Alaska Department of Transportation and Public Facilities

Alaska Construction Manual

Effective March 10, 2023

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Table of Contents

1. Construction Overview

1.1. Definitions, Terms and Acronyms

Terms that are frequently used in the manual are briefly defined below. If there is any conflict between these definitions and definitions contained in the contract, the language of the contract governs.

AAC: Alaska Administrative Code

AC: The FAA's Advisory Circular

ACM: Alaska Construction Manual

AIP: Airport Improvement Program. The program administered by the FAA in accordance with Federal Aviation Regulations and 49 CFR Part 18, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments.

AK-CESCL: Alaska Certified Erosion and Sediment Control Lead

AKSAS: Alaska State Accounting System was replaced by IRIS in July 2015.

ALDER: The Alaska Data Enterprise Reporting Data Warehouse is a statewide system designed to integrate and report data from IRIS.

ALP: Airport Layout Plan

American Recovery and Reinvestment Act (ARRA): A federal program that provides stimulus funds to some construction projects.

APDES: The Alaska Pollutant Discharge Elimination System. A DEC storm water discharge permitting system that replaces the EPA clean water act permitting system.

Appeals Officer: The Commissioner of the Department or designee.

APPW: Alaska Products Preference Worksheet

ARFF: Aircraft Rescue Fire Fighting

AS: Alaska Statutes

ATP: Authority to Proceed. FHWA issues the authority for advertising the construction contract for bids.

Bid Tabulation: A certified listing released shortly after the bid opening that shows the three lowest bidders' prices by pay item and total bid, and the Engineer's Estimate.

BMP: Best Management Practices

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

CFR: Code of Federal Regulations

Change Document: A written order by the Department to the contractor making changes to the contract.

Change Order: A written amendment to the contract covering a modification that is within the scope of the original contract.

Chief Contracts (Procurement) Officer: A person who works statewide for the commissioner on Policy & Procedures, appeals, policy, and guidance.

CIP: Capital Improvement Project

CGP: The Construction General Permit that authorizes stormwater discharges from Construction Activities, issued and enforced by DEC.

CMP: Construction Management Program

CRO: DOT&PF Civil Rights Office

Conformed Contract: The bound contract documents containing the plans and specifications, addenda, the fully-executed contract, payment and performance bonds, EEO forms, and a completed bid schedule.

Construction Engineering (CE): Department management and administration of the contract during construction.

Construction General Permit (CGP or ACGP): The APDES or NPDES storm water permit that

regulates discharges from construction activities. Also see MSGP.

Contracting Officer: The person authorized by the Commissioner of the Department to enter into and administer the contract on behalf of the Department. The project's contracting officer is identified on the Invitation to Bid.

CTAF: Common Traffic Advisory Frequency

CWA: Clean Water Act

D&ES: Statewide Design and Engineering Services Division

DBE: Disadvantaged Business Enterprise

DEC: Alaska Department of Environmental Conservation. Also see APDES.

Deferred-Participating Expense: Expenses on a federally funded project whose eligibility for reimbursement has been questioned by the federal agency, or whose eligibility has not yet been determined.

Department (DOT&PF): The State of Alaska Department of Transportation and Public Facilities

DER: Design Engineer of Record

Directive: A written communication to the contractor from the Project Engineer, enforcing or interpreting a contract requirement or ordering commencement or suspension of an item of work already established in the contract.

DOLWD: Alaska Department of Labor and Workforce Development

EEO: Equal Employment Opportunity

EMT: Emergency Medical Technician

Encumbrance: An amount of money set aside in AKSAS to meet financial obligations to a contractor, consultant, or equipment supplier.

Engineer's Estimate: The estimated unit prices of each contract pay item, developed by the design engineer, which is used to establish the initial funding for the project and is released to the public at the bid opening.

eNOI: The Electronic Notice of Intent to begin construction activity under APDES or NPDES.

eNOT: The Electronic Notice of Termination to end coverage under APDES or NPDES.

EPA: U.S. Environmental Protection Agency. EPA is the federal agency responsible for formulating policies and implementing regulations to maintain water quality throughout the nation.

Employee Safety Concerns Program (ECP): An ECP provides an alternate method for raising safety concerns outside the chain of command. The program is managed by the Statewide Safety Officer and includes a help line. (907) 338-1482.

Erosion and Sediment Control Plan (ESCP): See specifications.

FAA: Federal Aviation Administration. FAA provides a safe, secure, and efficient global aerospace system that contributes to national security and the promotion of U.S. aerospace.

FCC: Federal Communications Commission. FCC is an independent government agency intended to encourage competition in all communications markets and to protect the public interest. The FCC develops and implements policy concerning interstate and international communications by radio, television, wire, satellite, and cable.

FHWA: Federal Highway Administration. FHWA administers a number of highway transportation activities including standards development, research and technology, training, technical assistance, highway access to federally owned lands and Indian lands, and commercial vehicle safety enforcement. FHWA has a significant role, working through partnerships, programs, policies, and resources that facilitate the strategic development and maintenance of state and local transportation systems as effective and efficient elements of the national intermodal transportation system.

Field Engineering Expenses: That portion of CE expenses incurred by the Project Engineer and the project staff.

FOP: Field Operating Procedure

FSS: FAA Flight Service Station

General Scope of the Contract: A phrase used in conjunction with contract changes to define the nature of the original contract and the breadth of the originally intended end product of that construction.

Group Chief/Project Manager (PM): The Project Engineer's immediate supervisor who concurrently supervises several Project Engineers.

HMCP: Hazardous Material Control Plan. The HMCP is integrated into the SWPPP. See specifications.

IDR: Inspector's Daily Report

Interim Work Authorization (IWA): A written order by the Project Engineer initiating changes to the contract, within its general scope, until a subsequent change order is executed.

IRIS: The Integrated Resource Information System is a series of integrated software systems that handle accounting, finance, procurement, payroll and human resources management processes. It includes project financial records.

Liquidated Damages (LDs): An amount contractually stipulated as a reasonable estimation of actual damages to be recovered by the Department if the contractor fails to perform as required.

Manufacturer's Certificate of Compliance: A certificate from the supplied materials manufacturer, which certifies the product meets or exceeds the contract requirements. The certificate must state that the material or assembly fully complies with contract requirements, identify the project name and number, and be signed by the manufacturer. The certificate must accompany each lot of the materials or assemblies delivered to the project.

Materials Certification List (MCL): MCL is a project-specific list developed during the PS&E stage of the design of a highway or airport project that lists all the material certifications required by the contract and the approving authority for the certification. The completed MCL includes materials that have been added by change order with the appropriate approving authority. The 660/661 MCL is a separate MCL for all contracts containing 660 and 661 items in order to comply with the Department of Labor agreement with the Department.

Material Sampling and Testing Frequency (MSTF) Table: A table that lists the minimum frequency of materials sampling and testing.

Materials Testing Summary: A summary of all test reports required and completed for a specific project, based on plans, specifications, the MSTF table, and final pay quantities.

Memorandum of Exceptions: A memorandum by the Project Engineer with concurrence from the Quality Assurance Engineer, explaining any substantial exceptions to the plans and specifications. When a Memorandum of Exceptions is required, it is included with the Project Materials Certification letter.

MS4: Municipal Separate Storm Sewer System. A separate permit required for a municipal storm sewer system to discharge pollutants under an APDES or NPDES permit.

MSDS: Material Safety Data Sheets

MSGP: Multi Sector General Permit, The APDES or NPDES storm water permit that regulates discharges from industrial or commercial sites. Also see CGP.

MSHA: Mine Safety and Health Administration, U.S. Department of Labor.

NHS: National Highway System

NICET: National Institute for Certification in Engineering Technologies

NOC: Notice of Completion, from DOLWD

NOW: Notice of Work, from DOLWD

Non-participating Expense: All expenses on state-funded projects as well as expenses on federally funded projects that are ineligible for reimbursement by the funding agency.

NOTAMs: Notices to Airmen. Information not known sufficiently in advance to publicize by other means concerning the establishment, condition, or change in any component (facility, service, or procedure) of, or hazard in, the National Airspace System (NAS); the timely knowledge of which is essential to personnel concerned with flight operations (FAA Order 7930.2).

NPDES: The National Pollutant Discharge Elimination System is the federal, nationwide, multifaceted permitting program to prevent the pollution of the nation's waters.

NRC: United States Nuclear Regulatory Commission

NTP: Notice To Proceed

OJT: On-the-Job Training.

OSHA: Occupational Safety and Health Administration. OSHA is an agency created to save lives, prevent injuries, and protect the health of America's workers.

Partial Completion: Replaces the term "Partial Acceptance" in future versions of the Standard Specifications for Highway or Airport Construction.

Participating Expense: An expense on a federally funded project that is eligible for reimbursement by the funding agency.

P&P: The Department's Policy and Procedures.

Plans: The Department's contract drawings that show the work. They are supplemented by the contractor's approved Working Drawings.

Project Development Authorization (PDA): An authorization form that establishes the funding for a project or a project phase.

Project Engineer: The authorized representative of the contracting officer, the Project Engineer is in direct charge of the project.

Project Materials Certification: A letter of certification that verifies the materials incorporated into the project conform to the plans and specifications.

Project Materials Report (PMR): PMR may be used to certify off-the-shelf local material purchases and the placement of minor quantities according to the Materials, Sampling & Testing Frequency tables for highway or airport projects (see Section 18.8-18.11).

QC: Quality Control is the contractor's program to ensure that materials and construction meet contract requirements.

QLA: Quality Level Analysis. QLA is used when the specifications require a price adjustment. Price is adjusted for quality of work performed.

QPL: Qualified Products List. A list of materials that meet the Department's standard specifications, except for Buy America and Alaska Agricultural/Wood Products. The Department makes no guarantee that any product on the *Qualified Products List* meets the requirements of the Buy America Act, Buy America Provision, or Alaska Agricultural/Wood Products.

RCCL: Regional Contract Compliance Liaison. The staff person assigned to be liaison between the regional construction branch and the civil rights office.

Regional Construction Engineer: The person in charge of the Regional Construction Section.

Reimbursable Services Agreement (RSA): A contract between the Department and another governmental entity, under which either entity performs contract services for the other, and is reimbursed by them.

RFP: Request for Proposal

RME: Regional Materials Engineer

RQE: Regional Quality Assurance Engineer

Safety Conscious Work Environment (SCWE): An environment where employees feel free to raise safety concerns without fear of retaliation. See Appendix.

SME: Statewide Materials Engineer

Source Document: The original record, created or received at the project site, that contains the necessary measurement and acceptance/rejection information on a contract pay item, and is signed and dated by the author.

SPCC Plan: Spill Prevention Control and Countermeasure Plan. See specifications and 40 CFR 112.

Specifications: The written contract documents that govern the methods and materials the contractor will use to construct the project, and contain the methods of measurement and basis of payment for contract pay items.

SQE: Statewide Quality Assurance Engineer

Supplemental Agreement: A written amendment to the contract covering a modification to the contract that is outside the scope of the original contract.

Support Group: Any unit of the Department, other than the Project Engineer and project staff, that provides support services to the Project Engineer during the construction phase of the project.

SWPPP: Storm Water Pollution Prevention Plan. See specifications.

TAW: Technical Advisor for Welding

Transportation Management Plan (TMP): A plan to manage the work zone impacts of a highway

project. It includes a Traffic Control Plan (TCP), and may also include a Traffic Operations Plan (TOP) and/or a Public Information Plan (PIP).

USCA: The United States Code Appended

Utility: In the usage of this manual, an entity and its facilities that produces/transmits electricity, communication signals, water, steam, sewage, petroleum products, gas, or similar commodity, or is a railroad.

WAQTC: Western Alliance for Quality Transportation Construction

Working Drawings: The contractor's shop drawings, plans, details and diagrams. After the Department approves working drawings, they become part of the contract.

1.2. DOT&PF Organizational Structure

DOT&PF is organized geographically with a Headquarters office in Juneau, and regional offices in Juneau (Southcoast Region), Anchorage (Central Region), and Fairbanks (Northern Region). There are also highway maintenance offices, design offices, marine facilities, airports, and public buildings scattered across the state.

For purposes of construction contract administration, it is important to know who occupies the following positions: the chief contracts officer, the contracting officer, the appeals officer, the Group Chief/PM, and the Project Engineer. The balance of the field crew, the inspectors, and the engineering technicians are referred to as the project staff.

The contracting officer on a given contract is always identified by name on the Invitation for Bids and on the Construction Contract document. The appeals officer is the commissioner of the Department (AS 36.30.625) or their designee (AS 36.30.632).

Shortly after the contract is awarded, the contracting officer will send a letter to the contractor identifying the Project Engineer assigned to administer the contract and the Group Chief/PM who supervises the Project Engineer. The Project Engineer and/or all or a portion of the project staff may be either Department employees or contract employees provided by a consulting engineering firm under a professional services agreement.

1.3. Project Engineer/ Delegation of Authority

The Project Engineer is the Department's key employee in construction contract administration. The Project Engineer, whether a Department employee or a consultant, is the designated representative for the Department who is responsible for the administration of the contract in accordance with the plans and specifications and for the performance of the engineering functions necessary to administer the contract. The contracting officer or designee provides the Project Engineer with a written delegation of authority to administer the contract. That delegation spells out the limits of the Project Engineer's authority and designates the Group Chief/PM who will be the Project Engineer's immediate supervisor. The regional director delegates authority to the Project Engineer to sign the SWPPP and other CGP related documents.

The Project Engineer is the single point of contact between the Department and all other parties associated with the contract. All communications from the contractor should be directed to the Project Engineer, allowing the Project Engineer to deal effectively with the contractor.

1.4. Project Staff – Assignments, Authority, & Training

The Project Engineer and the Group Chief/PM are responsible for developing the staffing plan for a project. When the Group Chief/PM approves the plan, the positions are filled with available staff and in accordance with collective bargaining agreements or as described in a professional service agreement for consulting engineering services. All project staff members should receive written notification of their initial assignment to a project, but notification may be done verbally. The notification should list the Project Engineer as their immediate supervisor, along with the specific staff responsibilities, authorities, and assignments.

The Project Engineer should review new employees' qualifications and the requirements of the assignment; if any job task or safety-related training is needed (AS 18.60.066), it should be arranged before the start of the assignment, if possible. As the Project Engineer or their immediate supervisor familiarizes each new employee with their assignment, they should review the new employee's responsibilities, authority, relationship with their supervisor and other project personnel, and any other information that will make

the new employee better able to perform in the assigned capacities.

1.5. Employee Conduct

Employees should conduct themselves in an ethical, courteous and helpful manner when dealing with the contractor, the public, or other members of the project staff. Rules of conduct apply to all Department employees, including consultant employees.

- The Project Engineer and the contractor must post documents required by law at their field offices.
- See Appendix 18.2 and 18.3 for a list of required documents.

Department policies and Alaska Statutes of interest to employees are available on the web at:

- http://www.dot.state.ak.us/admsvc/pnp/policy_and_procedures.shtml

  (See P&Ps in Sections 2 and 8)

- http://www.legis.state.ak.us/basis/folio.asp

  (See AS 39.25.178 and AS 39.52)

The Department intends to provide a safety conscious work environment (SCWE). Employees should report conditions of work that jeopardize their safety or health, to their supervisor or to the Employee Safety Concerns Program (ECP). Each report filed with the Department will be investigated. No retaliation will occur for raising safety or health concerns. See Section 18.18 for SCWE, and the D&ES website for ECP Manual. Employees may also report conditions to an agency outside of the Department.

