it is graded onto the finished slope.

Soil with an organic content of less than 5 percent cannot be used as topsoil for the project. In this case furnish topsoil consisting of a natural friable surface soil without admixtures of undesirable subsoil, refuse or foreign materials having an organic content of 5 percent or more, as determined by ATM 203. The material shall be reasonably free from roots, clods, hard clay, rocks greater than 3 inches in diameter, noxious weeds, tall grass, brush, sticks, stubble or other litter, and shall be free draining and nontoxic. Notify the Engineer of the topsoil source location at least 30 calendar days before delivery of topsoil to the project from the identified location. The Engineer will inspect the topsoil and its sources before approval will be granted for its use.

CR208-112707

Special Provisions

Replace Section 727 with the following:

SECTION 727

SOIL STABILIZATION MATERIAL

727-2.00 GENERAL. Free of noxious weeds, seeds, chemical printing ink, germination and growth inhibitors, herbicide residue, chlorine bleach, (except where specified: rock, metal, plastics) and other deleterious materials and not harmful to plants, animals and aquatic life. Wood cellulose "paper" fiber, wood chips, sawdust, and hay are not permitted as stabilization materials.

727-2.01 MULCH. Flexible blanket/covering, temporary degradable (bio/photo) form of erosion control. Use one of the following:

Dry Erosion Control, Stabilization Products. Hand applied or spread with mulch blower equipment.

1. Straw. Use straw, in an air-dried condition, from oats, wheat, rye, or other approved grain crops that are free from noxious weeds, seeds, mold, or other materials detrimental to plant life. Straw material shall be certified weed-free straw using North American Weed Management Association (NAWMA) Standards. In-lieu of certified weed-free straw provide documentation that the material is steam or heat treated to kill seeds or provide U.S. or state's department of agriculture laboratory test reports, dated within 90 days prior to the date of application showing that there are no viable seeds in the straw.

2. Shredded Bark Mulch. Shredded bark and wood with the following characteristics:
   a. Not containing resin, tannin, or other compounds in quantities harmful to plant life.
   b. Maximum length of individual pieces is 2 inches with 75% passing through a 1 inch sieve.
   c. Will form a uniform ground cover/mat, have moisture absorption, retention, and percolation properties, not be susceptible to spreading by wind or rain providing a good growth medium.
   d. May contain up to 50% shredded wood material.
   e. Shredded wood material aged 1 year minimum prior to use.

Hydraulic Erosion Control Products (HECPs) Applied hydraulically.

A fiber mulch matrix: biodegradable and composed of wood, straw, coconut and other fibers natural and man-made. When applied, create a continuous, porous, absorbent high water holding, flexible blanket/mat/mulch/covering making intimate contact with, and adhering to sloped soil surface; permitting water infiltration; resists erosion and promotes rapid germination and accelerated plant growth. The fibers may be thermally processed, and cross-linked with a hydro-colloidal or linear anionic tackifier (curing period 24-48 hours) or mechanically-bonded (no curing period). When agitated in slurry tanks with water the fibers will become uniformly suspended, without clumping to form homogeneous slurry.

The HECPs shall be delivered premixed by the manufacturer. The HECP will contain only the materials provided in the sealed containers from the manufacturer. No added components are permitted after the manufacturer seals the product container, before application, during application or otherwise. Submit documentation dated within 3 years of application, from an independent accredited laboratory as approved by the Engineer, showing that the product's testing performance meets the requirements for the slope(s) to be protected on the project, according to the National Transportation Product Evaluation Program (NTPEP), Erosion Control Technology Council (ECTC) and or the Texas DOT/Texas Transportation Institute (TTI) Laboratory.

If the HECP contains cotton or straw provide documentation that the material is certified weed free using NAWMA Standards. In-lieu of certified weed-free straw, provide documentation that the material is steam or heat treated to kill seeds or provide U.S. or state's department of agriculture laboratory test reports, dated within 90 days prior to the date of application showing that there are no viable seeds in the straw.

The HECP shall contain a dye to facilitate placement and inspection of the material.

1. Wood Strand, Fiber.
   A blend of angular, loose, long thin wood pieces with a high length to width ratio and that are frayed. Minimum 95% of strands between 2 inches and 10 inches, at least 50% of the length shall have a width thickness between 1/16 and 1/8 inch. No single strand shall have a width or thickness greater than 1/2 inch. Processed wood fiber with the following characteristics:
   a. Will remain in uniform suspension in water under agitation and will blend with grass seed, fertilizer and other additives to form homogeneous slurry.
   b. Will form a blotter-like uniform ground cover on application, have moisture absorption, retention and percolation properties, the ability to cover, and hold grass seed in contact with soil, and not create a hard crust upon drying providing a good growth medium.

2. Dried Peat Moss. Partially decomposed fibrous or cellular stems and leaves of any of several species of Sphagnum mosses with the following characteristics:
   a. Chopped or shredded to allow distribution through normal hydraulic type seeding equipment and capable of being suspended in water to form part of a homogeneous slurry.
   b. Free from woody substances and mineral matter such as sulfur or iron and with a pH value of between 4.0 and 6.5.
   c. Furnished in an air dry condition and containing less than 35% moisture by weight. Have a water holding capacity of not less than 800% by weight on an oven dry basis.

3. Fiber Matrix (FM) Mulch - Types.
   a. Stabilized Mulch Matrices (SMMs)
   b. Bonded Fiber Matrices (BFMs)
   c. Mechanical Bonded Fiber Matrix (MBFM)
   d. Polymer Stabilized Fiber Matrix (PSFM)
   e. Fiber Reinforced Matrices (FRMs)
      - Flexible Growth Medium (FGM)
      - Extended-Term Flexible Growth Medium (ET-FGM)

727-2.02 MATTING. Fiber mulches, mulch matrices, nets and turf reinforcement mats manufactured from wood fibers, straw, jute, coir, polyolefins, PVC, nylon and others creating dimensionally stable nets, meshes, geotextiles and blankets; creating a continuous, porous, absorbent, flexible blanket/mat/mulch/covering making intimate contact with and adhering to sloped soil surface, resisting erosion and promoting rapid germination and accelerated plant growth.

Rolled Erosion Control Products (RECPs) (Temporary Degradable and Permanent Erosion Control)
Use RECPs that bear the Quality and Date Oversight and Review (QDOR) Seal from the ECTC. Independent test results from the NTPEP, that the mulch, when tested according to ASTM 6459 Standard Test Method for Determination of Rolled Erosion Control Products (RECP), Performance in Protecting Hillslopes from Rainfall-Induced Erosion, meets the performance requirement using the Revised Universal Soil Loss Equation (RUSL).

Functional Longevity.

1. Temporary Degradable.

   a. Duration.

      1) Short-Term RECPs. (RECPs 3 - 12 months)
         C_{Factor} = .15 maximum
         Test Soil Type = Sandy Loam
         (National Resources Conservation Service (NCRS) Soil Texture Triangle)

      2) Moderate (Extended) -Term RECPs. (RECPs 24 months)
         C_{Factor} = .05 maximum
         Test Soil Type = Sandy Loam (NCRS Soil Texture Triangle)

3) Long-Term RECPs. (RECPs 36 months)
C_{Factor} = .01 maximum
Test Soil Type = Sandy Loam (NCRS Soil Texture Triangle)

b. Product types.

1) Mulch-Control Nets (MCNs). Planar woven natural fiber or extruded geosynthetic mesh used to anchor loose fiber matting/mulches.

2) Erosion Control Blankets (ECBs). Processed natural and/or polymer fibers, yarns or twines mechanically, structurally, or chemically bound together to form a continuous matrix with a minimum weight of 8 oz/yd^2 and a limiting shear stress of 0.45 lb/ft^2.

3) Netless. Fibers mechanically interlocked and/or chemically adhered together.

4) Single-net and Double-net. Fibers mechanically bound together by single or double netting.

5) Open Weave Textiles (OWTs). Fibers woven into a continuous matrix.

c. Materials.

1) Burlap. Standard weave with a weight of 3.5 to 10 oz/yd^2.

2) Jute Mesh Fabric. Cloth of a uniform, open, plain weave of undyed and unbleached single jute yarn. Use yarn that is loosely twisted and not varying in thickness more than one-half its normal diameter. Furnish jute mesh in rolled strips meeting the following requirements:
   a) Width: 45 to 48 inches, ± 1 inch
   b) 78 warp-ends per width of cloth (minimum)
   c) 41 weft-ends per yard (minimum)
   d) Weight: 20 ounces per linear yard, ± 5%

3) Woven Paper or Sisal Mesh Netting. Woven from twisted yarns available in rolls 45 to 48 inches wide. Mesh may vary from closed to open weave, ranging from 1/8 to 1/4 inch openings. Shrinkage after wetting may not exceed 20% of the surface area.

4) Knitted Straw Mat. Commercially manufactured ECB. Use photodegradable netting and biodegradable thread. Use straw, in an air-dried condition, from oats, wheat, rye, or other approved grain crops that are free from noxious weeds, seeds, mold, or other materials detrimental to plant life. ECB may contain coconut or fiber to reinforce the straw. Straw material shall be certified weed-free straw using NAWMA Standards. In-lieu of certified weed-free straw, provide documentation that the material is steam or heat treated to kill seeds or provide U.S. or state's department of agriculture laboratory test reports, dated within 90 days prior to the date of application showing that there are no viable seeds in the straw.

5) Woven/Curled Wood blanket. Machine produced mat of curled wood shavings with a minimum of 80% 6-inch or longer fibers, with consistent thickness and the fibers evenly distributed over the entire area of the blanket. Smolder resistant without the use of chemical additives. Cover the top side of the blanket with biodegradable extruded plastic mesh.

6) Coconut (Coir Fiber). Machine produced mat, ECB of consistent thickness and coir fiber evenly distributed over the area of the mat. Use bio/photo degradable netting and thread.

2. Permanent.

   a. Product Types and Materials.

      1) Turf Reinforcement Mats (TRMs). A rolled erosion control product composed of non-degradable synthetic fibers, filaments, nets, wire mesh, and/or other elements, processed into a permanent, three-dimensional matrix of sufficient thickness with a minimum weight of 8 oz/yd^2 and a minimum limiting shear stress of 1.5 lb/ft^2. TRMs (may be supplemented with degradable components) shall impart immediate erosion protection, enhance vegetation establishment during and after maturation and permanent vegetation reinforcement providing long-term functionality.

727-2.03 SEDIMENT RETENTION FIBER ROLLS (SRFRs). Fiber rolls also referred to as wattles. Manufacture of photodegradable or biodegradable fabric netting without preservative treatment, evenly woven, free of crusted material, cuts, and tears. Manufacture stakes of photodegradable or biodegradable material (wood stakes, except as approved by the Engineer).