1.6. Federal-Aid Project Oversight Responsibility Agreements

FHWA and the Department have entered into a Stewardship and Oversight Agreement. The agreement assigns responsibilities and tasks to the Department or FHWA as outlined. The FHWA Stewardship and Oversight Agreement is posted at:

www.dot.state.ak.us/stwddes/dcspubs/assets/pdf/directives/attach/2015/stewardship_agreement_attach.pdf

The Department will assume these responsibilities under Section 106 of Title 23: for design, plans, specifications, estimates, right-of-way certification statements, contract awards, and inspections/final acceptance of projects. Projects are identified as PoDI, NHS, or Non-NHS Projects.

FHWA's focus will be on emphasizing technical and program assistance. FHWA personnel will conduct reviews on PoDIs (Section 7.7) and may occasionally review other projects. . All project records are open to FHWA, and reports are to be furnished when FHWA requests them.

FAA and the Department used to have an Oversight Agreement, it was rescinded by FAA on April 8, 2014.

The current responsibilities and tasks of the Department or FAA are outlined in Advisory Circulars and Orders, and the grant agreement. For more information use the following links:

- FAA Advisory Circulars: http://www.faa.gov/regulations_policies/advisory_circulars/
- FAA Airports Orders: http://www.faa.gov/airports/resources/publications/orders/
- Airports SOPs: http://www.faa.gov/airports/resources/sops/

There are further discussions on grant requirements for FHWA and FAA in Section 2.3.

1.7. Construction Manual Exceptions

Due to established regional procedures, or variances in project staffing or to the nature of a project; there may be situations where full compliance with the construction manual is either not cost-effective or not practical. In such cases the Project Engineer should document the exceptions in a memo. The memo should be sent through the Group Chief/PM to the Regional Construction Engineer. Regional procedures effecting construction administration should also be documented. The exceptions may not violate federal, state or local law; federal aid requirements; State Policy and Procedures; or D&ES Chief Engineer's Directives.

Project Funding & Expenditures

2.1. Project Numbers & Project Account Coding

Each federally-funded project has a federal project number or numbers assigned to it; this number relates to the federal funding agreement. An FHWA project number identifies the highway the project is on when a single federal route is identified, and includes a sequential project number for that section of highway. An FAA project number identifies the federal program funding the project, the airport, and includes a sequential grant number for that airport under that federal program. These numbers relate to the project grant, and not to expenditures.

Coding of overhead costs on all Capital Improvement Projects (CIP) changed on July 1, 2001. An Indirect Cost Allocation Plan (ICAP) charge is applied to all capital expenses. ICAP revenue supports the overhead activity within the Department.

Coordinate with regional project control to code project expenditures. See chapters 12.5 and 12.6 for more information about the process of coding project estimates.

2.2. Project Funding & Expenditure Monitoring

Prior to the Department advertising a contract for bid, initial funding is set aside for the construction phase of the project. The amount of funding is based on the Preconstruction Engineer's Estimate of the construction cost, plus a percentage of that estimate for construction engineering (CE) expenses. CE costs typically vary depending on the size, location, and complexity of the project. Also included on federally-funded projects, is enough state-only funding to cover the estimated cost of ineligible construction items plus a small additional amount of state-only funding to cover the cost of ineligible CE items. The total funding available for the construction phase of a project varies by project type, funding source, and the way the project was authorized by the state legislature.

Initial funding is established in IRIS through a document known as a Project Development Authorization (PDA). After the Department awards the contract, this initial funding is adjusted, through a PDA revision, to reflect the awarded contract amount. Subsequent adjustments are the responsibility of the Group Chief/PM and the Project Engineer. Any changes in project costs resulting in an increase or decrease require the preparation of a PDA (request for a) revision.

On federally-funded projects, expenses are divided into two basic categories: participating and non-participating. The federal agency reimburses the Department for a percentage of the cost of all eligible (participating) expenses. The reimbursement percentage is established in the federal funding agreement and varies considerably with the federal agency and the project type. The Department must pay the unreimbursed percentage of eligible expenses (known as state-match funds), as well as the total cost of all ineligible (non-participating) expenses.

Once a construction contract is awarded, the amount of the contract award is encumbered in the accounting system, and referenced to the contractor and contract number. This guarantees that sufficient funds are available to pay the contractor. This is accomplished using an Encumbrance Memo. Each category of funds must be encumbered separately and all funding must be available in the project phase account before the contractor can be allowed to proceed with the work (this applies both to the initial contract and to contract change documents). The Project Engineer and the Group Chief/PM are responsible for encumbering funds as the project progresses, to ensure sufficient funding is available and encumbered to guarantee payment of remaining contract obligations. All contractual obligations (consultant contracts, equipment purchases) and certain vendor stock requests are handled in a similar fashion.

Occasionally the Department may perform work for another governmental agency, or a utility may pay for a portion of the work performed under a Department contract. These outside funding arrangements are set up under Reimbursable Service Agreements (RSAs) or utility agreements. The regional finance unit bills the other agency/utility for the work after the Project Engineer certifies the work has been acceptably performed.

The project control unit designates the Group Chief/PM as the construction phase financial manager for all projects active in the construction phase. This designation makes the Group Chief/PM (or the Project Engineer, as the sub-designee) responsible for maintaining the construction phase financial account in a positive condition at all times. It is critical that both the Project Engineer and the Group Chief/PM closely monitor construction phase expenditures throughout the project to avoid exceeding the available funds. This is particularly important when the project encounters changed conditions or when additional work is contemplated. You can review current project financial information daily in IRIS or through project expenditure reports or special audit trails produced in ALDER. Project expenses will be paid only if sufficient funds are available in IRIS to cover them.

2.3. Federal Funding Agreements

On federally-funded projects, the Department enters into two contracts: one with the federal funding agency and the other with the construction contractor. FHWA and FAA financial programs are set up and monitored differently, but both accomplish the same result– the transfer of federal funds to the Department.

2.3.1 FAA

The signing of the FAA Grant Agreement usually takes place before the construction contract is awarded. The FAA's program consists of individual grants to airport sponsors (the Department is a sponsor). FAA awards grants on a project-by-project basis. The grant program is established/renewed by Congress, usually in three to five year increments, with the program name and emphasis varying.

A single FAA Grant Agreement may involve reimbursement for design engineering, land acquisition, construction improvements and construction engineering (CE); purchase of aircraft rescue and fire fighting (ARFF) vehicles, snow removal equipment, and buildings. The Department could manage each separate item under a separate grant; however, the FAA prefers to consolidate grants. Design engineering is typically included under the same grant with the related construction activity.

The parties to the grant agreement usually sign before the construction contract is awarded. FAA's Airports Division and the Department's Statewide Aviation unit sign the document. In addition to establishing the maximum dollar amount of federal reimbursement, the grant agreement includes a written description of the work items that are eligible for reimbursement. State funds cover improvements not in the grant agreement and the sponsor's matching share.

Amendments to the grant agreement are possible. The Department (sponsor) is limited to fifteen percent in additional funds to cover allowable and reasonable expenses on the project, such as:

- Construction changes
- Claims
- Engineering costs
- Overruns

Justification is required to back up the increased costs. Grant amendments cover changes in grant description and financial concerns. The Project Engineer should be familiar with a signed copy of the grant, the special conditions, and any subsequent amendments.

2.3.2 FHWA

The signing of the FHWA Project Agreement, authorizing the construction phase, always occurs prior to advertising the project for bid. The FHWA's program consists of individually funded agreements, handled on a project-by-project or a phase-by-phase basis. Like the airport grant program, Congress establishes/renews the FHWA funding program in multi-year increments, each bearing a different title and different emphasis. FHWA Project Agreements can fund preliminary engineering (design), land acquisition, construction improvements, construction engineering (CE), and utility relocation all under one agreement or each under a separate agreement.

The Project Agreement that provides the initial funding for the construction phase is usually signed at the same time that the FHWA issues their Authority to Proceed (ATP) for advertising the construction contract for bids. The document is signed by the FHWA's Alaska Division and the Department's Federal Aid unit, both located in Juneau.

Project Information Document (PID) Form: In accordance with 2 CFR 200.210, a Federal-aid project agreement must have an identified period of performance for the scope of work authorized. The period of performance includes both a start and end date, which identifies the period of time when costs can be incurred (work performed) on a project for the authorized scope of work to be eligible for reimbursement with Federal funds. No additional Phase IV costs can be incurred on the project for

federal reimbursement after the Authority to Proceed (ATP) end date.

Construction or Design (depending on regional practices) will submit the PID Form for Phase IV in an electronic program called eWorX. The PID indicates basic project information, scope, and ATP beginning and end dates. See web link: https://portal.eworx.com/

For further information on establishing and modifying ATP End Dates, refer to the FHWA Project Funds Management Guide for State Grants and FAQ's on ATP End Dates at the following respective links:

https://www.fhwa.dot.gov/cfo/projfundsmgta1.cfm

https://www.fhwa.dot.gov/cfo/projfundsmgt_qa.cfm

Following award of the contract, the Department submits a Project Agreement Estimate (the cost of the construction contract plus an additional allowance for the CE) to the FHWA, and the Project Agreement is modified to reflect the contract award amount. The Project Engineer should secure a copy of both the Project Agreement Estimate and the Project Agreement, as well as all subsequent revisions to either, and should become familiar with them. See Section 7.7 for further information.

The FHWA uses a system of Work Type Codes (also known as FA Codes) to track and account for expenditures of their funds. The codes appear on the Project Agreement and subsequent amendments, and must also appear on the Final Estimate. Questions on the proper application of these codes should be directed to the Group Chief/PM, regional project control, or to the FHWA area engineer.

For more information about managing Project Funds, use web link: https://www.fhwa.dot.gov/cfo/projfundsmgt.cfm

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3. Preliminary Activities

3.1. Getting Started – Review the Records

The first order of business for a newly assigned Project Engineer is to thoroughly review the contract and become familiar with the project. This holds true no matter what stage the project is in when the assignment is made. From a preliminary review of the contract documents, the Project Engineer should know the scope, location, and type of project and should be able to determine its estimated cost, timing, and general source of funding, as well as the seasonality of the project (winter or summer construction).

The Project Engineer should also obtain and review all of the following documents:

Conformed Contract and Bid Tabulations: Including all paperwork submitted by the contractor prior to receiving the contract, compare the low bidder's/contractor's principal unit prices and overall bid with those of other bidders and with the Engineer's Estimate; check the completion date or contract time.

Design File: Review the design engineer's assumptions and decisions, and gain insight into the whys of the project; obtain any aerial photos used during the design.

Engineer's Estimate: Following a review of the contract, the Project Engineer should compare their own estimated prices with the design engineer's estimated unit prices (the Engineer's Estimate).

Environmental Documents: The Project Engineer should obtain and review copies of the project's Environmental Assessment, Environmental Impact Statement, or Categorical Exclusion and should become familiar with all of the project's environmental commitments.

Federal Funding Agreements: For FHWA-funded highway or marine projects, the Project Engineer shall secure a copy of the Project Agreement, the Project Agreement Estimate, and the Authority to Proceed (ATP) and make certain the project will receive all amendments to the Project Agreement.

On FAA-funded airport projects, the Project Engineer shall have a copy of the Grant Agreement, Application for Federal Assistance, and any Grant Amendments.

Materials Certification List (MCL): The Material Certification List (MCL) is prepared by the Engineer of Record with the assistance of the MCL Coordinator. The MCL lists all materials that require certification and who approves the certification. See Section 4.5 for additional information on the MCL.

Materials Permits: The Project Engineer should secure copies of the permits for each of the projects' designated materials sources, if any, and copies of any royalty agreements and should become familiar with all of the permit stipulations (seasonality requirements, haul route designations/restrictions, fish and wildlife conflicts, overburden disposal, and pit clean-up requirements). Compare the permit stipulations with the contract language to make certain there are no conflicts.

Materials Report: For an in-depth look at the materials investigation, the Project Engineer should: study the materials source test results; check the age (old investigation or fairly recent) of the report and the extent sources were investigated, review sources that were investigated but not included in the design, and compare the materials report's recommendations with the design engineer's final design.

Materials Testing Summary: The Project Engineer, the regional quality assurance section, or the materials unit prepares the project's Material Testing Summary. To create a project-specific Material Testing Summary, combine the contract's specified test methods and estimated quantities with the Materials Sampling & Testing Frequency (MSTF) table for Airports or Highways, published on the Statewide Materials Website (a web link is in Sections 18.8 thru

18.9). The final Materials Testing Summary is based on final pay quantities (See Section 11.2).

Reimbursable Service Agreements (RSAs): If the project includes work for another agency, review the RSA to determine the scope of the other agency's work and its impact on the work of the prime contractor.

Right-Of-Way Documents: Principal documents include right-of-way plans, airport property plans, right-of-way certifications, airport lease lot drawings, memoranda of agreement regarding encroachments and access to private property. The Project Engineer should review all of these documents relating to the project and compare them to the contract for consistency and completeness.

State Funding Documents: Review the current Project Development Authorization in AKSAS, which contains the exact amounts, sources, and categories of funds that are available for the project.

Transportation Management Plan (TMP): On highway projects review the TMP and identify how it addresses work zone impacts. The TMP always includes a Traffic Control Plan (TCP). The TMP may also include a Traffic Operations Plan (TOP) or a Public Information Plan.

Utility Agreements: If the project involves relocating an existing utility or extending a utility to provide new service, review the utility agreement and determine the scope of involvement, if any, with the agreement; also review the timing and coordination with the prime contractor and the sources of funding for the utility work and/or railroad agreement.

Review and compare these documents to the contract for consistency and completeness.

The Project Engineer should review the plans and specifications and all related documents. The Project Engineer should review the project with the design engineer and airport manager on airport projects. This will allow the Project Engineer to gain needed insight into the design decision-making process, which may provide answers to questions that could arise during the project. The review also opens a channel of communication between the Project Engineer and the design engineer. The Project Engineer should verify the plans with an on-site inspection with the maintenance and operations unit (see Section 3.12).

3.2. Prior to Bid Opening

3.2.1. *Constructability Review*

Before the Department advertises the project for bid, the construction unit is given the opportunity to review and comment on the plans and specifications. A Constructability Review (CR) is a design review involving those with construction expertise. When a design review (local, PIH, or PS&E) set is distributed, the Construction Section is responsible for determining the appropriate level of CR and for assigning personnel with adequate construction expertise (depending on available resources). The Group Chief/PM assigned to supervise the project should conduct the review. If the Project Engineer has been selected, that person should also be involved in the review.

The purpose of a CR is to transfer construction knowledge, to ensure the project is biddable and buildable; that the contract documents clearly define when, where, and what work is to be performed; what restrictions exist; and how the contract work will be accepted and paid for.

Additionally, CRs look at:

- Coordination of contract documents
- Construction phasing and scheduling
- Traffic control
- Ease of construction
- Design consistent with field conditions
- Materials availability
- Specifications
- Areas/topics of high risk
- Permits and Environmental Commitments
- Estimate Award to Project Completion Time for bid documents.

Comments from a CR review are handled the same as other plan review comments. CR personnel should participate in plan review meetings as appropriate.

3.2.2. *Answering Bid Questions*

If the Group Chief/PM assigns a Project Engineer to the project prior to or in the early stages of the advertising period, the Project Engineer reviews the project records and becomes familiar with the project against a background of the events described in this

and the following section. During the advertising period, either the Group Chief/PM or the Project Engineer may be tasked with responding to bidder's inquiries.

The Project Engineer or Group Chief/PM should keep a permanent record of all contacts made with bidders, suppliers, and subcontractors during the advertising period. The record should include all questions and answers, as well as how the answers were determined. The records should be kept on a telephone call record form, or a similar form, and should be placed in the files. The design unit and the contracting unit will decide whether the answer to one bidder's question is significant enough to the bidding process to make it an addendum to the bid. Prior to the bid opening, the only information on project cost that the Department releases to the public is a range of estimated contract prices. The design engineer's estimate is not made public until bid opening.

3.3. Construction Sponsor Force Account Service

The FAA requires sponsors (the Department) to submit a Construction Force Account Proposal outlining the professional services for administration of the contract. The Force Account Proposal shall include:

- Heading and Introduction
  - Project title
  - Airport Improvement Number
  - Short Description of Project
  - Location
  - Request for approval of force account
- Project Scope
  - Describe nature and extent of force account work
- Justification
  - Describe the benefits to the sponsor and FAA, of using force account instead of competitive bids or negotiated contracts.
- Personnel Qualifications
- Detailed Cost Estimate
- Sponsor's Resources
- Cost Analysis

A detailed Outline for a Force Account Proposal is in Section 17. The FAA requires the Force Account Proposal prior to the contractor starting work. The FAA reviews the Force Account Proposal and must perform a reasonableness-of-cost determination.

3.4. Bid Opening to Award/Notice to Proceed

This subsection is considered informational only. There are no required actions of the Project Engineer.

All bid openings must be done according to P&P 10.02.011.

After the bid opening the Department tabulates the bids. After the bids are certified by the contract officer they are posted on the procurement website.

A confirming letter is sent to the apparent low bidder. The letter requests the following documents to be submitted within five working days:

- Subcontractor List (Form 25D-5) (all projects per AS 36.30.116)
- DBE Utilization Report (Form 25A-325C) (If the project is federally funded and has DBE goals).

If the apparent low bidder is unable to meet the DBE goals (per Form 25A-325C), they must also submit:

- DBE Summary of Good Faith Effort Documentation (Form 25A-332A)
- DBE Contact Reports (Form 25A-321A)
- A Written DBE Commitment (Form 25A-326) for each DBE to be used on the project.

3.4.1. *Reviewing Good Faith Effort*

On Federally funded projects where the apparent low bidder does not meet stated DBE goals, the Civil Rights Office (CRO) reviews the Good Faith Effort (GFE) documentation. The GFE forms document the bidder's unsuccessful efforts at meeting the DBE goals. The CRO decides either to accept, or not accept the GFE.

If the CRO does not accept the apparent low bidders Good Faith Effort, then the bidder has three days from the date the Department notifies them of this determination to request an administrative reconsideration of the determination. If the bidder doesn't request reconsideration, or their reconsideration is denied, then the Department may award the contract to the next lowest responsive and responsible bidder that meets the DBE goals.

If the contracting officer awards the bid based on Good Faith Effort, then the contracting officer notifies the apparent low bidder that their GFE was accepted in the Letter of Award.

3.4.2. *Internal Recommendation to Proceed with Intent to Award*

During the five day time period a "Recommendation to Proceed with Intent to Award" memo is circulated with the certified bid results to the Project Manager who is responsible for securing approval from the Section Chief and Project Director, as well as the Project Control official for funding verification. When this form has been approved by all, it is returned to the Chief of Contracts/Contracting Officer, and a Letter of Intent to Award is prepared.

3.4.3. *Letter of Intent to Award*

The contract section will send a Letter of Intent to Award to the apparent low bidder. For federal-aid funded contracts the following documents (as applicable) are submitted by the bidder within 15 calendar days:

- Corrected Bid Schedule (If Required)
- Bidder Registration (Form 25D-6)
- Contractor's Questionnaire (Form 25D-8)
- Construction Contract (Form 25D-10A)
- Payment Bond (Form 25D-12)
- Performance Bond (Form 25D-13)
- Material Origin Cert. (FHWA, Form 25D-60)
- Buy American Request for Type 3 Waiver (FAA , Form 25D-153)
- EEO-1 Certification (Form 25A-304)
- DOT&PF Training Program (Form 25A-310)
- Training Utilization Report (Form 25A-311)
- A copy of contractor's Alaska Business License
- A copy of contractor's Registration
- Evidence of Insurance

The Letter of Intent to Award triggers the protest period, which is ten (10) calendar days.

3.4.4. *Letter of Award, Notice to Proceed and Contract Amount*

Once all of the successful low bidder's documents are in order and are approved by the Chief of Contracts, the contracting officer signs the contract and issues a Letter of Award. The successful low bidder then becomes the contractor.

The Notice to Proceed may be issued by the construction section after the Letter of Award is issued, and it has been confirmed that the contractor has electronically submitted the Notice of Work (NOW) to the Alaska Department of Labor.

The amount of the successful low bid becomes the amount of award, and is known as the original contract amount; this amount usually establishes the daily-liquidated damage charge that applies when actual construction time exceeds contract completion time. The daily-liquidated damage charge represents the average daily construction engineering (CE) cost on contracts of this value and is based on analysis of actual CE costs from Department projects.

3.4.5. *Additional FAA Requirements*

The following documents must be sent to FAA for review, before they will give Concurrence to Award:

- Engineer's Estimate
- Bid Tabulations
- A statement signed by the sponsor that a price analysis was performed and that the sponsor recommends that FAA accept the statement and analysis as evidence of cost reasonableness
- The apparent low bidder's signed Form 25D-159 Certification Regarding Tax Delinquency and Felony Conviction

Submit the following documents to FAA when they are written or assembled:

- Conformed copy of the plans and specifications
- Force account construction proposal
- Construction Management Program (CMP), if applicable (Section 3.7)

3.5. Contractors Progress Schedule

The contract requires that the contractor submit a construction progress schedule to the Project Engineer, before the preconstruction conference. The Project Engineer should review the staffing plan and field engineering budget, and if needed, modify it based on the contractor's schedule.

The contract specifies the type of schedule (CPM, bar chart) that the contractor is to submit. The schedule should break out the construction information into sufficient detail to comply with contract requirements and to make the schedule meaningful for the Project Engineer. The schedule should show beginning and ending dates for the principal items of work, periods of multiple shift work, and periods of anticipated shutdown.

When the Project Engineer finds that the schedule provides all of the required information in a format that allows them to schedule staffing for the project

and to monitor the contractor's operations, they should return a signed copy to the contractor. A copy of the current schedule should be posted in the field office.

3.6. Project Staffing & the Construction Engineering Budget

After reviewing the plans and specifications and other project records, the Project Engineer should have a basic idea of project staff size and should start to develop a preliminary construction engineering (CE) budget. The CE budget consists of two categories of expenses: those that are under the direct control of the Project Engineer (field engineering expenses) and those that aren't (support group expenses).

Numerous groups within the Department, which support the field construction effort, incur expenses that are charged against the project's account; these units are referred to as support groups and include every individual who charges time or expenses to a construction project who is not under the Project Engineer's immediate supervision. Exercise control over the support groups' expenses by requesting, before construction begins, that each support group provide a budget for their group's estimated expenditures. The sample support group budget request memo, shown in the exhibits, lists the majority of the support groups that you should contact. Most of these support groups have a distinct program code or codes (see Section 2.1) to which they charge their expenses; this makes tracking their expenses much easier.

Following the Letter of Award, the project engineer may contact the contractor and find out tentative scheduling and staffing plans. If possible, secure a copy of the progress schedule. This information should allow you to refine the project staffing plan, add more accurate durations to the staff assignments, and refine the field engineering budget. The Project Engineer and the Group Chief/PM should review and coordinate the development of the staffing plan and CE budget.

The Project Engineer should look at the total CE budget amount (support group budgets combined with the field engineering budget) and compare it to the remaining available funds. If the total doesn't exceed available funds, all is well. If the budget does exceed the available funds, ask each support group to reduce their budget, or reduce the field engineering budget, or ask for a CE budget increase. Consult with the Group Chief/PM for budget help if necessary. Any CE expenses exceeding available federal funds must be paid out of state-only funds.

3.7. Construction Management Program

The Department must submit a Construction Management Program (CMP) to the FAA prior to the start of airfield taxiway, apron, and runway construction projects where the federal share of the cost of asphalt and concrete pavement, exceeds $500,000. The CMP shall detail the measures and procedures used to comply with provisions of the construction contract, including but not limited to all acceptance and quality control provisions and tests required by the specifications for subgrade, subbase, base, and surface courses.

The CMP shall include as a minimum:

- Project title and number
- Name of DOT&PF Project Engineer assigned to the project
- Names of testing laboratories and consulting firms with acceptance or quality control testing responsibilities on the project, and a description of the services to be provided, if these responsibilities must be identified
- A statement that construction inspection and material testing is to be performed in accordance with the Standard Specifications for Airport Construction, as modified by the Department and approved by the FAA, for Airport Improvement Program (AIP) construction in Alaska, and documented in accordance with the *Alaska Construction Manual* (Sections 10 and 11)
- Material Testing Summary: The Project Engineer, Quality Assurance section, or the Materials section applies the Materials Sampling & Testing Frequency – Airport Construction Contracts (Section 18.9) to the material quantities in the original contract to make up the summary

The Group Chief/PM and the Project Engineer prepare the plan. The Group Chief/PM submits it to the FAA for review. Receive acknowledgement from FAA prior to the start of construction work.

3.8 Preconstruction Conference

After receiving submittals from the contractor required by the contract, the Group Chief/PM and the Project Engineer should schedule a preconstruction conference. The meeting should be scheduled around

the availability of the Project Engineer, the contractor, maintenance and operations representatives, and the federal agency's engineer. The date and time of the meeting should be arranged verbally with all participants.

The complexity of the project, its location, and the type of work involved determine who should participate in the preconstruction conference. Participants may include the following people or representatives from the following groups:

Usually in attendance:

- Airport manager
- Alaska Department of Labor representative
- Contractor
- Group chief/PM
- Maintenance and Operations representative
- Project Engineer
- Quality Assurance/Materials unit
- Regional compliance officer

Invite as applicable:

- Design engineer, design consultant or naval architect
- Environmental unit
- FHWA or FAA Airports Division
- Major subcontractors (at the prime contractor's invitation)
- Other governmental agencies with direct involvement
- Traffic and Safety unit
- Utilities unit

The contract requires the contractor to provide certain information to the Project Engineer prior to the preconstruction conference. This information usually includes:

- A construction progress schedule
- A submittal list showing anticipated dates of drawing and plan submittals, procurement of materials and equipment, out of state fabrication inspections, and specialty work items inspections
- A list of all the suppliers and the material delivery dates
- A Construction Phasing Plan with Traffic Control Plans for initial phases
- A Stormwater Pollution and Prevention Plan and a Hazardous Material Control Plan
- A Quality Control Plan
- Designation of the Project Superintendent
- Designation of the DBE/EEO officer
- Designation of the Worksite Traffic Supervisor
- Designation of the Safety Officer

The preconstruction conference is intended to serve several additional purposes:

- Provide everyone associated with the contract activity an opportunity to meet and get acquainted
- Set up lines of communication that establish the Project Engineer as the single point of contact for the Department, and the prime contractor as the single point of contact for the prime and all of their subcontractors and suppliers.
- Review state/federal minimum wage rates and payroll reporting requirements; review the timing and procedures of subcontract approval
- Review requirements of the federal EEO programs and state DBE goals that affect the project
- Remind contractor to submit a Notice of Work with DOLWD
- Briefly review important general sections of the contract document
- Discuss the plans and specifications, particularly unusual conditions or requirements, permit stipulations, and load limits
- Discuss materials submittal requirements, including a review of the contract's list or the Project Engineer's list of pay items requiring submittals, the number of copies of each submittal, and the timing of those submittals and of their approval
- Review and discuss the contractor's progress schedule and proposed methods of operation
- Review and discuss the contractor's Traffic Control Plan. The contractor must immediately notify the Project Engineer of any traffic-related accident that occurs within the project limits as soon as the contractor or a subcontractor becomes aware of the accident.
- Review and discuss the contractor's Safety Plan Compliance Document. Discuss how it complies with the airport Construction Safety and Phasing Plan. Discuss the 45 day wait period after filing a Strategic Event Coordination form. Contractors and subcontractors must comply with Notices to Airmen (NOTAMs) issued for any construction activity. The contractor must notify the Department to cancel the NOTAMs when the activity ceases.
- Coordinate contract activities with other affected parties, including maintenance and operations,

airport management, airport tenants, air traffic facilities, and security
- Review and discuss the project's environmental documents including borrow permits, wetlands fill permits, and noise abatement requirements.
- Review and discuss the contractor's Stormwater Pollution Prevention Plan and Hazardous Material Control Plan.
- Discuss contractor/subcontractor responsibility for utility locates and Call 811 (if available for project area) before digging.

See FAA Advisory Circular (AC) 150/5300-9A, Predesign, Prebid, and Preconstruction Conferences for Airport Grant Projects.

Prepare an agenda for the preconstruction conference, and provide a copy to each attendee. Also provide a sign-up sheet for each person attending. Record the conference, and furnish copies of the recording to any attendee who requests one. Keep a copy of the recording in the field office. The preconstruction conference can be held as more than one meeting and can be conducted in whatever format the Project Engineer and Group Chief/PM feel best suits their particular project, as long as all topics of importance are covered.

3.9. Partnering

Partnering is an approach to managing a construction project that stresses communication and mutual goals and reduces confrontation and conflict. It is not defined in any contract document nor is it an enforceable part of the contract. The intent of partnering is to establish a cooperative relationship between the Department and the contractor at all levels. The goal is to enhance project cost effectiveness and maintain quality and efficiency by bringing both parties together to solve construction challenges and problems. Projects that incorporate partnering should include an evaluation of the process in the Explanation of Overruns, Underruns, and Change Documents.

Partnering usually starts when the Department approaches the contractor or the contractor approaches the Department, and a request is made to implement partnering on the project. If both agree, they have taken the first step. Partnering is not mandatory but it does require the agreement of all participants.

A professional facilitator may be hired to lead the session, or the session may be held without one. If a facilitator is hired, the Department and the contractor usually share the cost. A change order should be initiated to incorporate the Department's share of the cost into the contract; the FHWA will participate in the cost of partnering, but the FAA will not.

Hold a partnering session before construction begins. Session participants include contractor personnel at various levels, Department construction staff from the project staff up to the group chief/PM, and representatives from the subcontractors. The level of participation can extend to include the contractor's foremen and Department design personnel.

At the initial partnering session, all participants are equally involved and jointly work to develop a partnering pledge. The pledge lists mutual goals and commitments. All participants sign the pledge and agree to abide by it. Through this introduction to performing as a team, the participants start the process of working together toward a mutual goal. It may be necessary to hold a follow-up meeting, but the initial meeting is usually adequate.

There are no firm rules for partnering; the key elements are commitment, equity, trust, development of mutual goals, open communication, implementation, continuous evaluation, and timely responsiveness. The object is to create a spirit of teamwork by working together to avoid or attack mutual problems; the goal is to construct a quality project on time, within budget, and without conflict.

3.10. Transportation Management Plan (TMP)

Policy and Procedure 05.05.015 *"Highway Work Zone Safety and Mobility"* conforms with 23 CFR Part 630, Subparts J and K, Work Zone Safety and Mobility Policy. This P&P describes how to implement a TMP to manage work zone impacts of a highway project.

The TMP includes a TCP, and may also include a TOP or a Public Information Plan. All three components are required on *significant projects* as determined by Preconstruction and documented in the Design Study Report (See HPCM Chapter 14). Neither the TMP nor its three component plans are standalone documents. TMP provisions are included in project plans, specifications, and Department agreements with other parties.