1. Filter Sock (Wattle)
   a. Fabric netting.
   b. Filled with wood fiber, straw, flax, rice, coconut fiber material.
   c. Minimum diameter 5 inches.

2. Compost Sock.
   a. Extra Heavy weight fabric netting with a minimum strand width of 5 mils.
   b. Filled with coarse compost.
   c. Minimum diameter 8 inches.

3. Coir Log.
   a. Woven wrap bristle coir twine netting.
   b. Filled with 100% coconut (coir) fiber uniformly compacted.
   c. Segments maximum length 20 foot, diameter as suited to the application and a density of 7 lbs/pcf or greater.
   d. Coir twine strength equal to 80 lb minimum weaved to a 2 inch x 2 inch opening pattern.
   e. Ties made of hemp rope by 1/4 inch diameter.

727-2.04 COMPOST. Suitable for serving as a soil amendment or an erosion control material. Sanitized, mature compost meeting local, state, and Federal quality requirements tested and certified by the U.S. Composting Council (USCC) under the Seal of Testing Assurance (STA) Program. Biosolids compost must meet the Standards for Class A biosolids outlined in 40 Code of Federal Regulations (CFR) Part 503. Additionally, meet the requirements of the AASHTO specifications:

1. Compost Blankets. Standard Practice for Compost for Erosion/Sediment Control (Compost Blankets) R 52-10.

2. Compost Filter Berms and Filter Socks. Standard Practice for Compost for Erosion/Sediment Control (Filter Berms and Filter socks) R 51-10.

727-2.05 TACKIFIER. Tackifier, viscous overspray, generally composed of dry powered vegetable gums derived from guar gum, psyllium and sodium alginase; asphaltic emulsions; petroleum distillates; co-polymer emulsions; and lignosulfonates and used to anchor soil, compost, seed, the mulch fibers to one another, and the ground. Contain no growth or germination inhibiting materials nor significantly reduce infiltration rates. Tackifier shall hydrate in water and readily blend with other slurry material. Tackifier options include:

1. Type A. Organic tackifier with certification of plant sources; or

2. Type B. Synthetic tackifier with certification confirming product is not harmful to plants, animals, or aquatic life.

727-2.06 POLYACRYLAMIDE (PAM). Use as a tie-down for soil, compost, seed and as a flocculent. Polyacrylamide (PAM) products shall meet the requirements of American National Standards Institute (ANSI)/National Sanitation Foundation International (NSF) Standard 60 for drinking water treatment, be anionic (not cationic), linear and not cross-linked with an average molecular weight greater than 5 Mg/mole, minimum 30 percent charge density; contain at least 80% active ingredients and a moisture content not exceeding 10% by weight.

Deliver PAM in a dry granular powder or liquid form.

727-2.07 GEOTEXTILE-ENCASED CHECK DAM AND SEDIMENT BARRIER. Urethane foam core encased in geotextile material (silt fence material Section 633), minimum 8 inches height by minimum base width of 16 inches by minimum 7 foot length. Overhang the geotextile 6 inch minimum each end with apron type ties by 24 inches each side of the foam core.

727-2.08 SANDBAG.

1. Sandbag Sack Fabric. Fabric shall be a nonwoven, needle punched design meeting the Minimum Average Roll Values (MARV) verified in accordance with ASTM D4759.

2. Seam Thread. Similar durability to the sandbag sack fabric.

3. Sandbag Fill Material.
   a. Selected Material 703-2.07 Type B

4. Cinch Ties. Plastic ties or equivalent tie recommended by the sandbag manufacturer.

727-2.09 MANUFACTURED INLET PROTECTION SYSTEM.

1. Manufacturers:
   a. Ultra Tech International – Ultra-DrainGuard
   b. Bowhead Environmental and Safety - StreamGuard Exert II Sediment Insert
   c. Enpac - Catch Basin Insert, Oil and Sediment or
   d. Approved equal.

727-2.10 CLEAR PLASTIC COVERING. A clear plastic covering meeting the requirements of the National Institute of Standards and Technology (NIST) voluntary Product Standard PS 17 - 69 for polyethylene sheeting having a minimum thickness of 6 mils.

727-2.11 STAPLES. U-shaped staples for anchoring matting, approximately 6 inches long and 1 inch wide. Machine-made: No. 11 gage or heavier steel wire. Hand-made: 12-inch lengths of No. 9 gage or heavier steel wire.

CR727-050812

SECTION 730

SIGN MATERIALS

Standard Modification

Delete Subsection 730-2.01 SHEET ALUMINUM and replace with the following:

730-2.01 SHEET ALUMINUM. Use alloy 6061-T6, 5052-H36, 5052-H38, or recycled aluminum meeting alloy 3105, as specified in ASTM B 209. Meet the thickness of aluminum sheet designated on the Plans. Verify alloy and temper designation by mill certification.

Before January 1, 2011, treat the aluminum base metal sheets with chromate conversion coating for aluminum to meet ASTM B449, Class 2.

After January 1, 2011, treat the aluminum base metal sheets with a rinsed non-hexavalent chromium conversion coating for aluminum and aluminum alloys that meets ASTM B 921, class one. Handle the cleaned and coated base metal only by a mechanical device or by operators wearing clean cotton or rubber gloves. After cleaning and coating operations, protect the panels at all times from contact or exposure to greases, oils, dust, or other contaminants.

Make each sign panel a continuous sheet for all lengths 72 inches or less in the horizontal direction. Use no more than one vertical splice for signs up to 144 inches in length and 48 inches or less in height.

Meet the panel dimensions specified with a tolerance of 1/16 inch. Furnish metal panels that are cut to size and shape and free of buckles, warp, dents, cockles, burrs, and any other defects resulting from fabrication. Complete all possible fabrication, including shearing, cutting, and punching of holes prior to the base metal preparation.

E86-041210

Special Provision

730-2.04 SIGN POSTS.

Add No. 7:

7. Structural Tubing and W-Shape Beams.

   a. Structural tubing shall conform to ASTM A500, Grade B, or ASTM A501. The tubing shall be square and of the dimensions called for in the Plans with 0.2 inch thick walls. 0.4 inch diameter holes shall be drilled as required to permit mounting of the sign.

   b. W-shape beams shall conform to ASTM A36.

   c. Structural tubing and W-shape beams shall be hot dip galvanized according to 1.b. of this subsection. Damaged and abraded tubes and beams shall be repaired according to 1.c. of this subsection.

CR81-062204

INDEX

Standard Modification

INDEX Remove the text. "*Approved Products List*" *and replace with: Qualified Products List*

E36-012707

APPENDIX A

CONSTRUCTION SURVEY REQUIREMENTS



Alaska Department of Transportation and Public Facilities

Alaska Construction Surveying Requirements (US Customary Units)

Alaska Construction Surveying Requirements (US Customary Units)

Table of Contents

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1. Survey accuracy requirements

Third order survey

- ✓ Use a 1/5000 horizontal closure.
- ✓ Use an angle closure of $30\sqrt{N}$ seconds, where N equals the number of angles in the traverse.
- ✓ An Alaska-registered professional land surveyor must perform or supervise replacement of survey monuments (property, USGS, USC&GS, BLM, etc.) or establishment of monuments (including centerline).
- ✓ All monument work must comply with AS 34.65.040 and meet standards in the latest version of the Alaska Society of Professional Land Surveyors' *Standards of Practice Manual.*
- ✓ The allowable vertical error for misclosure is $e = 0.05\sqrt{M}$ e = maximum misclosure in feet, M = length of the level circuit in miles.

Table 1—Survey accuracy requirements (in feet)

	Stationing	HI	Closure	Horizontal Angle	Distance To center line	Grade
Additional cross sections	1.0	0.01	0.04	**	0.1	0.1
Benches		0.01	0.02			
Blue tops***	1.0	0.01	0.04		0.1	0.02
Bridges	*	0.01	0.02			0.01
Centerline	*			*		
Clearing & Grubbing	1.0				1.0	
Culverts	1.0	0.01	0.04	**	0.1	0.1
Curb & gutter	1.0	0.01	0.02		0.1	0.02
Grade stakes	1.0				0.1	0.1
Guardrail	1.0				0.1	
Manholes, catch basins & inlets	1.0	0.01	0.02		0.1	0.02
Monuments	*			*		
Red tops***	1.0	0.01	0.02		0.1	0.05
Riprap	1.0	0.1	0.04		1.0	0.1
Signs	1.0				0.1	
Slope stakes & RP's	1.0	0.01	0.04	**	0.1	0.1
Under drains & sewer	1.0	0.01	0.02		0.1	0.02

* Third order survey
**Right angle prism or transit angles from center line
*** Use blue tops for top of base course and red tops for the bottom of base course.

1. Survey frequency requirements

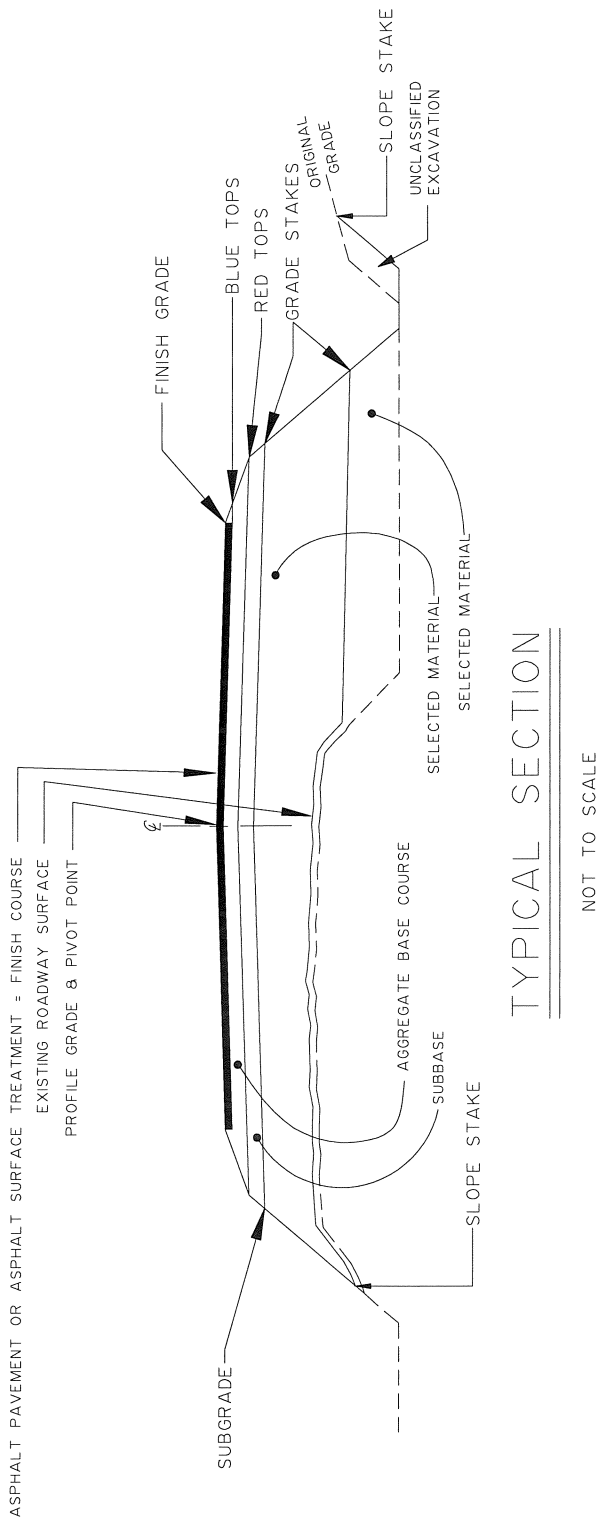
Table 2—Survey frequency requirements (in feet)

	Tangents	Curves	Interchange ramps	Stake each per plan	See special instructions on sample notes
Additional cross sections	*	*	*		
Bench marks					X
Blue tops	100	100**	25		X
Blue tops within 100 feet both sides of railroad track crossings and bridge approaches	25	25	25		X
Bridges				X	X
Center line	100	100**	25		
Clearing	100	100**	25		X
Culverts				X	X
Curb and gutter	25	25	25		
Grade stakes	100	100**	50		
Guardrail	25	25	25		
Manholes, catch basins & inlets				X	
Monuments				X	
Red tops	100	100**	25		X
Riprap	50	50	50		
Signs				X	
Slope stake / cross sections	100	100**	25		X
Under drains and sewers	50	25	25		

* Establish additional cross sections and slope stakes at all breaks in topography and where structures begin and end.

**Curves shall be staked on 50-foot stations if the curve is greater than six degrees.

2. Typical Section Drawing



3. Survey point materials requirements

- ✓ These are minimum requirements; larger sizes may be necessary.
- ✓ Use only stakes with planed sides.

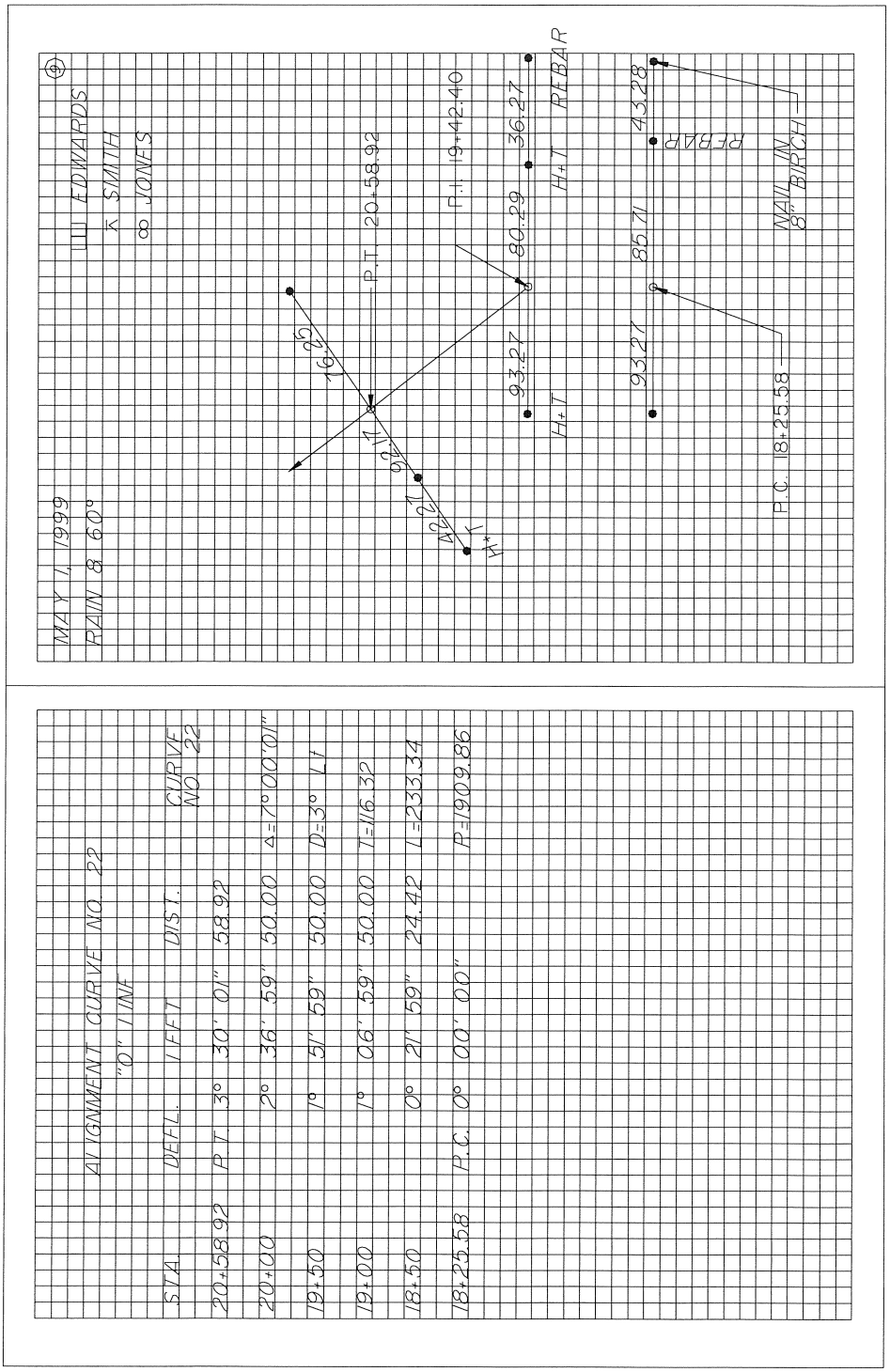
Table 3—Survey point materials requirements

	24" lath or whiskers	2" x 2" x 8" hub	2" x 2" x 12" hub	1" x 2" x 18" stake	1" x 2" x 24" stake	48" lath	Hub and tack	40d nail	60d nail	½" x 24" rebar
Benchmarks									X	
Blue tops	X	X								
Centerline P.C., P.T., P.O.T.			X	X			X *			X*
Centerline reference points			X	X			X *			X *
Centerline station				X				X		
Clearing						X				
Culvert stake			X		X	X				
Culvert stake references			X		X	X				
Curb and gutter			X		X		X			
Guardrail								X		
Major structures			X	X *	X *	X	X *			X *
Red tops	X	X								
Signs						X				
Slope stake					X	X				
Slope stake references			X		X	X				

* Optional depending on conditions, and to be determined by the Project Engineer.

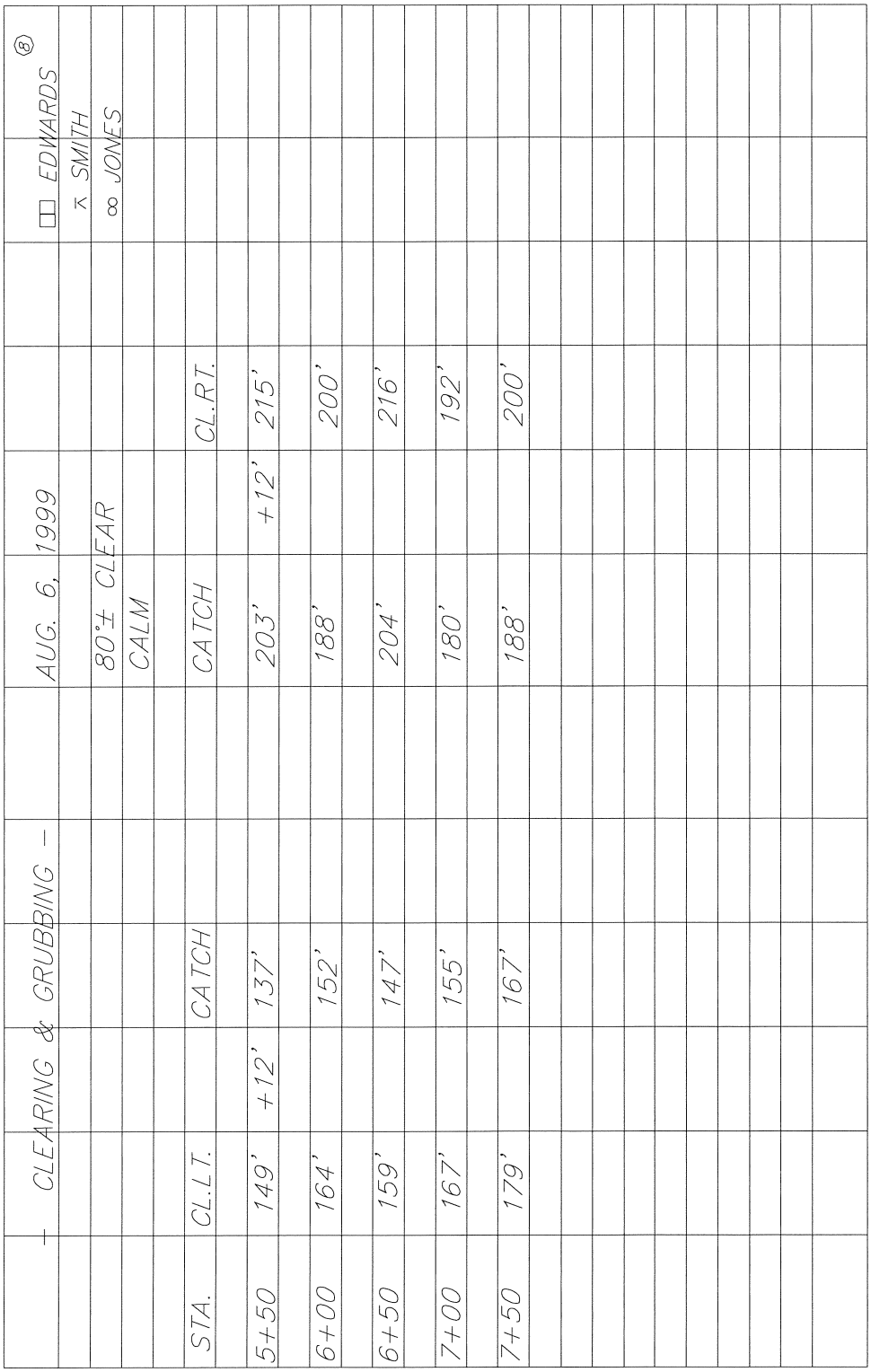
4. Typical alignment notes

- ✓ The Chief of Parties must prepare the alignment book before actual staking.
- ✓ Don't use swing ties for reference points.
- ✓ Use three point right angle ties, two to the right and one left, or vice versa.
- ✓ Reference P.C., P.I., P.T., and P.O.T.