When changes to the TMP are considered, the Project Engineer should consult with stakeholders as

appropriate. The region's Traffic and Safety unit and/or the Traffic Control Coordinator of the Construction Unit should be included as reviewers during the submittal process.

Prior to the contractor beginning work on the project, the Project Engineer should send a letter to the law enforcement entities having jurisdiction in the area (police, fire and EMT), advising them of the pending construction project and of the project limits, the work schedule, the names and phone numbers of the contractor and worksite traffic safety supervisor, and the Project Engineer's contact information. The Project Engineer should request the cooperation of law enforcement in controlling traffic during construction and should request that they notify the project field office of any accidents that occur within the construction work zone. The Project Engineer should also request that the law enforcement entity provide the project office with copies of all those accident reports.

When there is an agreement for additional traffic enforcement within the project limits, the Project Engineer or regional traffic control coordinator should specify the days and times for law enforcement to be present. It is important that project staff also document the dates that law enforcement work in the project limits, using an Inspector's Daily Report or the Traffic Law Enforcement Presence Log, Form 25D-128.

Department Oversight: The Project Manager is responsible for overseeing TMP components and other safety and mobility aspects of the project. They may delegate to traffic control representatives. Personnel require training in accordance with P&P 05.05.015.

Contractor Oversight: Section 643 requires the contractor to assign a certified Worksite Traffic Supervisor for implementing TMP components, and implementing other safety and mobility aspects of the project. The Contractor must submit Form 25D-124 designating the Worksite Traffic Supervisor. Verify the information on this form meets the requirements of the contract.

Traffic Control Plan (TCP): Most contracts that contain highway improvements also contain TCPs prepared by Preconstruction. A Department-prepared TCP may be modified by the contractor to suit its plan of operation.

The contractor must prepare its own detailed TCP if the contractor does not use the Department prepared TCPs.

TCPs identify traffic control devices to be used and how they should be located and operated to facilitate safe and timely road user transit through a work zone or incident area. TCPs also include phased staging and traffic routing plans, where needed.

Review the contract for requirements for TCPs. Usually this will be found in Section 643, but the environmental commitments, ROW agreements, and permits may also have traffic requirements that are part of the contract.

When reviewing TCP's, consider the effects on pre-existing roadside safety hardware. Pre-existing roadside safety hardware should be maintained at an equivalent or better level than existed prior to project implementation until the progress of construction necessitates removing that hardware. From that time until permanent roadside safety hardware is installed, maintain positive protection devices as required in the plans and specifications.

Before the contractor can use oversize or overweight vehicles within the limits of a highway project, the contractor must submit a TCP that addresses vehicle use and required traffic control measures. (see highway spec 105-1.12 and 643, and Section 9.4)

Public Information Plan: A communications plan to inform affected road users, the general public, area residences and businesses, and appropriate public entities of project scope, expected work zone impacts, closure details, and recommended action (if any) for drivers to avoid impacts and changing conditions during construction.

The Public Information Plan may be designed and managed by the Department, or it may be part of the Contract work. If the Public Information Plan is managed by the Department, then the Project Engineer must communicate areas and dates of road work in a timely manner to the individual responsible in the Public Information Plan for posting public notices.

Transportation Operations Plan (TOP): A Department plan to minimize project impacts through activities not covered under Public Information Plans or TCPs. In general, these activities consist of

coordination with external agencies, events, projects, and other traffic systems. TOP activity may include:

- Plans for on-project enforcement and other activities by external agencies.
- Coordination with other projects to minimize cumulative impact.
- Coordination with agencies that manage signal operations.
- Plans to maintain access for emergency vehicles, school buses, transit, etc.
- Plans to minimize impacts to major traffic-generating events.

Agreements made under the TOP that are not incorporated in project plans or specifications must be retained in project files.

When there is an agreement to provide additional enforcement of traffic laws within the project limits, the Project Engineer or regional traffic control coordinator should coordinate with local law enforcement agencies. Direction to law enforcement may only be given within the terms of the agreement. Provide information such as hours of work, goals/objectives during work, recommendations for areas or locations for increased enforcement presence, and locations that are unsuitable (due to construction activity or safety) for enforcement vehicles. Monitor the hours that local law enforcement agencies work.

3.11. Stormwater Pollution and Prevention Plan

The contractor must prepare a Stormwater Pollution and Prevention Plan (SWPPP) for construction projects that disturb earth or begin with winter construction. The contractor must obtain coverage under the CGP from DEC for projects that disturb one acre or more (and other selected projects). The contractor must prepare a Hazardous Materials Control Plan (HMCP) for all construction projects. The contractor must prepare a Spill Prevention Control and Countermeasure (SPCC) Plan when required by the contract or by DEC. The contractor must prepare and submit the required plans to the Project Engineer according to Highway Specifications Section 641 or Airport Specifications P-641. Timelines for contractor submittals and Department reviews are identified in the specifications.

See Section 9.9 for SWPPP & HMCP Implementation and Monitoring requirements. See Section 9.17 for other agencies permits, environmental commitments, and contractor obtained permits.

3.11.1. *SWPPP*

Most contracts will include an Erosion and Sediment Control Plan (ESCP) developed by the Department, which addresses identified erosion prevention and sediment control issues. The ESCP addresses issues within the Project Zone, which is where the Department accepts responsibility as a co-operator.

The contractor must use a qualified SWPPP preparer to develop a SWPPP for construction activities within the Project Zone. The contractor is also solely responsible for developing SWPPP2s or Multi-Sector General Permit (MSGP) for areas outside the Project Zone that require stormwater permit coverage. The Department does not review or inspect SWPPP2s or MSGP permits.

SWPPP2s may be required for contractor-supplied waste, material, or staging sites, when the sites are eligible for CGP coverage. In this case, the contractor's declared NOI acreage would be greater than the Department's acreage.

The contractor may also be required to obtain stormwater permit coverage under a MSGP. The contractor is responsible for obtaining all other clearances and permits (see Section 9.17.4).

The SWPPP is based on information from the ESCP, and the contractor's scheduling, workers, equipment, and the CGP requirements. Environmental commitments that are identified in the permits or in the contract should be incorporated into the SWPPP. The HMCP is included in the appendix of the SWPPP.

The SWPPP must follow the format of the DOT&PF SWPPP template, meet the requirements of the DOT&PF SWPPP checklist, and meet contract requirements. It must also address how water quality will be protected in areas within the Project Zone that are permitted by an Army Corps of Engineer Clean Water Act Section 404 permit.

After the contractor submits the SWPPP (and HMCP) to the Project Engineer, the Department has 14 days to review the submittal. Review the SWPPP as soon as possible. The SWPPP is reviewed by the Project Engineer and the regional environmental section (other support resource groups may be required depending on plan complexity and regional policy). Include the design engineer of record if available.

The Project Engineer, the project Stormwater Inspectors, and the Regional Construction Stormwater Specialist must be qualified with a current certification as an Alaska Certified Erosion and Sediment Control Lead (AK-CESCL), or other acceptable training that meets the DEC CGP requirements for qualified personnel; before they review the SWPPP or perform other SWPPP related duties. For newly employed, transferred or assigned Project Engineers who are not certified as AK-CESCL, they will be considered qualified after completing an interim training course from the DOT&PF training web site, but they must also complete AK-CESCL training within six months.

The Project Engineer will notify the contractor in writing when the SWPPP is found to be acceptable. The contractor and Department must sign and certify the approved SWPPP according to the CGP, Appendix A Part 1.12. This must be completed prior to submitting an NOI and after delegation of authority.

Department Delegation of Signature Authority

The regional director must sign eNOIs and eNOTs, but should delegate signature authority for other documents to the position of Project Engineer and Regional Construction Stormwater Specialist (or other Qualified Delegate) for that project. Use the SWPPP Delegation of Signature Authority for CGP Documents – DOT&PF (Form 25D-107).

The Project Engineer must sign and certify the SWPPP Certification for DOT&PF (Form 25D-109), SWPPP Construction Site Inspection Reports (Form 25D-100) and other CGP related documents on behalf of the Department. These signature authorities cannot be delegated lower than the Project Engineer.

Contractor Delegation of Signature Authority

The contractor's responsible corporate officer must sign the eNOIs and eNOTs, but shall delegate signature authority for other documents to the superintendent assigned to the project. Use the SWPPP Delegation of Signature Authority for CGP Documents - Contractors (Form 25D-108).

The superintendent signs and certifies the SWPPP Certification for Contractor (Form 25D-111), SWPPP Construction Site Inspection Reports (Form 25D-100) and other CGP related documents on behalf of the contractor. These signature authorities cannot be delegated to an authority lower than the superintendent.

DEC authority and filing eNOIs

DEC has authority to permit construction activities, conduct site inspections, and pursue legal action for a project that is out of compliance with the CGP. Regional staff will use the Alaska Pollutant Discharge Elimination System (APDES) NOI electronic filing for obtaining and terminating CGP authorization. EPA retains authority to review DEC and construction projects, and has authority to enforce.

After the Department approves the SWPPP:

- The contractor must submit an electronic Notice of Intent (eNOI) to DEC through the APDES web site, and provide a copy of the signed eNOI and DEC acknowledgement letter to the Project Engineer. The contractor is responsible for paying required fees to DEC.
- The Project Engineer reviews the contractor's eNOI for errors (cross check against other permits). If errors are found, notify the contractor that they must file a NOI modification.
- The regional director will submit the Department's eNOI or paper NOI to DEC. The Project Engineer will send a signed and certified copy of the Department's eNOI and the DEC acknowledgement letter to the contractor.
- After DEC acknowledges receipt of the eNOIs and receives payment, they will post the eNOIs with a "Date Issued" assigned. A project must receive written authorization from the DEC that it is "eligible to discharge stormwater", and may commence earth disturbing activities upon receiving the authorization letter.
- The contractor is prohibited from beginning construction activities until the SWPPP Preparer has visited the site and signed a SWPPP Pre-Construction Site Visit (Form 25D-106).

For more information and to check the status of eNOIs on the Water Permit Search page, use this website:

http://dec.alaska.gov/water/wnpspc/stormwater/index.htm

DEC Review of SWPPP

The contractor must submit the approved SWPPP to DEC for their review when the project disturbs five acres of land or more; or when the project disturbs one acre or more within the Municipality of Anchorage, or

the urbanized area boundaries of Fairbanks or North Pole.

The contractor must submit copies of the signed and certified SWPPP, including all project eNOIs, using delivery receipt confirmation to the DEC stormwater coordinator. The contractor must provide the Project Engineer with a copy of the delivery receipt confirmation within seven days of receiving it.

If DEC responds to the contractor with a review letter, the contractor must transmit a copy to the Project Engineer. The Project Engineer provides a copy to the Department's environmental section. The Project Engineer ensures that the contractor amends the SWPPP as required by the review letter.

The Project Engineer should ensure a copy of the initial SWPPP is retained in the Department's eDocs system within one week of its approval.

For more information, refer to the Department's *Stormwater Pollution Prevention Plan Guide, Construction SWPPP Forms, and Instructions for using Construction SWPPP Forms.* See the statewide D&CS environmental website and D&CS construction website for links to these documents:

http://www.dot.state.ak.us/stwddes/desenviron/resources/stormwater.shtml

http://www.dot.state.ak.us/stwddes/dcsconst/pop_constforms.shtml

DEC and EPA have website links to other publications about BMPs and SWPPP preparation.

3.11.2. HMCP

The HMCP must present the contractor's plans for containment, cleanup, and disposal of all hazardous materials used or hazardous waste generated on the project, including petroleum products and hazardous substances. See the specifications and SWPPP Hazardous Material Control Plan Template on the D&CS Construction Forms page, for information on preparing a project specific HMCP.

HMCP Template Link:

http://www.dot.state.ak.us/stwddes/dcsconst/assets/docs/constforms/hmcp_template.doc

After the contractor submits the HMCP to the Project Engineer, the Department has 14 days to review the submittal. Review the HMCP as soon as possible. The HMCP will be reviewed by the Project Engineer, and the regional environmental section. When the HMCP is found to be acceptable, the Project Engineer will notify the contractor in writing.

3.11.3. SPCC Plan

See highway specifications 641-2.03 (airports P-641-2.3) for SPCC plan requirements (for greater than 1,320 gallons of above ground petroleum storage such as oil, gasoline, diesel fuel, liquid asphalt products, and oil based paints).

The contractor may be required to submit the SPCC Plan to the Project Engineer, but no approval is necessary. The Department reserves the right to review and ask for corrections to the SPCC Plan, and require a resubmittal of the document. For additional information refer to the following web site:

http://www.epa.gov/emergencies/content/spcc/index.htm

3.12. Preconstruction Site Inspection

After the award of the contract, and prior or concurrent with contractor mobilization at the site, the Project Engineer should make an on-site inspection with a Maintenance and Operations (M&O) representative. During the visit, review the project scope and timing with M&O and have them explain what they expect to gain from the project and how the facility should be maintained during construction. Once the contractor begins work on the project, the terms of the contract dictate when maintenance becomes the contractor's responsibility.

The Project Engineer should document all site conditions prior to the start of construction using a video or still camera. Pay close attention to the maintained condition of the facility and of all Department-furnished materials sources. Following the inspection, the Project Engineer should prepare a memorandum, from the Group Chief/PM to the regional M&O head. The memo should give the projected date that the contractor will start construction and assume maintenance responsibilities on all or part of the facility. If maintenance responsibility is assumed by the contractor incrementally, the Project Engineer should advise the M&O representative of the contractor's schedule. The memo should also include the names and phone numbers for the Project Engineer, the Group Chief/PM, the contractor's worksite traffic safety supervisor, and the project's M&O representative.

3.13. Post Award Conference

If the project special provisions require a post award conference, contact the CRO and RCCL as soon as practical after award. Provide the CRO and RCCL with the contractor's planned schedule for mobilization and start of work. Provide the CRO and RCCL with contact information for the:

- Contractor;
- Construction Project Manager;
- Project Engineer; and
- any known community contacts (municipal/tribal administrators, M&O staff, etc.).

Design should be able to provide a list of any community contacts that collaborated or provided information during the design phase

The CRO will coordinate with project stakeholders to schedule the post award conference. The specifications provide a minimum notice before the post award conference, but the CRO will provide greater advanced notice of the date when possible.

The purpose of the post award conference is to provide the community with information about the project, notify the community of impacts during construction, provide the community with information about possible jobs that the contractor will have during the course of the project, and provide information to the contractor about the skills and other resources that are available in the community.

4. Field Office Set-Up & Record Keeping

4.1. Field Office, Supplies, & Equipment

Not all projects are administered out of a field office. For those that are, selecting, locating, and equipping that office is the first chore facing the Project Engineer and the project staff when they move to the project site. In some cases, one or more of these decisions may already have been made for the Project Engineer by the contract: the office and some of the furnishings may be provided by the contractor or by an engineering consultant. Field offices come in all sizes and shapes and may be owned or rented by the contractor, by an engineering consultant, or by the Department (depending on the terms of the contract).

The field office should be located at a site acceptable to the Project Engineer, convenient to the project as a whole, and accessible to persons covered under the Americans with Disabilities Act. A sign located near the entrance should identify the office. If access to the office is not direct, additional signs should be installed to assist the public in locating it. At rural project sites where the office is readily identifiable or the location of it is commonly known, signing is not necessary.