5. Typical clearing notes

- ✓ Exclude areas not needing clearing.
- ✓ Draw a diagram as required to show unusual or confusing areas.



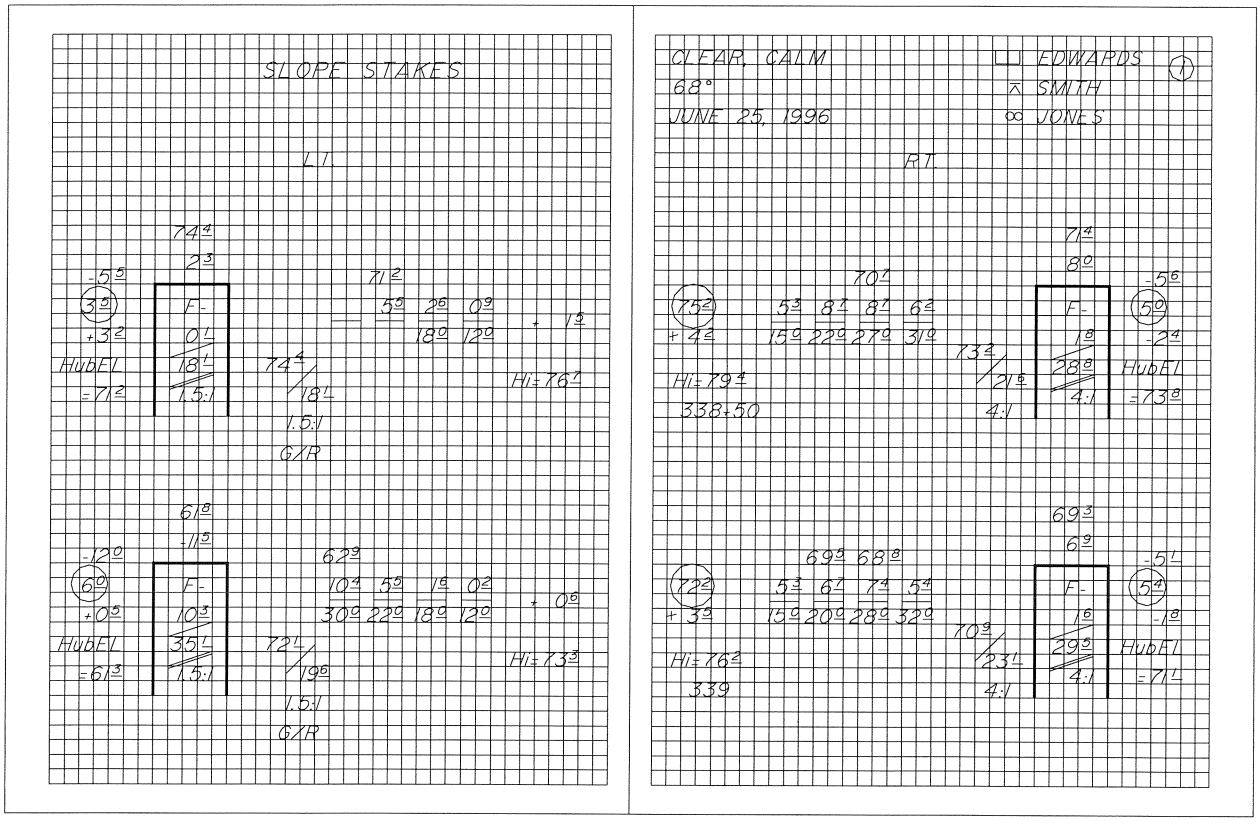
6. Typical level notes

- ✓ Balance back sights and foresights.
- ✓ Establish all benchmarks and take the centerline profile before doing any staking involving elevations.
- ✓ Don't set benchmarks in utility poles.
- ✓ Don't use side shots on benchmarks.
- ✓ Use the turn through method when establishing benchmarks.
- ✓ Re-check benchmarks after each major freeze/thaw cycle and/or any environmental event that may change the benchmark elevation.
- ✓ Do not use double rodding.
- ✓ Run separate level loops between all benchmarks.
- ✓ Set benchmarks in trees of at least six-inch diameter, unless approved by the Project Engineer.
- ✓ Correct errors in benchmark elevations so they will not affect the elevations of succeeding benchmarks.
- ✓ Consult with the Project Engineer before placing benchmarks in areas of permafrost or other unstable ground.
- ✓ Establish benchmarks at intervals and locations consistent with good engineering practice, and generally not more than 1000 feet.
- ✓ Completely describe benchmarks when establishing or re-establishing their elevation. Give centerline stationing, offset, benchmark projection, and observable benchmark characteristics. When checking into or out of benchmarks, note the book and page number that contains the most recent elevation establishment for that benchmark.
- ✓ Write the station on the top twelve inches facing centerline, with numerals a minimum of one inch in height.

STA.	BS+	HI	FS−		ELEV.	45°± CLEAR WARM CALM					☺ EDWARDS
						WILD 413579		3-23-90		⌖	SMITH
TBM #101											
6+72					161.309		Nail in	base of 12" Spruce			
								85' 10" LT.		6+72	
	3.877	165.186									
6+00			1.95		163.24						
6+25			2.32		162.87						
6+50			2.96		162.23						
T.P.			3.246		161.940						
	1.103	163.043									
6+75			2.31		160.73						
7+00			2.56		160.48						
T.P.			2.823		160.220						
	2.332	162.552									
							Nail in	base of 18" stump			
TBM #102			1.143		161.409		60' 4" RT		7+21	Elev.	161.413

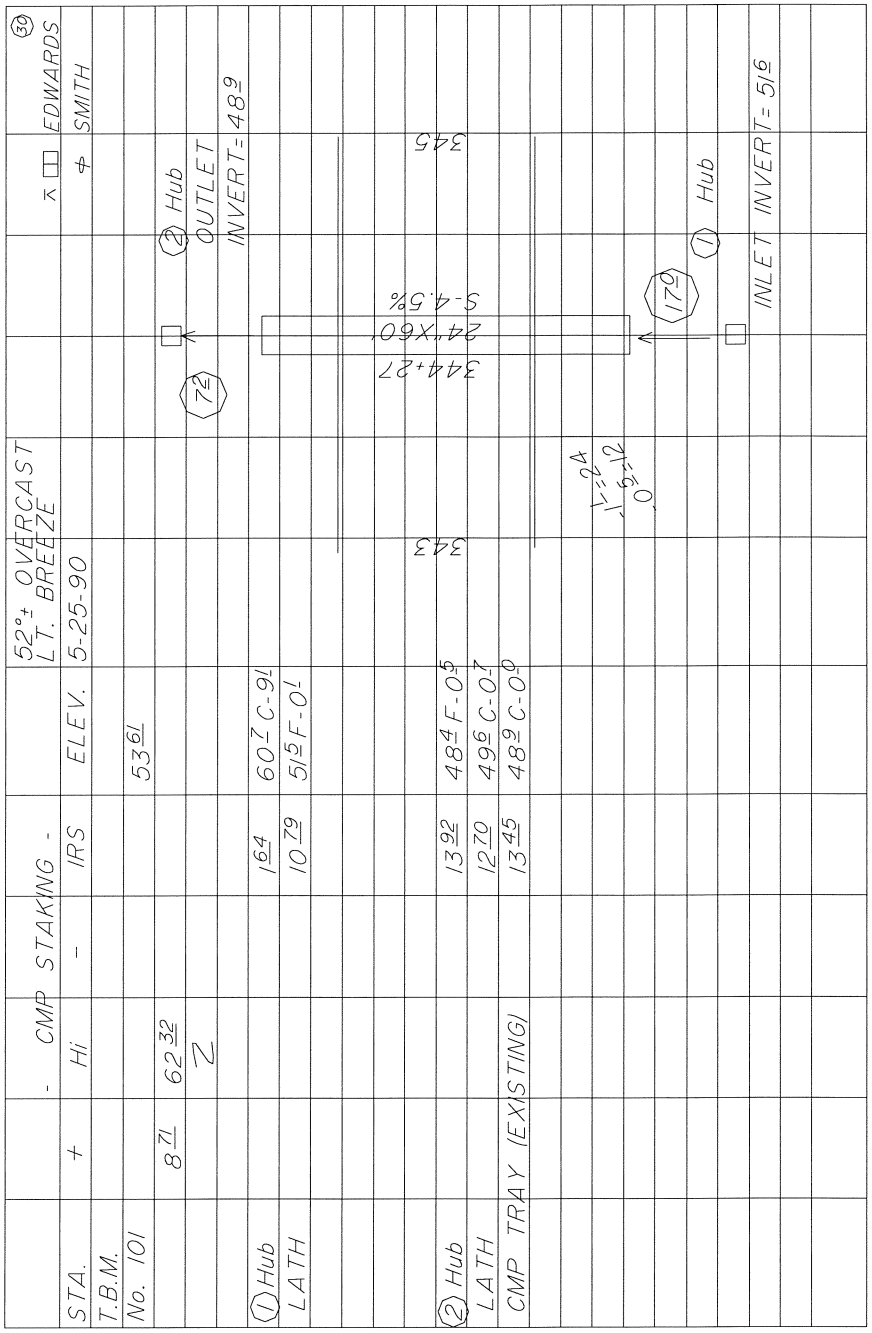
7. Typical slope stake notes

- ✓ Enter the station, elevations, shoulder distance or ditch distances, and slope in the slope stake book before staking begins.
- ✓ In areas where slides or overbreak are anticipated, extend the sections beyond the construction limits.
- ✓ Slope-stake each section that is cross-sectioned.
- ✓ Final re-cross sections are required where there are overbreaks, undercuts, etc. Re-cross section book and page numbers shall be noted on the original cross-section and slope staking page for the relevant stations.
- ✓ Use a hand level only for one turn up or down from the instrument.
- ✓ Clearly note hand level turns.
- ✓ Use a reference point that is 10-20 feet beyond the slope stake.
- ✓ The reference point must show the cut or fill to the slope stake and must include the slope stake information.
- ✓ Slope stake all abrupt changes in typical sections.
- ✓ Position all laths to face centerline.
- ✓ Include at least the following information on the stake: (1) where to begin the cut or fill (2) the slope ratio (3) the depth of cut or height of fill and (4) the station.