If the contractor or an engineering consultant provides the field office, the contract or professional services agreement establishes its size and the basic furnishings and utilities that are provided. Any remaining furnishings and office equipment are the responsibility of the Department. If the Department provides the field office, the Project Engineer is responsible for securing all of the furnishings and office equipment. In each region, the Project Engineer and Group Chief/PM should review that region's standard list of equipment and supplies needed to equip the field office, and should modify it to suit the needs of their particular project.

The Department will usually be able to supply basic office furnishings and equipment such as desks, chairs, file cabinets, a computer, and copy and fax machines; the Project Engineer must sign for each piece of equipment received from the Department, and it will be added to the Project Engineer's inventory. The contractor must purchase all expendable supplies and any additional equipment or furniture needed. While the Project Engineer's purchase authorization limit varies from region to region, general purchasing and stock request procedures are detailed in the Departmental Procedures (DPDR 10.01.021). To properly prepare and submit Stock Requests (Form 02-303), the Project Engineer must also be familiar with the project's financial account coding system (Section 2.1).

The field office should have a first aid kit equipped commensurate with the size of the project staff and the type of hazards the staff will be exposed to. Depending on the type of project and the funding source, the Project Engineer is responsible for displaying a number of posters at the field office. The specific posting requirements are shown in Table II in the Appendix. Workplace and safety posters should be attached to a wall or bulletin board that is accessible to staff. Posting for the Department is only required at one location on a project site, even when there are multiple offices or buildings.

If the field office and project vehicles are equipped with radios, the Project Engineer and staff shall know basic phraseology and techniques; see chapter four, section two of the *Aeronautical Information Manual*, a link is provided on the DOT&PF Construction web site. This applies when communicating with FAA Flight Service Station, Tower personnel, or aircraft. Also, see FAA Advisory Circular (AC) 150/5370-2 Operational Safety on Airports during Construction.

Several Department Policy & Procedure's have application to the field office and are available on the web for reference: P&P 02.01.050 Use of State Telephones, Fax Machines, Computers & Other Office Technologies; also the P&Ps 10.03.010 Procurement, Maintenance, and Control of Surveying Instruments, P&P 10.03.010 Property Control and P&P 10.03.030 Salvaging and Destroying Structures.

The following link will bring you to P&Ps:

http://www.dot.state.ak.us/admsvc/pnp/policy_and_procedures.shtml

4.2. Records Systems

To fulfill their contract administration responsibilities, the Project Engineer and project staff are responsible for establishing and maintaining a system of accurate and complete records covering all project activities. These records must substantiate the acceptability and the quantity of the contractor's work and certify the disbursement of funds. In addition to covering quality, quantity, and payment, project documentation must cover all of the important administrative matters including contract modifications (time, money, and contract language), differing site conditions and their resolutions, and contractor compliance with all of the administrative aspects of the contract (labor and payroll, DBE, EEO, origin-of-manufacture requirements). The importance of developing and maintaining proper records is basic to successful construction contract administration.

The records system is the general framework within which project staff store the documents generated by contract administration. You must tailor it to meet the needs of each project. On any given project, some elements of that system may be used hardly at all, while others will be developed extensively; the extent and direction of development is largely a matter of the Project Engineer's judgment. For the system to be effective, project records must be sufficiently clear and complete and must be filed in such a manner that they are readily accessible, either manually or electronically.

The records system for each project should include the basic elements shown below; acceptable formats are covered in greater detail in Section 4.3 and contents are covered in Sections 10.3 – 10.5:

Master Index Book or File: A listing of all project records.

Engineer's Diary: An electronic diary, or a bound or loose-leaf book, or inspector's daily reports.

Progress Documentation: Inspector's daily reports, specialized daily reports, field books, and supporting data.

Progress Summary: An Estimate book or estimate files.

Progress Payments: Estimates, quantity calculations.

Reports: Weekly or semi-monthly project construction reports; intermittent program reports on OJT, safety, and labor programs; inspection reports received from the contractor and from other agencies – SWPPP reports, US Coast Guard, American Bureau of Shipping; geotechnical reports; accident reports.

Photographic Records: Photo albums and/or video tape files.

Project Files: This should contain project correspondence; contract documents and changes; materials submittals, certifications, and test results; federal reimbursement agreements and payment information; construction progress schedules and revisions; contractor prepared plans; design and project development data; materials and environmental permits; administrative files; in addition to the above listed items.

Full-size drawings: For as-built markup.

You must tailor the format and scope of the record keeping system to the needs of a project and the size of the project staff. As soon as you have determined the documentation requirements for a project, you should set up the files, books, and indexing. On a smaller project, the Project Engineer usually sets the system up and together with the project staff they jointly maintain the system. On a larger project one project staff member is usually assigned the field office management duties.

All project records, both loose-leaf and bound book, should be listed in a master index, either in a bound book, an index file, or a computer file; the records include all contract documents, engineering drawings, materials reports and test results, bound books, project files, and photographic records. This index book or file serves as the master index for all project records both during construction and after the project is completed.

The purpose of a filing system is to organize loose project records in an orderly manner, so that you can retrieve any record without delay. The project filing system, which organizes all of the above material, should be set up along logical lines; a guide format that subdivides the files into six sections is shown in Table IV in the Appendix. All of the basic sections outlined in Table IV should be present in the filing system, regardless of the format you follow. The specific files required for any project will depend on the nature of the project and there should be enough files to create an efficient, easy to use system. Once established, you must keep the filing system current throughout the project.

In addition to all of the half-size plans that the project inherits from the bidding process, the Project Engineer should obtain several sets of full-size plans also. One of these sets should be set aside in the field office for recording all of the as-built changes made to the project during construction; if regional policy allows, you can record as-built changes on half-size plans, if you can record them accurately.

Accomplishing these organizational steps prior to the start of construction will make it much easier to document the work as it is being performed. It will also allow you to spend more time at the primary job of assuring that the project is constructed in accordance with the contract.

4.3. Records Management

Records developed during the course of the project consist of both loose leaf records (which may be hand written, typed, or computer-stored, and which may include the Engineer's diary, inspector's daily reports, specialized daily reports, photographic records, materials test results, correspondence, progress summary, progress payments, change documents, construction progress reports) and bound book records (hand written records which may include the Engineer's diary, inspector's daily reports, specialized daily reports, field books, progress summary). All project records, particularly loose-leaf records, must contain the project name and project number for identification purposes.

Project records are used to support payments to the contractor to determine the acceptability of materials, verify conformance of the work to the contract, develop a record of the completed project, and, on federally-funded projects or under reimbursable agreements, substantiate the eligibility for reimbursement of construction phase expenses. On contracts with multiple projects or funding sources, the project records must account for the separation of charges to each project or source.

Computers may be used to record and store the records of project progress. The master index, as well as the Engineer's diary, inspector's daily reports, and the Construction Progress Report all may be prepared on a computer and the records stored in computer files. Computers may also be used to calculate quantities and prepare progress estimates, prepare change documents, calculate and prepare materials test results and reports, and prepare general project correspondence. Computer-generated forms may be used in place of any form listed in this manual as long as the computer form contains the same information, in the same or in a different format, and maintains the essential integrity and legal requirements, if any, of the original form.

Computer records used as source documents must be either:

- Printed, signed and dated by the person creating the record, or
- Electronically signed and dated, with the data stored in a non-rewritable electronic archiving system kept in a secure area.

All documentation recorded on a computer bank must be downloaded onto data storage devices for backup and storage no less frequently than once each week; depending on the volume of data being generated on the project, more frequent backup may be advisable.

Loose-leaf records may contain field notes, calculations, transcriptions of audiotape records (such as the Engineer's diary or the minutes of meetings), and other information necessary to document the progress and acceptance of the work. Project name and number must identify each loose-leaf record. Signature and dating requirements vary for loose leaf records, depending on the type of record: calculation sheets and records serving as pay quantity source documents must be signed and dated by both the author and the checker, if applicable, on the front page with initials and dates used on subsequent pages. If it is necessary to change an entry on any written project record, the original entry should lined out and initialed, and the corrected entry made immediately following the incorrect entry.

Bound book records may contain survey measurements, field notes, staking data, calculations and other information necessary to document the progress and acceptance of the work. Certain Department forms may also be available in bound book form, as well as loose-leaf form, including inspector's daily reports and scales diary forms. The number, type and content of field and computation books will vary with the type of project. Each book should have its own index on the first pages, and each project staff member making entries in a book should print and sign their name and initials near the front of the book. The pages in bound books should be numbered as they are used, for ease in cross-referencing the contents. Calculations made in bound

books must be initialed and dated by both the person who calculates and the person who checks. If it is necessary to change an entry on any written project record, the original entry should be lined out and initialed, and the corrected entry made immediately following the incorrect entry.

Photographic records are another form of loose leaf record and include both still photos and video tape, taken from the ground or from the air. The photographer should record the date, time and location of each photo/film segment taken, and should record that information on the back of each still photograph before the photo is placed in the project album. Video segment filming information should be referenced to the tape and tape segment and kept in the project files. Negatives from still photographs should be cross-referenced to the photos in the album for ease in obtaining duplicate prints.

The Project Engineer must maintain a **progress summary**, in the form of an estimate book or estimate files, to tabulate the quantity of work completed on each pay item for each estimate. This record shows how each pay item's quantity was derived (calculated or estimated) and must provide an audit trail back to the source document measurements that were used to establish the quantities. It can be set up as shown in Section 12.4.

4.4. Source Documents

The source document is the basis for determining that work on a pay item has been acceptably performed and is eligible for payment. To be complete and valid, the source document must:

- Identify the project by name and number;
- Identify the pay item, the quantity of the pay item or material inspected, and the location of the installation or placement;
- Be made on the site at the time an item is manufactured, fabricated, or inspected, by the person taking the action;
- Contain a validation statement, indicating that the item substantially conforms to the plans and specifications and was incorporated into the project;
- Be dated and signed by the person creating or receiving it.

A person's initials, printed or typewritten name, electronic (digital) signature, or handwritten signature, are all considered acceptable ways of signing. The contract, ACM or Department forms, may be more specific about signature requirements.

Source documents that are used in determining contract quantities may include materials certifications, field notes, calculations, receipts, invoices, weigh tickets, daily load count or time equipment records, survey measurements, and reports.

You should never destroy an original source document; if you must replace one (to clarify the information or to correct an error), you should line out the original information and label it as original, and label the replacement as a copy. Cross-reference and retain both documents in the project records; add an explanatory note to the original record along with the date and the signature of the person making the change.

4.5. Materials Certification List (MCL)

The contractor must submit certifications, or quality testing must be completed, for all the materials incorporated into the project.

A Materials Certification List (MCL) is a listing of all the material certifications required by the contract, and identifies which positions in the Department can review/approve their use.

Non project specific MCL master documents are available from the D&ES Statewide Materials website.

A project specific MCL should be developed by the Engineer of Record during the final PS&E stage of the design of the project, or it may be developed by construction staff.

The contractor submits material certifications for approval to the Project Engineer, who will approve the material certification or transmit it for approval to the position designated in the MCL. The position that reviews/approves each submittal is identified in the unshaded box corresponding to the appropriate item.

If the contractor submits a material listed on the Qualified Products List (QPL), the Project Engineer must indicate in the appropriate cell on the MCL the manufacturer and model of the material.

If the material submittal by the contractor does not match the material required in the contract, the Project

Engineer must contact the Engineer of Record or the Project Manager to get approval for the material.

If the Project Engineer adds materials by change order, then the new materials must be added to the MCL with the appropriate approval level.

After acceptance of the material, the Project Engineer will fill out the MCL with the date of approval, manufacturer, model number, and the file location of the material certificates.

A sample of the Master Materials Certification List can be found in Section 17.

4.6. Qualified Products List (QPL)

The Qualified Products List (QPL) identifies products that meet the Department's standard specifications. The QPL is populated and maintained by the Statewide Materials section. Access the QPL at this web address:

http://www.dot.state.ak.us/stwddes/desmaterials/qpl_intro.shtml

The QPL provides information on the product; contact information for the manufacturer/supplier, and independent verification of the product's conformance with standard specifications.

The Project Manager or Project Engineer must print a copy of the QPL (revised monthly, kept on file at Statewide Material website) that corresponds to the day of Bid Opening. Products may be added to the QPL after this date and the product can be used on the project if it meets contract requirements.

When products are listed on the QPL, the Project Engineer can approve submittals of catalog cuts or invoices instead of requiring a manufacturer's certificate of compliance.

Products on the QPL do not consider or address compliance with Buy America, Buy American, or Alaska Agricultural/Wood Products. The Project Engineer must verify compliance or non-compliance with the appropriate contract requirements. Verification will include examining the contractor or supplier signed:

- Certificate of Buy America Act Compliance, Form 25D-62 and associated material documents (for FHWA funded steel and iron products)
- Material Submittal for Buy American Compliance, Form 25D-154 and associated material documents (for FAA funded steel and manufactured goods)
- Alaska Products Preference Worksheet, using APPW Form (for agriculture/wood products on 100 percent state funded projects)

Special provisions may modify product requirements so that products listed in the QPL do not meet the modified contract requirements. The contract provisions and federal regulation take precedence over the QPL.

Use of the QPL does not guarantee the approval of, or appropriateness of a product for a given project or application. The contractor must request and receive approval from the Project Engineer before incorporating a product into the project.

Products that perform unacceptably in the field, or are found to be non-compliant with standard specifications, may be removed at any time from the QPL. The Project Engineer must notify the Statewide Materials Quality Assurance Engineer of any product on the QPL that is found to be non-compliant with the standard specifications or that performs unacceptably in the field.

A product that was listed on the QPL on the day of Bid Opening and later removed; may still be used on the Project if it meets contract requirements. Discuss with Statewide Materials the reasons for product removal. If the product hasn't been ordered yet, discuss purchase of equal products with the contractor.

4.7. Degree of Accuracy

The degree of accuracy used in making field measurements, in performing quantity calculations, and in measuring and calculating materials test results should be consistent with the contract requirements, construction methods, and good engineering judgment. You should determine the appropriate degree of accuracy to use in each situation before construction is started.

Measurements and calculations should be rounded off according to the following rules:

- Determine the last digit needed for the required degree of accuracy.

- If the digit following the last needed digit is 4 or lower, drop it.
- If the digit following the last needed digit is 5 or greater, drop it and add 1 to the last needed digit.

Measurements for pay quantities should be made only to the number of decimal places that can be determined with reasonable accuracy, using conventional and commonly used measurement methods; such measurements should be consistent with the value or price of the pay item being measured. Pay quantities and materials test results should be calculated to a degree of accuracy consistent with the measurements. This would normally mean calculating to one less decimal place than the least accurate measurement taken; however, when more than one calculation is necessary to obtain the final answer, all intermediate results should be carried out to one decimal place more than is necessary is the final answer. The following table may be used as a guide in taking measurements and in calculating quantities:

BID PRICE/ UNIT	SIGNIFICANT DECIMAL/ MEASURED UNIT	SIGNIFICANT DECIMAL/ CALCULATED UNIT
< $10	0.1	1
$10 - $99.99	0.01	0.1
$100 - $999.99	0.001	0.01
> $1000	0.0001	0.001

4.8. Disclosure of Records

All project records are available for review by the contractor and the public (under AS 09.25.110 – AS 09.25.220), except for personnel files, labor compliance interviews (Section 7.3), and correspondence between the Department and their attorneys that is marked CONFIDENTIAL – ATTORNEY CLIENT PRIVILEGE. Attorney client privilege correspondence should be kept in a separate file to make its inadvertent release less likely. The Project Engineer should keep a record of all requests to review the project records and should coordinate all reviews in advance with the Group Chief/PM.