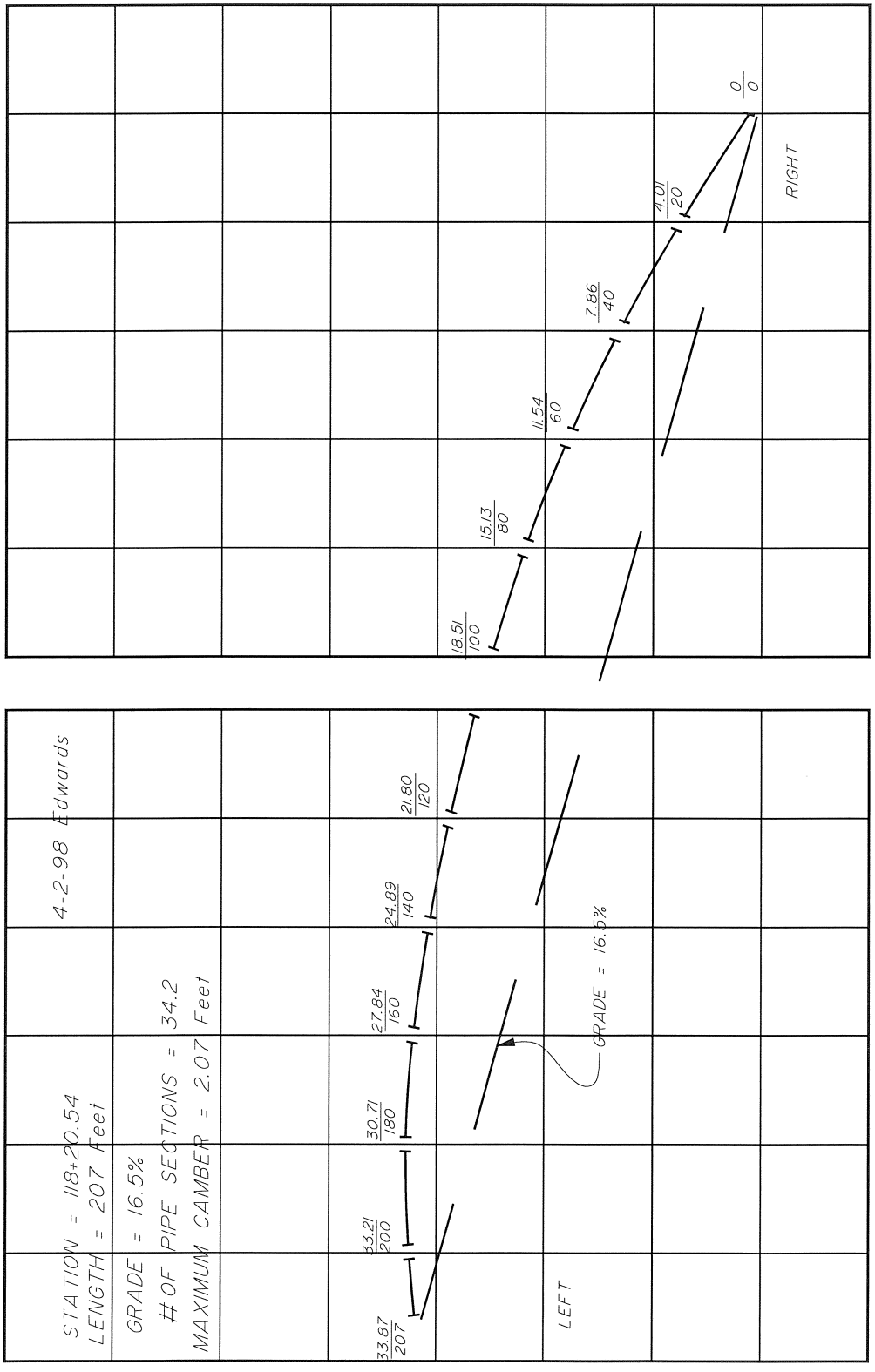


8. Typical culvert notes

- ✓ Show at least the following information on culvert stakes
  - station
  - size
  - length
  - type of pipe (e.g., 24" x 80' CMP)
  - cut or fill from top of hub to inlet & outlet
  - skew angle
  - horizontal distance from hub to end of pipe
  - gradient of pipe
  - drop of pipe
- ✓ Ensure that all culverts have a minimum camber equal to 1% of the length of the pipe, unless the Project Engineer directs otherwise.
- ✓ Develop a culvert camber diagram showing each section of pipe and its elevation and offset.

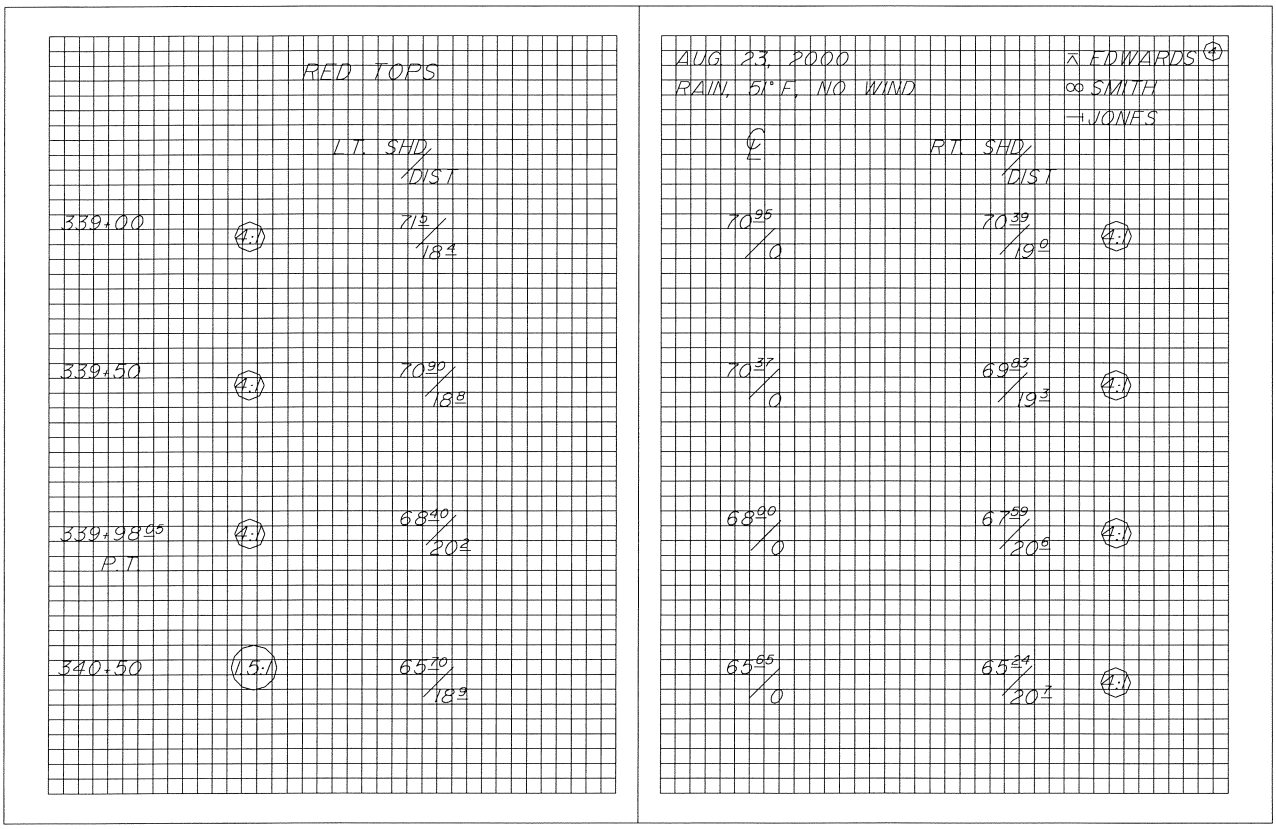


9. Typical culvert camber diagram



10. Typical blue or red tops and grade stake notes

- ✓ Place blue and red tops at each break in typical section and on centerline.
- ✓ Use blue tops for top of base course.
- ✓ Use red tops for the bottom of the base course.
- ✓ Evenly space red/blue tops at and between crown section break points with a maximum spacing of 25 feet between red/blue tops.
- ✓ Establish horizontal control from centerline references and vertical control from benchmarks.
- ✓ Place blue tops at the same interval as slope stakes.
- ✓ Stake all curve transitions.



APPENDIX B

ENVIRONMENTAL PERMITS

City of Homer
www.cityofhomer-ak.gov

Planning
491 East Pioneer Avenue
Homer, Alaska 99603
Planning@ci.homer.ak.us
(p) 907-235-3106
(f) 907-235-3118

FLOODPLAIN DEVELOPMENT PERMIT

For the construction of: Sterling Highway MP 174-179 including Homer Spit Rd.

Issued to: Alaska Dept of Transportation

Project Address: Sterling Hwy MP 174-179

Issued by: City of Homer, Planning and Zoning Office

Date: August 1, 2013

The project includes:

- Improving curb ramps, pedestrian crossings, road drainage, automated traffic recorders, guardrails and guardrail end treatments.
- Replacing signs and restriping
- Relocating utilities
- Repairing the road embankment in select locations.

Compliance with:

- City of Homer, Flood Prone Areas HCC 21.41.070

Valid as long as construction begins by Dec. 31, 2014.

D Harness-Foster

Dotti Harness-Foster, Certified Floodplain Manager August 1, 2013

APPENDIX C

MATERIAL CERTIFICATION LIST

MATERIALS CERTIFICATION LIST, EXCEPT SECTION 660/661/740 (current 1/30/12)

Project Name Sterling Highway MP 173-179 Pavement Preservation

Project Number 0211(061)/56176 & 0211(059)/55260

Project Engineer Signature

Unshaded boxes indicate who approves the manufacturer's certificate of compliance or materials submittals. If two boxes not shaded, either approving authority may be used.

Materials Item	Specification	Construction		Design			Statewide Materials		Manufacturer/ Remarks	Certificate Location e.g. Binder #
	2004 or Std. Mod. if noted	Project Engineer	Regional Materials or QA Engineer	Design Engineer of Record	State Bridge Engineer	Regional Traffic Engineer	*Qualified Products List (QPL)	State Materials or QA Engineer		
202 REMOVAL OF STRUCTURES AND OBSTRUCTIONS										
Steel Pipe, Galvanized	202-2.01									
Steel Fasteners, Galvanized	202-2.01									
Reflectors	202-2.01									
401 ASPHALT CONCRETE PAVEMENT										
Mix Design	401-2.01									
Joint Adhesive	401-3.14									
Joint Sealant	401-3.14									
603 CULVERTS AND STORM DRAINS										
Flexible Watertight Gaskets										
Ring Gaskets for Rigid Pipe & Precast Manhole Sections	705-2.05									
Ring Gaskets for Flexible Metal Pipe	705-2.05									
Continuous Flat Gaskets for Flexible Metal Pipe	705-2.05									
Corrugated Polyethylene Pipe										
Culverts, 18 Inch	706-2.07									
Culverts, 24 Inch	706-2.07									
End Sections for 18 inch CSP Pipe	707-2.01/Plans									
End Sections for 24 inch CSP Arch	707-2.01/Plans									

*Unshaded boxes under QPL do not indicate that the materials are currently on that list. They indicate materials with potential for being on the QPL once qualified.
See Section 106-1.05 for submittal requirements.