After completing the project, transfer records for long term storage according to Section 16.15.

4.9. Reference Books/Material

The Project Engineer should equip the field office with a small library of reference material that may be useful to the project staff during construction. Table V in the Appendix contains a list of both required and recommended reference material for the field office, along with a list of reference material that should be available in the regional office. Some books and safety guides are required by AS or CFR, to be kept on hand in certain offices; other reference material is applicable only to certain types of projects.

5. Field Lab Set-Up, Equipment & Record Keeping

5.1. Field Laboratory

The field laboratory is set up at approximately the same time as the project office. As is the case with the field office, the contractor, the Department or a consulting engineer fir may provide the lab. In the first two situations, all laboratory test equipment and most or all of the furnishings are the responsibility of the Department; in the latter case, the terms of the professional services agreement detail what the consultant provides. The Department should have on hand all of the materials test equipment that it is responsible for providing. Any expendable supplies or additional equipment will have to be purchased by stock request. Information on this process is shown in Section 4.1.

The field laboratory may be located adjacent to the field office, or at any site that is close to the contractor's materials production operations. Once the field lab is set up, the regional quality assurance/materials unit should inspect it. The field laboratory should have an industrial first aid kit, tailored to the particular chemicals and hazards that the project materials staff could be exposed to. If hazardous materials are present in the field lab in quantities equal to those specified in AS 29.35.500(c), appropriate placards must be prominently displayed on the lab building (13 AAC 54.020). Materials Safety Data Sheets (MSDS)/Safety Data Sheets (SDS), OSHA Form 20, (AS 18.60.067) should be available for distribution for each applicable substance.

5.2. Nuclear Testing Equipment and Materials Testing

The extent to which a field laboratory is equipped depends entirely on the scope and size of the contract. A small rural project, with only a few pay items that require testing, does not require a laboratory equipped to the degree that a major urban project's laboratory is equipped. As an aid to the Project Engineer in equipping the field lab, Table VI in the Appendix contains three lists of testing equipment for various types of projects (an earthwork project, an asphalt paving project, and a project with concrete work). These lists are guides only, and the Project Engineer and Group Chief/PM may modify them to suit the needs of the particular project. If the Department is unable to provide the needed supplies and equipment on the lists, the Project Engineer should obtain them through the stock request procedures outlined in Section 4.1.

Most projects containing earthwork or asphalt involve the use of nuclear testing equipment. The SRSO has overall responsibility for the safety and security of the nuclear testing equipment, in accordance with the U.S. Nuclear Regulatory Commission (NRC) license. Nuclear testing equipment is issued only to project staff members who have received required training and have been approved by the RRSO. Each project staff member who will work with nuclear moisture/density gauges or nuclear asphalt content equipment must receive training /certification (AS 18.60.066 and 10 CFR 19.12) in the safe use, care, and storage of this equipment, and be authorized by the Regional Radiation Safety Officer (RRSO), before they will be permitted to use it.

Nuclear testing equipment must be handled in a manner that will prevent project staff and members of the public from radiation exposure in excess of regulatory requirements (10 CFR 20.1301). Dosimeters must be worn at all times by staff members who are transporting, operating, or working with any nuclear testing equipment. The Radiation Protection Program governs the availability and control of dosimeters. The RRSO is responsible for implementing the Alaska Radiation Protection Program in their region.

Personnel who are not wearing a dosimeter should stay 5 feet or farther away from the nuclear testing equipment.

Nuclear testing equipment must be kept locked when not in use, and kept in a qualified locked storage area, that has a detailed radiation survey (10 CFR 20.1302) posted, and approved by the SRSO. Nuclear testing equipment must be stored in a weatherproof, heated, and ventilated storage shed. The building must be located and approved by the RRSO and should be at least 15 feet away from occupied areas. The shed shall be installed before a nuclear gage is allowed on the

project. The storage unit must be secure, have a lockable entrance door (3' x 6'8") and all keys shall be surrendered to an authorized nuclear gauge user to control access.

The nuclear testing equipment storage area must have postings that are visible to the employees as they go about their licensed activities. Postings must include:

1. The license, license conditions, or documents incorporated into a license by reference, and amendments thereto
2. Any notice of violation involving radiological working conditions, proposed imposition of civil penalty, or order issued, and any response from the licensee
3. NRC Form 3
4. A notice describing 10 CFR 19, CFR 20 and the Radiation Protection Program Manual and where they may be examined (10 CFR 19.11).
5. SCWE/ECP Poster

When nuclear testing equipment is being transported, including within the project site, documentation required by the NRC must accompany the equipment. Further information on NRC regulations can be obtained from the RRSO.

See the Alaska Radiation Protection Program Manual, published by Statewide Materials and located on their website, for additional guidance on the Radiation Protection Program. The Statewide Radiation Safety Officer (SRSO) is responsible for maintenance and control of the Radiation Protection Program and updating and maintaining the manual.

5.3. Toxic and Hazardous Substances

Some materials test procedures require the use of toxic and hazardous substances. Hazardous substances include the propane used to fuel field stoves and ovens. If you use any such substance on the project, you must properly label, store, transport, and handle it. You may need to mark buildings that contain minimum quantities of hazardous materials with placards (AS 29.35.500(c) and 13AAC.54.020). Each project staff member who will work with a toxic or hazardous substance must receive training (AS 18.60.066) in the safe use, care, transport, and storage of the particular substance before they work with that substance. Employees responsible for the transport of hazardous substances should familiarize themselves with the Shipping and Transporting Requirements of the US Department of Transportation.

The Project Engineer must maintain a supply of Material Safety Data Sheets (MSDS)/Safety Data Sheets (SDS), OSHA Form 20, for each classified substance used on the project and must provide them to project staff members on request (AS 18.60.067), or must maintain a list of those classified substances and the location where the MSDS/SDS sheets may be obtained. The Project Engineer must also post the Alaska Department of Labor's "It's Your Right to Know" poster on toxic/hazardous substances (AS 18.60.068 and 8 AAC 61.950) in both the field office and the field laboratory. If there is a spill of a classified substance, the Project Engineer must notify the Group Chief/PM or the environmental unit immediately so that the spill may be properly reported. Further information on classified substances that are still used on construction projects is available from the regional safety officer.

5.4. Materials Tests, Record Keeping, & Reference Material

Materials to be incorporated into the project must meet the quality standards that are established in the contract. Some materials are accepted based on manufacturer's certifications and the results of tests performed off-site. The contract also establishes tests that are to be performed on other materials on-site to demonstrate that they also meet quality standards. The Materials Testing Summary outlines, by pay item, the tests that are to be performed and the approximate numbers of each type of test (Section 11.2). This summary serves as a guide in establishing the project's materials staff testing workload and record keeping requirements. A materials sample identification system has been established to aid the record keeping effort; the system is shown in Table VII in the Appendix.

The project materials staff should set up a filing system for the results of all materials tests taken on-site; staff should set up files for each pay item requiring testing. Section 4.2 and Section 18, Table IV in the Appendix, contain more information on setting up the filing system and its structure. Complete a final Materials Testing Summary by the end of the project. This summary contains a list of all the materials tests taken as required for each pay item and designates passing and failing tests. Prepare the summary in outline form before construction starts so that as you complete each type of test on a particular item, you can enter the results on the summary and keep the summary current.

Certain materials test procedures require you to ship all or a portion of a sample to the regional laboratory for testing. Since the regional laboratory receives materials samples as well as materials test results from many different projects, it's important for the project staff to properly identify samples and test results from their project. Identify samples by: project name, number and materials source; the reason the sample was taken; the purpose for which the material will be used; the type of test to be run; and the number of the sample. Records should be kept of all samples sent off the project for testing.

The field laboratory should be equipped with all applicable test methods and reference materials that are needed for the project materials staff to fully perform their duties. Table V in the Appendix contains a list of both required and recommended reference books and related materials information.

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6. Managing the Staff

6.1. Project Staff Administration

The Project Engineer is directly responsible for the training, assignment, supervision, and evaluation of all employees placed on the project staff. The Project Engineer's personnel administration duties include assigning duty and shift assignments, managing overtime and leave, monitoring ethics and conflicts of interest, accident reporting, preparing personnel evaluations, and approving time sheets. The Project Engineer should have applicable policies and procedures relating to these matters available in the field office and/or be familiar with them. Each project staff member should report daily hours worked and vehicle mileage on time sheets and vehicle mileage logs provided by the Project Engineer; staff should secure overtime approvals on the Request for Overtime Authorization form (Form 25A-042).

Good communications between the Project Engineer and the project staff are essential. Employees must know what their duties and responsibilities are, and they must be given authority commensurate with those responsibilities. The Project Engineer or the immediate supervisor should familiarize all new or reassigned employees with their responsibilities, their authority, and their relationship with other project personnel, the schedule of operations, and the status of the contract, and should consider rotation of job assignments where project conditions permit.

6.2. Staff Logistics

The Department provides transportation for its employees on the project site using either Department-furnished or contractor-provided vehicles. When the project site is located over fifty miles from the employees' normal work location, the Department provides transportation for its employees to the project site, and provides either meals or lodging for the employee, or pays the employee a daily allowance in lieu of meals and lodging (per diem) while they are stationed at the site. Check union bargaining agreements for detailed requirements.

All drivers of state vehicles must be 18 and have a valid Alaska Driver's License. Drivers must have a valid Alaska Commercial Driver's License if the License is required for operating their work vehicle (see Division of Motor Vehicles Website and *P&P 07.01.010* for requirements). Drivers are responsible for safety and operation checks on their vehicles (checking oil, gas, batteries, and lights) as well as arranging for all periodic maintenance and repairs.

Drivers should immediately report any accident involving a state vehicle to their supervisor. Report forms with instructions for reporting accidents should be in the glove compartment of the vehicle. Report accidents involving personal injury and/or damage to either vehicles or property on the Supervisor's Accident Investigation Report (Form 02-932). If the accident occurs within the project limits, or within the construction work zone (between construction warning signs), or involving traffic in a queue backed up from work with the project limits, file a Work Zone Accident Report (Form 25D-123). All of the comments in this section apply to both Department-furnished vehicles and contractor-furnished vehicles. The *ADOT&PF Safety Manual*, chapter 2.9, section 6, provides specific details on accident reporting.

ACM Sections 6.4 and 6.5 cover safe working conditions on the project.

The Department insures its vehicles only for public liability and property damage; the Department's employees have insurance under the Alaska Worker's Compensation Law. The contractor furnishes additional insurance coverage on the vehicles they provide. The driver should check vehicles for Proof of Insurance, Alaska DMV registration, and accident report forms. Further details on vehicle operation and responsibilities are contained in Section 5.3 regarding transport of hazardous substances on the project; *P&P 11.04.010 Use, Storage, and Marking of State Owned Vehicles and Equipment* and the *P&P 10.03.010 Property Control*.

6.3. Authority and Duties of Inspectors

Each project staff member should receive a written, general notification of their assignment to a project (Section 1.3). The Project Engineer will assign each staff member their specific project responsibilities and their authority. An inspector's duties may include:

- inspecting any one or all of a contractor's construction operations;
- sampling and/or testing materials produced by or provided by the contractor;
- measuring or verifying the measurements of pay item quantities;
- keeping daily records of the work in progress;
- performing project office duties that could include: reviewing materials submittals, calculating pay item quantities, establishing audit trails from source documents to the calculated quantities;
- assigning duties to and supervising other inspectors.

The inspector is usually authorized to clarify the contract for the contractor when questions arise, to reject materials or work performed by the contractor, and to act as supervisor for other inspectors on larger projects. Inspectors should familiarize themselves with the overall contract placing specific emphasis on the areas of the contract they are responsible for. They should be alert to the status of the work and should maintain good communications with the contractor, keeping the Project Engineer current on the contractor's progress. Inspectors who supervise others have responsibilities similar to those outlined for the Project Engineer in Section 6.1. Some of those responsibilities could include: duty and shift assignments, overtime management, preparing personnel evaluations, and time sheet approval. Inspection duties and reporting requirements are covered in more detail in Sections 10.1 and 10.3.

6.4. Personal Safety

Personal safety and safe working conditions are a top priority on construction project sites, where the exposure to potential accident and injury is much higher than in most work environments. The Project Engineer must set the example for the project staff by encouraging staff to bring safety concerns to him/her and maintaining safe working conditions. The Project Engineer should hold safety meetings at least once each month and all project staff members should attend. The topics of discussion should fit the type of project and the particular construction activities under way at the time. A brief summary of each meeting should be kept on the Supervisor's Safety Meeting Report form (Form 25M-063), and all those attending the meeting should sign the back of the form. Send each summary to the Regional Safety Officer. Vehicular accidents and reporting requirements are covered in Section 6.2.

All necessary safety equipment, required for the particular field conditions, should be made available to any staff member who needs it (AS 18.60.075). This includes items such as hard-hats, safety vests, safety glasses, hearing protectors, and life jackets. The *ADOT&PF Safety Manual* does reference personal protective equipment and the required assessments. Section 5.3 covers safety precautions that must be taken around toxic and hazardous substances that may be present on the project site. Each field office, field laboratory, and all vehicles will be equipped with a first aid kit that is sufficient for the type of project and number of employees.

The Project Engineer, and each staff member in a supervisory position, must have a valid first aid card and a valid certificate in cardiopulmonary resuscitation (CPR). At a minimum, projects with fewer than fifteen employees require only one first aid and CPR certificate; projects with more than fifteen employees require at least two first aid and CPR certificates.

Each employee should familiarize themselves with the contents of the *ADOT&PF Safety Manual* and regional memoranda that applies to their working conditions. The *ADOT&PF Safety Manual* is available on the Department's internal website at: https://web.dot.state.ak.us/stwdmno/safety-manual.shtml.

The D&ES Research & T2 website offers training for both job tasks and safety issues. Currently there are web courses in Hazardous Communication (mandatory all employees), and Wetlands and Stormwater. There will soon be training on Naturally Occurring Asbestos (see Section 9.6). Training opportunities are posted at: http://dot.alaska.ecatts.com/lmsTrainingCalendar

The terms of the Alaska Worker's Compensation Law apply to all Department employees who sustain injuries on the job. Accidents involving employees that result in hospitalization or fatality must be reported immediately to the Group Chief/PM, Regional Safety Officer, and the Alaska Department of Labor. OSHA must be notified within 8 hours (AS 18.60.058). The Project Engineer must also formally report any accident on the Supervisor's Accident

Investigation Report (Form 02-932), and the Report of Occupational Illness or Injury (Form 02-921). When an employee returns to work following an injury involving loss of time, the Project Engineer should notify the Group Chief/PM.

The Department is committed to providing a safety-conscious work environment (SCWE) where concerned individuals feel free to raise safety concerns without fear of retaliation. See Section 18.18 for more information about SCWE. The Department has created an Employee Safety Concerns Program (ECP) that is managed by the Statewide Safety Officer. The program is intended to handle safety concerns from employees, who do not choose to raise concerns with their immediate supervisors. The ECP manual is published on the Design and Engineering Services website, and contains contact information for each region. The ECP manual is posted at: https://web.dot.state.ak.us/stwdmno/safety/resources.shtml#pub.

6.5. Project Safety

The Project Engineer and project staff should be alert to any unsafe working conditions that might develop on the project. The contractor is responsible for compliance with applicable safety standards. If in the judgment of the Project Engineer, a serious hazard exists that presents imminent danger to the contractor's employees, to the state's project staff, or to the public, the Project Engineer may exercise their authority to direct the contractor to stop working on the affected part of the work until corrective measures are taken to eliminate the hazard.

The contractor is responsible for compliance with applicable safety standards for their own operations and employees, and for the operations and employees of their subcontractors.

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7. Program Administration

7.1. General

There are a number of administrative programs mandated by both the federal and the state government that may apply to contracts that fall under the Project Engineer's contract administration responsibility. Most of these programs do not have universal application. The administrative programs fall into two groups:

1. Programs that are under the authority of the Civil Rights Office (CRO) and are known as external affirmative action programs (these include EEO, OJT and DBE programs); and

2. All other administrative programs (federal and state labor requirements, Buy American (FAA) the Buy America Act (FHWA), and the Alaska Product Preference program).

A brief review of these programs appears in the following sections.

7.2. External Affirmative Action

There are three affirmative action programs mandated by the federal government that apply to most federally funded contracts that fall under the Project Engineer's contract administration responsibility:

- Equal Employment Opportunity (EEO)
- Disadvantaged Business Enterprise (DBE) Program
- On-the Job Training (OJT) Program

The parallel state affirmative action program is State Administrative Order 76. It requires compliance with federal EEO requirements on all state-funded projects. State Administrative Order 76 requires increased contracting opportunities for minority and women-owned firms. There is no DBE goal on state-funded construction contracts; DBE certification is recognized for participation under an incentive program developed to encourage prime contractors to voluntarily use DBE firms on these projects.

Every federally funded contract includes the EEO and DBE requirements. Only selected FHWA-funded projects include OJT requirements, depending upon specific criteria identified in federal guidelines such as: the type of work, size of workforce in each craft, and length of the project. A contractor's performance with respect to compliance with each of these programs is part of each Contract Compliance Review mandated by the federal government and performed by the Statewide Contract Compliance Review Officer in the Civil Rights Office. For this reason, it is imperative that contractors understand their contractual obligations regarding these programs. It is also imperative for enforcement purposes that Project Engineers administer these programs consistently and uniformly in the field.

Policy and Procedure 01.02.010 delegates final authority on all external affirmative action matters (EEO, OJT, and DBE programs) to the Civil Rights Office. This authority covers implementation, interpretation and clarification of policies, related contract specifications, and reporting requirements of these programs. This authority has been delegated to ensure uniform and consistent interpretation, application, and enforcement of these federally-mandated programs within the Department statewide.

The Contracting Officer has final authority with regard to construction contract decisions and resolution of problems.

If issues or questions arise regarding external affirmative action programs, contact the construction staff person that has been assigned duties as Regional Contract Compliance Liaison (RCCL). If they can't resolve the problem then the issue will be sent to the Civil Rights Office. This includes issues or questions involving the following contract provisions:

1. Statewide Special Provisions, Section 120, Disadvantaged Business Enterprise (DBE) Program, and all related forms;

2. Statewide Special Provisions, Section 645, Training Program, and all related forms;

3. Federal EEO Bid Conditions (Form 25A-301);

4. Form 25D-55, Sections I, II and III.

Construction personnel must obtain concurrence from the Civil Rights Office prior to issuance and/or

approval of change documents involving DBE and OJT.

Construction personnel are encouraged to coordinate with the RCCL or the Civil Rights Office as soon as possible when issues arise. The primary goal is to coordinate early in the process to avoid contract compliance violations later on. Proper contract administration of these programs can help the contractor avoid serious Contract Compliance Review problems, up to and including debarment.

The Department's External Affirmative Action Plan and annual EEO Assurances explain the Department's obligations, procedures, and performance with respect to these programs. Internal operating methods of the Civil Rights Office provide guidance on how the Department will meet its obligations to the federal government. All other documents are obsolete. Because of the dynamics and evolution of these programs, it is impractical for the Department to develop and distribute official policies and procedures just to have them become outdated soon after publication. For these reasons, please use the Civil Rights Office as the resource for current, effective information and/or assistance with these programs.

7.2.1 Equal Employment Opportunity (EEO)

The authority for the EEO program requirements on FHWA-funded Department projects is 23 USC 140. The Department implements the EEO Program as a condition of receiving FHWA funds. EEO goals and timetables in construction come from the US Department of Labor through Executive Order 11246. The requirements apply to contractors, subcontractors, and materials suppliers on federally-funded projects whose contracts/subcontracts exceed $10,000. Specific project EEO goals, good faith efforts, and reporting requirements are included in every construction contract.

7.2.2 Disadvantaged Business Enterprise (DBE) Program

The DBE Program is intended to provide the contracting opportunities on federally funded projects for DBE-owned firms in accordance with federal regulatory criteria. The Civil Rights office establishes a DBE utilization goal for each project, as a percentage of the total contract award amount. The Civil Rights office establishes the DBE project goal in accordance with federal guidelines based upon the subcontractable items for which there are certified DBEs to perform that type of work. Statewide Special Provision, Section 120 explains in detail determination of DBE compliance.

7.2.3 On-the-Job Training (OJT) Program

This program, mandated by 23 USC 140a and implemented only on selected FHWA-funded projects, becomes part of the contractor's required affirmative action program. The Department selects the specific construction projects that will utilize the OJT program and establishes the project training goal in terms of individuals to be trained and the number of hours of training to be provided. The Department establishes annual OJT goals in accordance with federal guidelines; FHWA approves OJT goals before including them in contract documents.

Statewide Special Provision, Section 645, explains the OJT Program requirements and contractor obligations for that project. Contract documents, Form 25A-310 (OJT- DOT&PF Training Program Request) and Form 25A-311 (OJT Training Utilization Report), once approved by the Civil Rights Office, establish the type of training to be provided and bind the contractor, prior to contract award, to specific training curriculum and reporting requirements. Failure by the contractor to comply with OJT requirements during the course of the contract may result in the withholding of progress payments and deduction of damages from the contractor's final payment, as specified in section 645. Also, failure to comply will result in a finding of noncompliance in a Contract Compliance Review.

7.2.4 Commercially Useful Function Monitoring and Verification

Commercially Useful Function Monitoring

Complete a DBE Commercially Useful Function Monitoring Report (Form 25A-298) for each DBE firm that works on each federally funded project. Reports are required regardless of whether the project or program is race-conscious or race-neutral, or the presence of DBE utilization goals.

Complete a CUF Monitoring Report within seven days of when each DBE first shows up on the job site. If the project extends for multiple seasons, complete a CUF Monitoring Report for each construction season the DBE is on-site.

A CUF Monitoring Report is completed by interviewing the DBE's On-Site Representative or other DBE staff who has technical knowledge and the ability to answer questions regarding the DBE's work being performed on the project. The CRO can provide

additional information if you are unsure of who is the on-site DBE representative. Only project personnel can complete the CUF Monitoring Report; it may not be filled out by the contractor or DBE.

The CUF Monitoring Report must be signed and dated by the project staff who performed the interview, and the DBE's On-Site Representative as defined in 120-1.04 of the *Standard Specifications for Highway Construction* or the *Statewide Special Provisions for Airport Construction*. Coordinate directly with the Statewide Civil Rights Office for any questions or assistance in completing the Monitoring Report.

Photograph and document DBE activities. Also note whenever there are significant changes to the DBE's day-to-day operations that may not be consistent with commercially useful work (see: "red flag issues"). Send each completed CUF Monitoring Report to the RCCL, for their acceptance.

CUF Monitoring Reports are not required on projects that have no federal funding.

Commercially Useful Function Verification

Complete a DBE Commercially Useful Function Verification Report (Form 25A-299) for each DBE firm that works on each federally funded project. Only the Project Engineer or designee can complete the CUF Verification Report; it may not be filled out by the contractor or DBE.

Coordinate directly with the Statewide Civil Rights Office for any questions or assistance in making the verification. Complete the CUF Verification Report after the DBE is substantially finished with their portion of the project work but before project final payment. Complete the report by reviewing project records. Send each completed CUF Verification Report to the RCCL, for their acceptance.

CUF Verification Reports are not required on projects that have no federal funding.

The RCCL or Project Engineer will verify that the DBE owner, or DBE On-Site Representative was at the worksite and responsible for the work. Immediately notify the RCCL if the interview reveals a potentially adverse finding. Discuss findings and significant changes with the RCCL. The Project Engineer or RCCL will notify the contractor of potentially adverse findings, and discuss ways to resolve issues. A copy of the reports may be provided to the contractor upon request.

The RCCL will coordinate potentially adverse findings with the CRO as appropriate. Again, the primary goal is to avoid contract compliance violations. Use the CRO as a resource for any questions about these requirements.

Send a copy of all CUF Monitoring and CUF Verification reports to the CRO consistent with regional policy. Copies may be in the form of an electronic PDF file.

7.3. Labor Compliance

7.3.1 Wages and Payroll Reporting

All federally funded contracts fall under the Copeland Act and the Davis-Bacon and Related Acts (29 CFR Parts 1, 3 and 5) regarding wages and the conditions of their payment. These regulations require the payment to all project mechanics and laborers of not less than the prevailing minimum wages for the local area that are contained in the latest wage rate decision published by the US Department of Labor. This decision is included in the contract. The regulations also cover such other matters as frequency of wage payments, fringe benefits, overtime wages, and legitimate deductions. Further details are contained in the contract, in the Required Contract Provisions for Federal-aid Contracts section (Form 25D-055).

Both state-funded and federally funded contracts fall under the requirements of AS 36, which requires the payment of not less than the prevailing minimum wage rates contained in the latest wage rate decision published by the Alaska Department of Labor and Workforce Development (DOWLD). This decision is also included in the contract. On federally funded contracts, if there is a difference between the federal and the state minimum wage rates, the higher rate will govern. Both the federal and the state wage rate decisions also include minimum fringe benefit rates. The federal wage rates are established at the time of contract advertisement and remain in effect for the life of the contract. State wages are established ten days prior to bid opening and remain in effect for the life of the contract, or 24 months, whichever is less. The count of the 24-month period starts at award of the contract. Upon expiration of the initial 24-month period, the latest state wage rates issued by the DOWLD shall become effective for a subsequent 24-month period or until the original contract is completed, whichever occurs first. This process shall be repeated until the original contract is completed.

The contractor and each subcontractor are required to prepare a weekly payroll and statement of compliance (14 CFR 151.53, 23 CFR 635.118, and 29 CFR 3.4) and submit them to the Project Engineer and to DOLWD within seven days of the payroll ending date. The payrolls must be project specific, identify each employee by name and work classification, and must include the hour's worked and hourly rate(s), price extensions, and deductions. Bona fide truck owner-operators hauling materials for the project must appear on the certified payrolls (as owner-operators) of the prime Contractor or an approved subcontractor.

Check that the submitted certified payrolls have a statement of compliance that is signed by the contractor or subcontractor (or their agent) who submitted the payroll.

Store certified payrolls as per the record retention schedule in Section 16.15.

7.3.2 Labor Compliance Interviews

Labor compliance interviews must be conducted on federally funded (not required for state funded) projects by project staff or by the regional contract compliance liaison. Interviews are conducted to determine if contractor employees are receiving the wages and benefits they are entitled to (correct wages and classifications, fringe benefits, hours worked = hours paid).

Conduct interviews at a time that is reasonable and convenient for the worker, with questions and answers documented on a Labor Compliance Interview (Form 25D-040).

Each season, the project staff will conduct one interview per Prime Contractor and one interview per subcontractor for 50 percent of the subcontractors. The subcontractors must be on the project more than one day per season. The seasons are summer and winter.

No interviews are required during periods of seasonal shutdown. Conduct additional interviews if there are indications of possible noncompliance. Information given during the interview is confidential.

Following the interview, the information received should be compared to payroll data to determine compliance. Each compliance evaluation should cover the employee's name, actual wage rates, and deductions from wages.

7.4. Buy American - FAA

The Buy American Preferences under 49 USC § 50101 require that all steel and manufactured goods used in AIP (Airport Improvement Program) funded projects be produced in the United States. The FAA is given the authority to waive these Buy American Preferences if certain market or product conditions exist.

A Buy American waiver may be requested from FAA based on the exceptions listed below. The Department must receive FAA approval for the requested waiver prior to issuing the Letter of Award. The four types of waivers to the Buy American requirement are:

1. **Type I.** The FAA can issue this type of waiver if the FAA determines that applying the Buy American requirements would be inconsistent with the public interest. (Department use only.)

2. **Type II.** The FAA can issue this type of waiver for equipment or construction material if the FAA determines that the goods are not produced in a sufficient and reasonably available amount or are not of a satisfactory quality. Type II Waivers can only be issued on the equipment/construction material level and cannot be issued for a system and/or facility that is comprised of various pieces of equipment/construction material. (Department use only.)

3. **Type III.** The FAA can issue this type of waiver if the FAA determines that 60 percent or more of the components and subcomponents in the equipment/facility are of U.S. origin and their final assembly is in the United States. A Type III Waiver cannot be issued at the system level and must be issued for each piece of equipment; however, in the case of facilities (i.e. buildings) a Type III Waiver may be issued for the entire facility if all the construction materials when combined meet the 60 percent U.S. origin requirement. (The term "final assembly" for purposes of this provision should be substantial rather than a light bulb put in a vehicle.) The application of this type of waiver is determined after bid opening. (Bidder may apply before award.)

   No exception is allowed for structural steel. The manufacturer must certify in writing that any major structural steel used in their equipment is of 100 percent U.S. origin. Small amounts of steel that are used in components and subcomponents,

that are not structural steel, may be of foreign origin. This would typically consist of nuts, bolts and clips. For these types of steel, the manufacturer must indicate the use of the steel (nuts, bolts, clips, etc.) and must count this steel as non-U.S. origin when completing the Content Percentage Calculation Form (Form 25D-155, Buy American Percentage).

4. **Type IV.** This type of waiver is not allowed under Alaska's standard contract language. However, the FAA can issue this type of waiver if the FAA determines that applying Buy American requirements increases the cost of the overall project by more than 25 percent. In order to issue this type of waiver, the FAA must determine that there is at least one bid from a Buy American compliant supplier to make the 25 percent cost increase determination.

FAA-funded projects require each bidder to submit a Certificate of Buy American Compliance (Form 25D-151 or 25D-152) with their bid. If the apparent low bidder indicates they will apply for a Type III waiver, then they must submit the waiver request, with documentation, before award to the Contracting Officer (section 3.4). The waiver request will be reviewed by local FAA office, and it may be approved or denied. If it is denied, the bidder is required to construct using all Buy American compliant products.

FAA-funded projects also have a list of items that have been determined nonavailable and according to 48 CFR § 25.1 are excluded from the Buy American preference requirements, and other products subject to a Nationwide Buy American Waiver, and other products subject to nationwide Buy American waivers. See web links:

https://www.faa.gov/airports/aip/buy_american/

A manufacturer or supplier of products must provide documentation to show they comply with Buy American provisions by completing a Material Submittal Form 25D-154 and associated material documentation for each product. The Contractor may sign Form 25D-154 if they have knowledge of the origins of the material and are the supplier or fabricator of the product.

7.5. Buy America - FHWA

Applicable only to FHWA-funded contracts, the terms of Public Law 98-229 require that under most conditions only certain domestic materials be incorporated into the project (23 CFR 635.410). On FHWA-funded projects, this covers steel, steel-manufactured products, and iron and steel coatings. The contractor must provide a Buy America Material Origin Certificate (Form 25D-60) demonstrating compliance with the provisions of the Buy America Act prior to award of the contract. When the Contractor becomes aware of a change from or error in a previously submitted Material Origin Certificate (Form 25D-60), the Contractor is required to submit an updated Material Origin Certificate, Form 25D-60. The contractor may amend the certificate following award and only up to the limit specified in the contract.