Unshaded boxes indicate who approves the manufacturer's certificate of compliance or materials submittals. If two boxes not shaded, either approving authority may be used.

Materials Item	Specification	Construction		Design			Statewide Materials		Manufacturer/ Remarks	Certificate Location e.g. Binder #
	2004 or Std. Mod. if noted	Project Engineer	Regional Materials or QA Engineer	Design Engineer of Record	State Bridge Engineer	Regional Traffic Engineer	*Qualified Products List (QPL)	State Materials or QA Engineer		
604 MANHOLES & INLETS										
Concrete Mix Design	501-3.01									
Curing Materials	711-2.01									
Clay or Shale Brick										
Sewer Brick	704-2.01									
Building Brick	704-2.01									
Concrete Brick	704-2.02									
Concrete Masonry Block	704-2.03									
Flexible Watertight Gaskets										
Ring Gaskets for Rigid Pipe & Precast Manhole Sections	705-2.05									
Ring Gaskets for Flexible Metal Pipe	705-2.05									
Continuous Flat Gaskets for Flexible Metal Pipe	705-2.05									
Reinforcing Steel										
Deformed and Plain Billet-Steel Bars	709-2.01									
Fabricated Deformed Steel Bar Mats	709-2.01									
Steel Welded Wire Fabric	709-2.01									
Steel Wire	709-2.01									
Epoxy-Coated Reinforcing Bars	709-2.01									
Precast Concrete Manhole Sections	712-2.05									
Frames, Grates, Covers & Ladder Rungs										
Gray Iron Castings	712-2.06									
Carbon-Steel Castings	712-2.06									

*Unshaded boxes under QPL do not indicate that the materials are currently on that list. They indicate materials with potential for being on the QPL once qualified.
See Section 106-1.05 for submittal requirements.

Unshaded boxes indicate who approves the manufacturer's certificate of compliance or materials submittals. If two boxes not shaded, either approving authority may be used.

Materials Item	Specification	Construction		Design			Statewide Materials		Manufacturer/ Remarks	Certificate Location e.g. Binder #
	2004 or Std. Mod. if noted	Project Engineer	Regional Materials or QA Engineer	Design Engineer of Record	State Bridge Engineer	Regional Traffic Engineer	*Qualified Products List (QPL)	State Materials or QA Engineer		
Structural Steel	712-2.06									
Galvanizing	712-2.06									
Malleable Iron Castings	712-2.06									
Corrugated Metal Units	712-2.07									
606 GUARDRAIL										
Concrete Mix Design	501-3.01									
Pre-Mixed (Sac Crete)	606-2.01									
Wire Cable	709-2.02									
Metal Beam Rail	710-2.04									
Guardrail Posts and Blocks										
Wood Posts and Wood Blocks	710-2.06									
Timber treatment	714									
Steel Posts and Blocks	710-2.06									
Synthetic Blocks	710-2.06									
Guardrail Hardware	710-2.07									
Terminals										
Slotted Rail Terminal	710-2.11									
Extruder Terminal	710-2.11									
Controlled Release Terminal	Dwg. G-25.20W									
All other Terminals	710-2.11									
Flexible Markers	606-2.01									
Guardrail Reflector Assembly Brackets	606-2.01									

*Unshaded boxes under QPL do not indicate that the materials are currently on that list. They indicate materials with potential for being on the QPL once qualified.
See Section 106-1.05 for submittal requirements.

Unshaded boxes indicate who approves the manufacturer's certificate of compliance or materials submittals. If two boxes not shaded, either approving authority may be used.

Materials Item	Specification	Construction		Design			Statewide Materials		Manufacturer/ Remarks	Certificate Location e.g. Binder #
	2004 or Std. Mod. if noted	Project Engineer	Regional Materials or QA Engineer	Design Engineer of Record	State Bridge Engineer	Regional Traffic Engineer	*Qualified Products List (QPL)	State Materials or QA Engineer		
Reflective Sheeting Type_	606-2.01									
608 SIDEWALKS										
Concrete Mix Design	501-3.01									
Joint Fillers	705-2.01									
Joint Sealer	705-2.02									
Asphalt Concrete Mix Design	608-2.01									
Detectable Warnings	608-3.04									
609 CURBING										
Concrete Mix Design	501-3.01/ 609-2.01									
Joint Fillers	705-2.01									
Joint Sealer	705-2.02									
Joint Mortar	705-2.04									
Precast Concrete Curb	712-2.04									
Asphalt Concrete Mix Design	609-2.01									
615 STANDARD SIGNS										
Sheet Aluminum	730-2.01/Plans									
High Density Overlaid Plywood	730-2.02									
Sign Framing Members	Std. Dwg. S-20.10									
Reflective Sheeting	730-2.03									
Orange Background Signs	615-2.01									
Vertical Crossbuck Support Panels	615-2.01									
Non-Illuminated Overhead Signs	615-2.01									

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See Section 106-1.05 for submittal requirements.

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Materials Item	Specification	Construction		Design			Statewide Materials		Manufacturer/ Remarks	Certificate Location e.g. Binder #
	2004 or Std. Mod. if noted	Project Engineer	Regional Materials or QA Engineer	Design Engineer of Record	State Bridge Engineer	Regional Traffic Engineer	*Qualified Products List (QPL)	State Materials or QA Engineer		
Fluorescent Yellow-Green School Area Signs	615-2.01									
Reflective Sheeting Warranty	615-2.01									
Sign Posts										
Metal Pipe Posts	730-2.04									
Perforated Steel Posts	730-2.04									
Finished Wooden Posts	730-2.04									
Pressure Treatment for Wooden Posts	730-2.04/714									
Preservative for Field cuts and holes	730-2.04									
Wide Flange Posts	730-2.04									
Flanged Channel Posts	730-2.04									
Square Non-Perforated Steel Tubes	730-2.04									
Zinc Coating for Repairs	730-2.04									
Flexible Delineator Posts	615-2.01 and 730-2.05									
Acrylic Prismatic Reflectors	730-2.06									
Sign Bases										
Slip Base	615-2.01/Plans									
Breakaway Base	615-2.01/Plans									
Frangible Couplings	615-2.01/Plans									
Concrete	615-2.01/ 501-3.01									
618 SEEDING										
Seed	724									
Fertilizer	618-2.01/725									

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Materials Item	Specification	Construction		Design			Statewide Materials		Manufacturer/ Remarks	Certificate Location e.g. Binder #
	2004 or Std. Mod. if noted	Project Engineer	Regional Materials or QA Engineer	Design Engineer of Record	State Bridge Engineer	Regional Traffic Engineer	*Qualified Products List (QPL)	State Materials or QA Engineer		
619 SOIL STABILIZATION										
Mulch										
Wood Cellulose Fiber or Natural Wood Fiber	727-2.01									
Dried Peat Moss	727-2.01									
Matting										
Burlap	727-2.02									
Jute Mesh Fabric	727-2.02									
Woven Paper or Sisal Mesh Netting	727-2.02									
Knitted Straw Mat	727-2.02									
Woven/Curled Wood Blanket	727-2.02									
627 WATER SYSTEM										
630 GEOTEXTILE FOR EMBANKMENT SEPARATION AND STABILIZATION										
Geotextiles and Sewing Thread										
Separation	729-2.01									
633 SILT FENCE										
Geotextile	729-2.04									
Posts	729-2.04									
641 EROSION, SEDIMENT AND POLLUTION CONTROL										
BMP Installations	641-2.05								Materials identified and documented in SWPPP and	
642 CONSTRUCTION SURVEYING AND MONUMENTS										
Monument Cases	642-2.01									
Primary Monument	642-2.01									
Secondary Monument	642-2.01									

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See Section 106-1.05 for submittal requirements.

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Materials Item	Specification	Construction		Design			Statewide Materials		Manufacturer/ Remarks	Certificate Location e.g. Binder #
	2004 or Std. Mod. if noted	Project Engineer	Regional Materials or QA Engineer	Design Engineer of Record	State Bridge Engineer	Regional Traffic Engineer	*Qualified Products List (QPL)	State Materials or QA Engineer		
643 TRAFFIC MAINTENANCE										
Traffic Control Devices	643-2.01								project with TCP conforming to Alaska Traffic Manual (ATM).	
670 TRAFFIC MARKINGS										
Traffic Paint, Beads Combined Cert.	708-2.03, 712-2.08									
Preformed Pavement Markings	712-2.14									
Iron Casting for Raised/Recessed Markers	670-2.01									
Methyl Methacrylate Markings, Beads, Anti-Skid Combined Cert.	712-2.17, 712-2.08									
Raised and Recessed Pavement Markers	712-2.15/Plans									
Additional Materials										

*Unshaded boxes under QPL do not indicate that the materials are currently on that list. They indicate materials with potential for being on the QPL once qualified.
See Section 106-1.05 for submittal requirements.

Project Name: Sterling Highway MP 173-179 Pavement Preservation

Project Number: 0211(061)/56176 & 0211(059)/55260

Project Engineer Signature:

SECTION 660/661/740 MASTER MATERIALS CERTIFICATION LIST (Updated 07/01/11)

Item	2004 Specifications	Third Party Listing or Labeling Required? (Y/N)	Acceptance By:							Remarks
			Construction			Design			Statewide	
			Project Engr		QA/ Matls Engr	Design Engr	Bridge Engr	Traffic Engr	State Materials Engineer	
Section 660/661/740 is updated every quarter. Changes made this quarter are highlighted in yellow. Deleted text is lined out.				QPL						
660 SIGNALS AND LIGHTING										
TRAFFIC SIGNAL SYSTEMS										
CONDUIT / LOOPS:										
Galvanized Myers Hub (for connection to enclosures)	Special Provisions, 740-2.06	Y								Central Region
Schedule 80 PVC Conduit (for loops)	740-2.06 Std. Dwg. T-32.10 eff. 8/03	Y								
PVC Fittings & Adapters (Loops)	740-2.06 Std. Dwg. T-32.10 eff. 8/03	Y								
Type "X" Conduit Bodies with Covers, Gaskets & Plugs (Loops)	Std. Dwg. T-32.10 eff. 8/03	Y								
AUTOMATED TRAFFIC RECORDERS										
JUNCTION BOXES: (from Manufacturers on APL)										
Type II	Regional Details 660-3.04, 711-2.01, 709-2.01	N								
JUNCTION BOXES: (from Manufacturers NOT on APL)										
Type II	Regional Details, Std. Dwg T-34.01, 660-3.04, 711-2.01, 709-2.01	N								
Concrete Mix Design	660-2.01									
Curing Materials	711-2.01									
Reinforcing Steel	709-2.01									

SECTION 660/661/740 MASTER MATERIALS CERTIFICATION LIST (Updated 07/01/11)

Item	2004 Specifications	Third Party Listing or Labeling Required? (Y/N)	Acceptance By:							Remarks
			Construction			Design			Statewide	
Section 660/661/740 is updated every quarter. Changes made this quarter are highlighted in yellow. Deleted text is lined out.			Project Engr	QPL	QA/ Matls Engr	Design Engr	Bridge Engr	Traffic Engr	State Materials Engineer	
Junction Box Cover	660-3.04	N								
Ground Wire from Bushing to Cover	660-3.04	N								
CONDUIT / LOOPS:										
Galvanized Rigid Metal Conduit	740-2.06	Y								
Galvanized Couplings	740-2.06	Y								
Galvanized Split Couplings	740-2.06	Y								
Galvanized Elbows	740-2.06	Y								
Galvanized Nipples	740-2.06	Y								
Bored Casing										
Underground Marker Tape	660-3.03.14	N								
Pull Rope	660-3.03.13	N								
Schedule 80 PVC Conduit (Loops)	740-2.06	Y								
PVC Fittings & Adapters (Loops)	740-2.06	Y								
Type "X" Conduit Bodies with Covers, Gaskets & Plugs (Loops)	Detail in Plans	Y								
BONDING & GROUNDING:										
Copper Ground Rod	660-3.06	Y								
Grounding Bushings	660-3.06	Y								
Ground Rod Clamps	660-3.06	Y								
#6 & 8 Bare Copper Ground Wire	660-3.06	N								
Braided Copper J-Box Lid Bonding Wire	660-3.06	N								
CONDUCTORS / CABLES:										
1C#14 Detector Loops	Regional Special 669-2.01	Y								Northern Region
6pr#18 Loop Lead-in Cable	Regional Special 669-2.01	Y								Northern Region
CONTROLLER CABINET										
Style CBA2 Cabinet	740-2.11 & 669-2.01	Y								Northern Region
Terminal Blocks:	Regional Special 669-2.01	Y								Northern Region
Circuit Breaker Panel	Regional Special 669-2.01.2.j	N								Northern Region

SECTION 660/661/740 MASTER MATERIALS CERTIFICATION LIST (Updated 07/01/11)

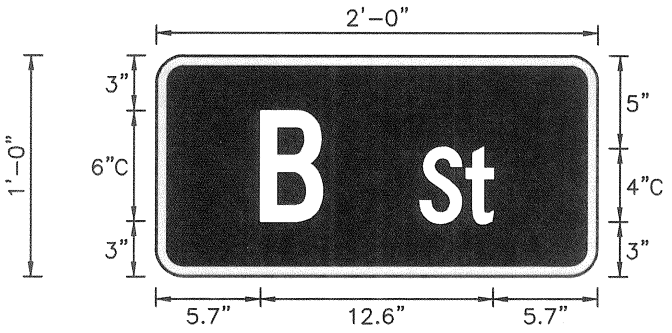
Item	2004 Specifications	Third Party Listing or Labeling Required? (Y/N)	Acceptance By:							Remarks
			Construction			Design			Statewide	
Section 660/661/740 is updated every quarter. Changes made this quarter are highlighted in yellow. Deleted text is lined out.			Project Engr		QA/ Matls Engr	Design Engr	Bridge Engr	Traffic Engr	State Materials Engineer	
				QPL						
Transient Voltage Surge Protection	Regional Special 669-2.01.2.k	N								Northern Region
Interior Light	Regional Special 669-2.01.2.l	N								Northern Region
Cooling Fan	Regional Special 669-2.01.2.m	N								Northern Region
Thermostatically Controoled Outlet	Regional Special 669-2.01.2.n	N								Northern Region
110-volt Recepticals	Regional Special 669-2.01.2.o	N								Northern Region
Heater	Regional Special 669-2.01.2.p	N								Northern Region
Thermostat	Regional Special 669-2.01.2.q	N								Northern Region
SPLICES										
Overlap Type Crimp Connector	660-3.05	N								
Heat Shrink Tubing	660-3.05	Y								
Electrical Tape	660-3.05	Y								
DATA LOGGERS AND TEMPERATURE SENSORS										
Data Logger	Regional Special 669-2.01.5.a	N								Northern Region
External Interface	Regional Special 669-2.01.5.b	N								Northern Region
Serial Interface	Regional Special 669-2.01.5.c	N								Northern Region
Termocouple Referance Termistor	Regional Special 669-2.01.5.d	N								Northern Region
Road Temperature Thermocouple	Regional Special 669-2.01.5.e	N								Northern Region

SECTION 660/661/740 MASTER MATERIALS CERTIFICATION LIST (Updated 07/01/11)

Item	2004 Specifications	Third Party Listing or Labeling Required? (Y/N)	Acceptance By:							Remarks
			Construction			Design			Statewide	
Section 660/661/740 is updated every quarter. Changes made this quarter are highlighted in yellow. Deleted text is lined out.			Project Engr		QA/ Matls Engr	Design Engr	Bridge Engr	Traffic Engr	State Materials Engineer	
				QPL						
Air Temperature Thermocouple	Regional Special 669-2.01.5.f	N								Northern Region
Radiation Shield	Regional Special 669-2.01.5.g	N								Northern Region
Telemetry Software	Regional Special 669-2.01.5.h	N								Northern Region
Vertical Temperature probe	Regional Special 669-2.01.5.i	N								Northern Region
ADDITIONAL COMPONENTS										
Piezoelectric Sensor	Regional Special 669-2.01.1	N								Northern Region
AS475 methyl grout for sensor	Regional Special 669-2.01.1.i									Northern Region
PSTN Modem	Regional Special 669-2.01.3	N								Northern Region
Remotely Controllable Code Operated Switch	Regional Special 669-2.01.4	N								Northern Region
Automated Vehicle Classification (AVC) Counter	Regional Special 669-2.01.6	N								Northern Region
ADDITIONAL MATERIALS										

APPENDIX D

SIGN SHOP DRAWINGS

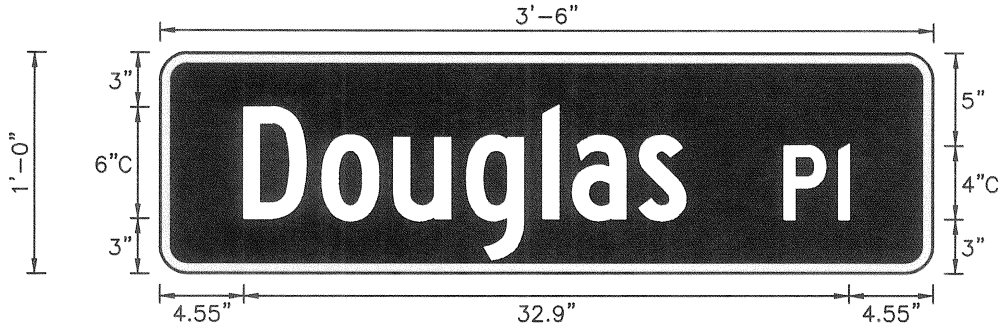


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SCALE:	NTS	FIGURE:	--

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES

STERLING HIGHWAY
MP 173 – 179
PAVEMENT PRESERVATION

D3-1 B STREET

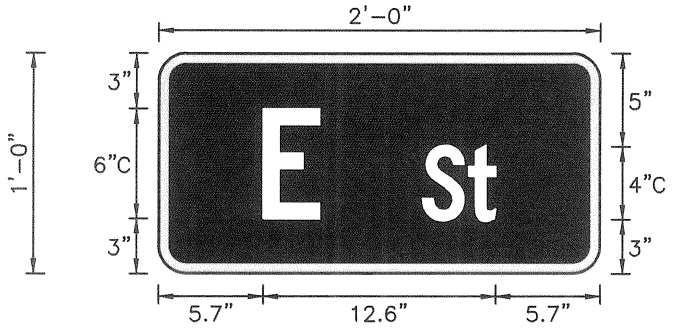


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SCALE:	NTS	FIGURE:	--

STATE OF ALASKA
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AND
PUBLIC FACILITIES

STERLING HIGHWAY
MP 173 - 179
PAVEMENT PRESERVATION

D3-1 DOUGLAS PL

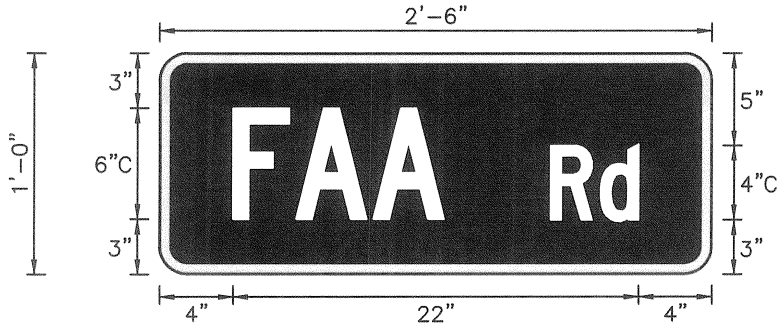


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SCALE:	NTS	FIGURE:	--

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES

STERLING HIGHWAY
MP 173 - 179
PAVEMENT PRESERVATION

D3-1 E STREET

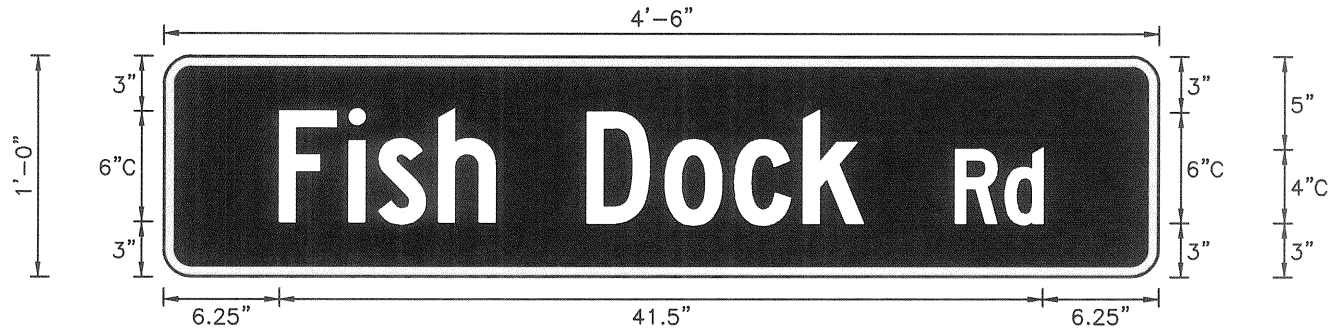


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STATE OF ALASKA
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PUBLIC FACILITIES

STERLING HIGHWAY
MP 173 – 179
PAVEMENT PRESERVATION

D3-1 FAA RD

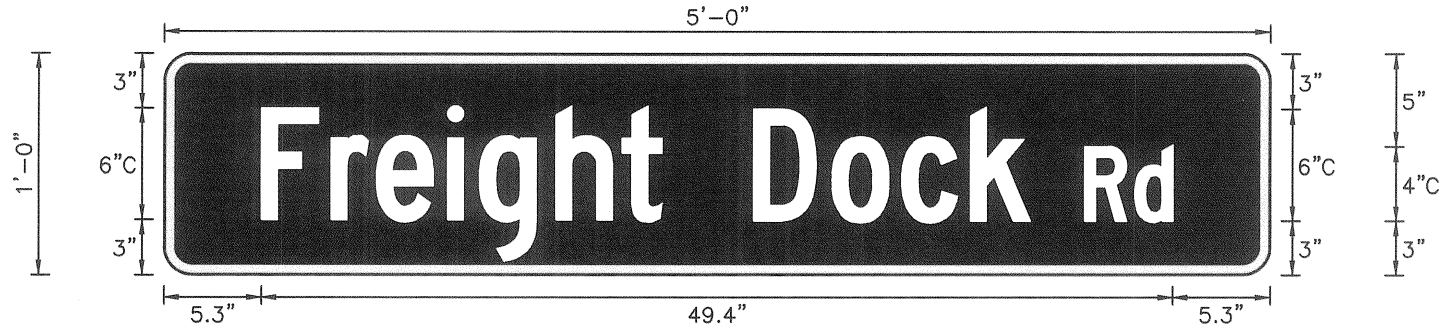


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SCALE:	NTS	FIGURE:	--

STATE OF ALASKA
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AND
PUBLIC FACILITIES

STERLING HIGHWAY
MP 173 – 179
PAVEMENT PRESERVATION

D3-1 FISH DOCK RD

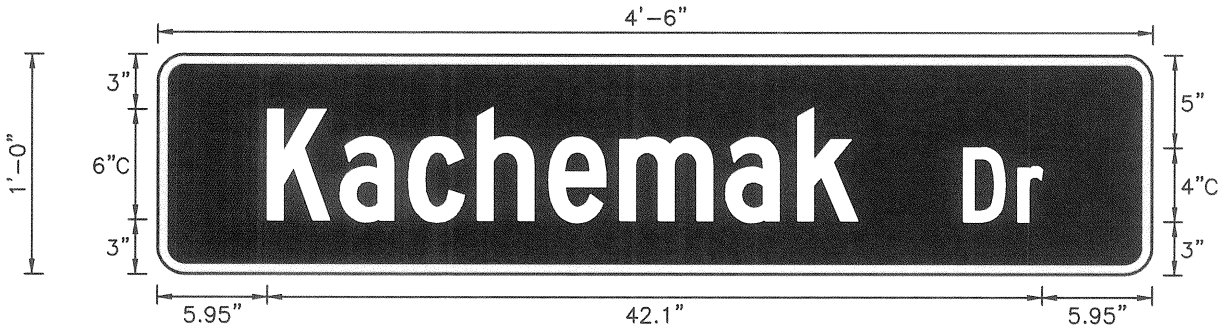


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SCALE:	NTS	FIGURE:	--

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES

STERLING HIGHWAY
MP 173 - 179
PAVEMENT PRESERVATION

D3-1 FREIGHT DOCK RD

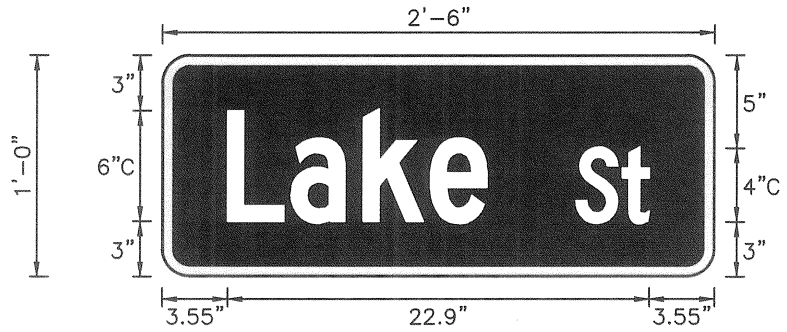


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SCALE:	NTS	FIGURE:	--

STATE OF ALASKA
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STERLING HIGHWAY
MP 173 - 179
PAVEMENT PRESERVATION

D3-1 KACHEMAK DR

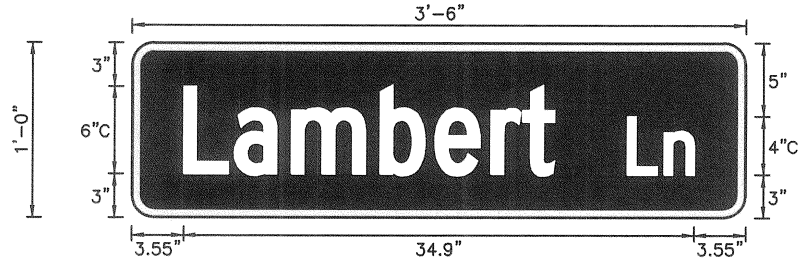


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SCALE:	NTS	FIGURE:	--

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES

STERLING HIGHWAY
MP 173 - 179
PAVEMENT PRESERVATION

D3-1 LAKE STREET

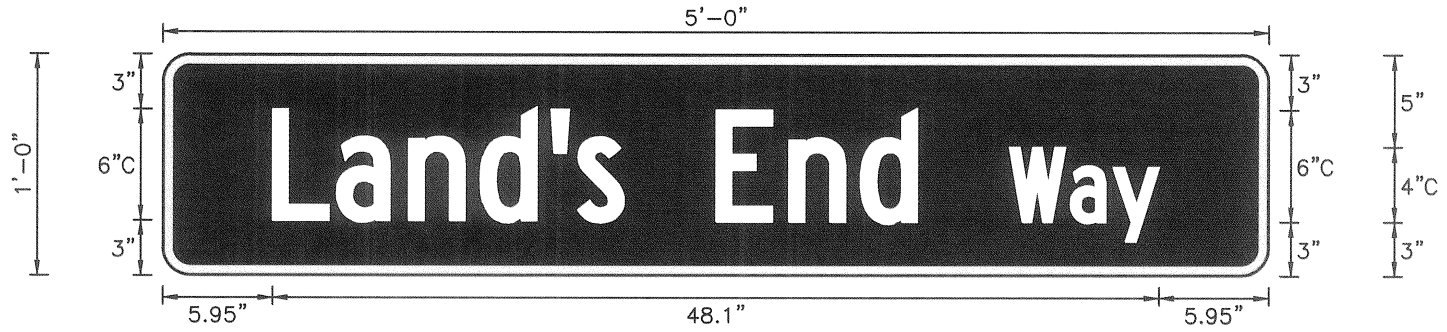


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SCALE: NTS	FIGURE: --

STATE OF ALASKA
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AND
PUBLIC FACILITIES

STERLING HIGHWAY
MP 173 - 179
PAVEMENT PRESERVATION

D3-1 LAMBERT LN

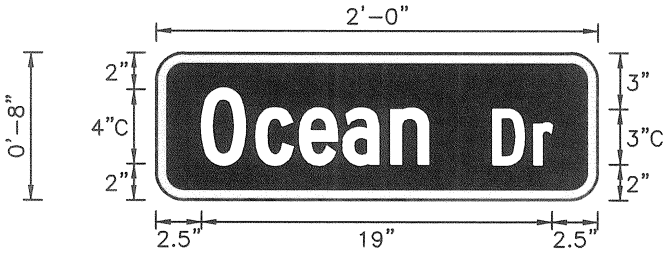


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SCALE:	NTS	FIGURE:	--

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES

STERLING HIGHWAY
MP 173 - 179
PAVEMENT PRESERVATION

D3-1 LAND'S END WAY

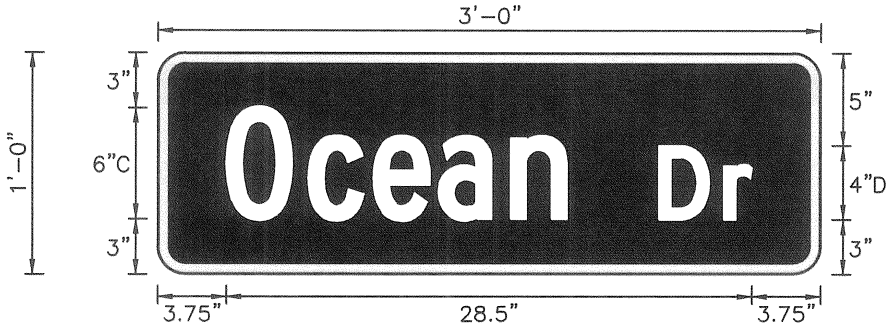


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SCALE:	NTS	FIGURE:	--

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES

STERLING HIGHWAY
MP 173 – 179
PAVEMENT PRESERVATION

D3-1 OCEAN DR



DRAWN:	MTH	PROJ. NO.:	NH-0211(059)/55260
SCALE:	NTS	FIGURE:	--

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES

STERLING HIGHWAY
MP 173 - 179
PAVEMENT PRESERVATION

D3-1 OCEAN DR



DRAWN:	MTH	PROJ. NO.:	NH-0211(059)/55260
SCALE:	NTS	FIGURE:	--

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES

STERLING HIGHWAY
MP 173 - 179
PAVEMENT PRESERVATION

D3-1 STERLING HWY

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

REQUIRED CONTRACT PROVISIONS
for
FEDERAL-AID (FHWA) CONSTRUCTION CONTRACTS

FHWA-1273 -- Revised May 1, 2012

REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS

I. General
II. Nondiscrimination
III. Nonsegregated Facilities
IV. Davis-Bacon and Related Act Provisions
V. Contract Work Hours and Safety Standards Act Provisions
VI. Subletting or Assigning the Contract
VII. Safety: Accident Prevention
VIII. False Statements Concerning Highway Projects
IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
X. Compliance with Governmentwide Suspension and Debarment Requirements
XI. Certification Regarding Use of Contract Funds for Lobbying

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of $10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding $10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under

this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are

applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

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

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor

will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of $10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding $2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

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

b.(1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or

will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding

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

3. Payrolls and basic records

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

b.(1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g. , the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH–347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

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

10. Certification of eligibility.

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of $100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

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

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

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

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

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

(1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
(2) the prime contractor remains responsible for the quality of the work of the leased employees;
(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost $25,000 or more – as defined in 2 CFR Parts 180 and 1200.

1. **Instructions for Certification – First Tier Participants:**

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.

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

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. **Instructions for Certification - Lower Tier Participants:**

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost $25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.

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

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the

department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed $100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

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

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed $100,000 and that all such recipients shall certify and disclose accordingly.

ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.



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