The contract lists exceptions or waivers to the Buy America requirement, including minor amounts, raw materials such as pig iron, and temporary structures.

Minor amounts of foreign (or unknown origin) steel and iron materials is allowed, if the cost of such materials used does not exceed one-tenth of one percent (0.1 percent) of the total contract cost or $2,500, whichever is greater. The cost is that shown to be the value of the steel and iron products as they are delivered to the project including freight. Contract specified steel or iron materials (or equal), which are subject to the Buy America Act but are not manufactured in the United States, are counted towards the project's total value of foreign steel.

The Contractor shall secure and provide a Certificate of Buy America Act Compliance (Form 25D-62) with the material documentation for each steel or iron product that is subject to the Buy America Act and incorporated in the project. The Contractor may sign Form 25D-62 if they have knowledge of the origins of the material and are the supplier or fabricator of the product.

If one contract is federal-aid funded, then Buy America applies to it and all other contracts regardless of funding sources, when those contracts are within the same scope of a finding, determination, or decision under NEPA. This also affects subcontracts with the contractor, third party agreements (like utilities or local government) and related work.

7.6. Alaska Product Preferences

Under the provisions of the Alaska Product Preferences chapter in the Alaska Statutes (AS 36.15.050), the use of Alaska agricultural and fisheries products, including Alaskan timber and

products manufactured in the state from timber and lumber, is required on state-funded contracts when the Alaskan items are priced no more than seven percent above similar outside products. Additionally, under AS 36.30.324, the Department encourages the use of Alaskan products and recycled Alaskan products in all Department procurements. Bidding preferences and monetary penalties for the use of or for the failure to use such products are established for all products except timber, lumber, and manufactured lumber products. The Alaska Product Preferences are not acceptable for FAA-funded or FHWA-funded projects.

The Alaska Department of Commerce and Economic Development maintains the Alaska Product Preferences List which lists all Alaskan products that have established eligibility for the program. Contracts containing Alaska Product Preferences reference the availability of the Department's "Alaska Product Preference Program Preparation Pamphlet" in a Special Notice to Bidders. The Project Engineer should review this pamphlet and all staff members involved with Alaskan Preference items. It contains complete information on the program including: instructions to bidders for completing the Alaska Product Preferences Worksheet (Form APPW); required product specification and installation schedule submittals; inspection procedures and procedures for correcting absent, nonconforming or not substantiable Alaskan products; documentation required to substantiate the declared value of Alaskan products (3AAC 92.050); and instructions for calculating applicable preferences and penalties.

7.7. FHWA Stewardship Agreement

Review the project stewardship and oversight agreement for responsibilities and oversight authority.

The Alaska Division of FHWA has signed a Stewardship and Oversight Agreement with DOT&PF. This agreement describes roles and responsibilities during financing, design and construction of projects that are funded by FHWA.

A copy of the current agreement is attached to the Chief Engineer's Directive dated November 20, 2015. See link: http://dot.alaska.gov/stwddes/dcspubs/assets/pdf/directives/attach/2015/stewardship_agreement_attach.pdf

Attachment A of the Agreement lists project level activities for which the "STATE" has responsibility and approval authority. Attachment B lists program level activities, roles and responsibilities. Attachment C lists DOT&PF manuals and operating agreements that are approved by FHWA.

FHWA has retained project financial approval authority. It is important that we preserve a working relationship with our funding partner by providing the information they need. The following documents are required based on language in the ACM or based on CFR and standard operating procedures with FHWA. Document submittals to FHWA are made by the regional construction engineer or their delegate.

Submit the following documents to FHWA as informational copies:

- Change Orders
- Progress Estimates
- Project Materials Certification and Memorandum of Exceptions (if necessary)
- Form FHWA 1446C – Final Inspection
- Final Construction Payment and Project History
- Letter of Project Completion
- Other documents as required by the PoDI Stewardship and Oversight Agreement.

Submit the following documents to FHWA for approval before described work begins:

- Supplemental Agreements

Project status reports must be available for FHWA review.

Projects of Division Interest

Each year the Alaska Division of FHWA conducts a risk based assessment of projects. They typically designate 10-20 projects to be Projects of Division Interest (PoDIs). FHWA may discuss potential PoDIs with the regions and headquarters in January or February before deciding on a final list.

PoDIs are chosen because they have elevated risk, contain elements of higher risk, or present a meaningful opportunity for FHWA involvement to enhance meeting program or project objectives. The FHWA risk based assessment may include:

1. Complexity
2. Cost
3. Schedule

4. Urgency
5. Environmental Considerations/Stakeholders, and
6. Other considerations.

Each PoDI has its own Stewardship and Oversight Agreement with authorities and responsibilities that may be different from the general agreement. Administer PoDI projects according to their project specific PoDI Stewardship and Oversight Agreement.

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8. Contract Administration in the Office

8.1. Contract Administration – General

Construction contract administration involves more than simply inspecting and testing the construction operations, and measuring and accepting them. This Section covers many of the other administrative responsibilities of the Project Engineer and project staff. A few of them, along with Section references where more information may be found, are the following:

Communication requirements: coordination with maintenance and operations personnel (Section 3.12) and with federal agency representatives; keeping all the communication channels open with the prime contractor and all of the subcontractors (Sections 3.9 and 9.1); reporting the progress of the project (Section 10.5).

Review and approval requirements: subcontracts (Section 8.2); materials submittals (Section 8.3); mix designs (Section 11.3); transportation management plans (Sections 3.10 and 9.8); storm water pollution prevention plans and hazardous materials control plans (Sections 3.11 and 9.9).

Monitoring requirements: utility relocation or extension agreements; attainment of DBE goals (Section 7.2); construction progress schedule updates (Section 8.5); compliance with federal and/or state labor (Section 7.3) and occupational safety requirements (Section 6.4 and 6.5); compliance with the TMP (Sections 3.10 and 9.8), with the airport construction safety plan (Sections 3.7 and 9.7) and with the SWPPP and HMCP (Sections 3.11 and 9.9); contractor, subcontractor and owner-operator insurance certificates.

Financial requirements: evaluating, recommending and authorizing contract changes (Section 12); preparing progress payments (Section 12); authorizing federal reimbursement requests (Section 8.6); and constantly monitoring the status of project expenses and project funding (Sections 3.1 and 8.6).

Record keeping requirements: documenting and reporting the contractor's operations (Sections 10.3 and 10.5); maintaining the project records (Sections 4.2 and 4.3); keeping quantity records updated (Sections 10.4 and 12.4); updating as-built drawings (Section 8.7).

8.2. Subcontract Process

Within five days of the identification of the apparent low bidder (AS 36.30.115), the apparent low bidder must submit its Subcontractor List (Section 3.4) to the Department, indicating which pay items they intend to subcontract and to which firms. Once the contract is awarded, the contractor is obligated to subcontract the pay items as indicated on the form.

The contract (specifications Section 103-1.02 or GCP 30-02) and AS 36.30.115 state the only grounds under which the contractor may deviate from the Subcontractor List without the possibility of penalty or termination of contract. *Contracting Officers Bulletins 98-001and 99-003*, clarify the penalties for violating the requirements of the contract and Alaska Statute. The contractor may enter into additional subcontracts as a result of change documents without violating the terms of the contract or Alaska Statutes.

Directions regarding subcontract review are given to the contractor at the preconstruction conference (Section 3.8).

Before a subcontractor (including lower tier subcontractors) can begin work on the contract, the Department must have either received, or reviewed and approved, the subcontractor's information using one of the two following methods:

8.2.1 Self Certification Process

The contractor must submit a Contractor Self Certification for Subcontractors and Lower Tier Subcontractors (Form 25D-042) and other documents required by contract for each subcontractor. The contractor may submit documents to the Regional

Contract Compliance Liaison (RCCL) either directly or through the Project Engineer.

The RCCL reviews Contractor Self Certified subcontracts by comparing each self certification against the Subcontractor's List and DBE Utilization Report.

The RCCL will select at least one in ten contractors self certifications per project for full compliance review. The RCCL will review the subcontractor agreement, licenses, Form 25D-55, and any other documentation relating to the certification (as outlined in 8.2.2 full subcontractor agreements below). The RCCL may select more than the required one in ten for full review, for any reason.

The RCCL does not need to provide written approval to the contractor of Form 25D-042 and subcontracts submitted to the Department.

The RCCL must keep a detailed record identifying which certifications were selected and reviewed for full compliance.

Demonstrating that at least one in ten receives a full compliance review is a condition of FAA and FHWA approval of the Contractor Self Certification process.

8.2.2 Full Subcontractor Agreements Process

In addition to the Self Certification Process described in 8.2.1; the Department may, at its discretion, require the contractor to submit any or all subcontract agreements to the RCCL either directly or through the Project Engineer for review and approval. If the subcontract agreements are acceptable the RCCL will give written approval for each subcontract.

The RCCL reviews the supporting subcontractor agreement and other documentation including:

- Licenses,
- Form 25D-55 for federal-aid contracts
- Mandatory standard language,
- Subcontractor prompt payment requirements (AS 36.90.210),
- Certification that the subcontractor is adequately insured,
- Cumulative percentage of the contract that is being subcontracted.

8.2.3 Unauthorized Subcontractors

Under the terms of the contract, the Project Engineer cannot allow a subcontractor to perform any work on the project prior to the Department receiving the completed and signed Contractor Self Certification (Form 25D-042) and other documents required by the contract. If the contract or RCCL requires full subcontract agreement submittals, no subcontractor can perform any work on the project prior to the approval letter from the RCCL.

If the Contractor does not submit Form 25D-042 or a full subcontract agreement for a subcontractor, and the subcontractor works on the project, upon discovery the Engineer should:

- contact the RCCL
- direct the Contractor to remove the subcontractor from the worksite
- withhold progress payments for the subcontractor's work until proper paperwork is submitted or approved

8.3. Reviewing Materials Submittals & Working Drawings

Certain off-site manufactured, fabricated, structural and/or specialized contract pay items obligate the contractor to provide the Project Engineer with information, verifying that the material or assembly meets the contract requirements, before the items can be ordered. This information, in the form of materials submittals, may vary from manufacturer's tear sheets and catalog cuts on standard manufactured items, to laboratory test results, to certifications establishing a material's point of origin or manufacture, to manufacturer's certifications and, in some cases, to working (shop) drawings on custom manufactured items.

The contract requires the Project Engineer to review and approve all submittals prior to the contractor ordering material. The Project Engineer may also require fabrications or assemblies to be inspected and approved prior to their shipment to the project site.

The contractor can begin making submittals of materials, products, and drawings after they receive a Letter of Award.

The contract requires that the contractor provide the Project Engineer with a list of their materials suppliers (Section 3.8); and a list showing anticipated dates for

procurement of materials and equipment, furnishing of working drawings, and other reviewable items.

8.3.1 Special Clauses

Reserved.

8.3.2 Submittal Process

The contract requires that the contractor prepare a Submittal Register (Form 25D-030) to track working drawings, and other submittal items. Material submittals are tracked with the MCL. The submittal process, with review procedure and time deadlines, is described in the contract under Highway Specification 106-1.08 or Airport Specification GCP 60-08. Some other specifications have alternate submittal review processes and deadlines.

The Project Engineer reviews submittals for content and completeness, and to determine whether the project staff or other reviewer has the expertise to determine the submittal's acceptability. If the submittal changes a sealed design in a technical manner (see ACM 13.6), the submittal review should include the designer of record (or designated professional in their section).

If a submittal is incomplete, it should be marked resubmit and returned to the contractor with the reasons listed. The reasons (insufficient information) may or may not include a comprehensive list of missing information.

The Project Engineer distributes complete submittals to the reviewers. The reviewer should mark the submittal with a review stamp or written direction, and sign the mark. Indicate the submittal status as: approved, conditionally approved with the conditions listed, resubmit (due to incomplete information), or rejected (disapproved) with the reasons for rejection listed. When the Project Engineer returns a conditionally approved or rejected submittal to the contractor, the Project Engineer must explain in detail the requirements to make the submittal acceptable.

8.3.3 Bridge Submittal Reviews

The Project Engineer should send shop drawings and other structural submittals that need to be reviewed to the Designer of Record. The Project Engineer should choose which section will review other bridge related items based on Department or consultant staff expertise. The bridge design section also reviews the submittals for temporary bridges used by the public, including an Independent Design Check letter and a Temporary Bridge Package (design calculations, working drawings, and specifications). See Appendix for Temporary Bridge Submittal Checklist.

8.3.4 Materials Certification List (MCL)

On highway and airport projects, a MCL is included in each contract (ACM 4.5). The MCL lists all material certifications required by contract, and lists Department positions that have approval authority.

The Project Engineer will maintain the MCL in the field office and use the MCL to track the status of all material submittals on airport and highway projects that require material certification. If the MCL is not complete, list other materials that are required by contract to have material certifications on the MCL.

The MCL may require that the Design Engineer of Record, Regional Materials/QA Engineer, Statewide Bridge Engineer, Regional Traffic Engineer, or the Statewide Materials/QA Engineer approve the submittal. Write the date that approval is received in the box on the MCL. After receipt of the approved submittal note the file location of the material certificate.

The Project Engineer may accept a product without a manufacturer's certification (or other Department approvals), if it appears on the Qualified Products List (ACM 4.6) or the FAA AC 150/5345-53, provided it meets contract requirements. An invoice, catalog cut, or proof of purchase is still required, and is stored in project files.

8.3.5 Airport L Series Items

The Airport standard specifications require that materials or equipment in the L series of bid items must be chosen from the current FAA Advisory Circular (AC) 150/5345-53, Airport Lighting Equipment Certification Program. The Project Engineer can only approve material or equipment that is certified by FAA. Any L series bid items not included in the FAA certified list, such as beacon towers and electrical duct, will be evaluated by the Department using submittal documents.

8.3.6 Off Site Testing

If a particular material requires off-site testing and/or inspection, the Project Engineer usually contacts the Project Manager to make the arrangements for use of the Term Contracts managed by Statewide Materials, see Section 11.7 Term Contracts and Job Order Procedures.

8.3.7 Inspection

When each off-site manufactured item is received at the project site, it should be inspected and compared to the approved materials submittal. The item should be undamaged by shipping and storage. Note the inspection in the Inspector's Daily Report or diary.

8.3.8 Project Materials Reports

If the item is an off the shelf purchase or small quantities of miscellaneous materials on the MSTF table, use the Project Materials Report (Form 25D-080) to document the item.

8.3.9 Material Records

The Project Engineer keeps records on all material certifications, material invoices, freight bills, and mill certificates that are submitted. These records must provide enough information to identify the date, company and location of invoice (bill, certificate); project name and number where material will be incorporated, manufacturer, product number, and quantity.

For FHWA and FTA federally funded projects: as per the Cargo Preference Act (see Forms 25D-55H or 25D-55T), keep records of shipments transported by ocean vessel. Submittals consist of 'on-board' commercial ocean bill-of-lading. For more information see the Special Notice in the contract.

8.3.10 Building Plans

If the contract requires the contractor to submit detailed building plans, the Project Engineer and the State Fire Marshal's Office must review and approve those plans (13 AAC 50.027). Building and site development plans may also need to be submitted to local government agencies for their review and approval. When plans have been approved, the State Fire Marshal's permit and local government building permits must be kept in the field office.

8.4. Other Administrative Approvals

On projects involving truck haul operations, a bona fide *truck owner-operator* is not considered a subcontractor and is not an employee of the contractor provided that he or she complies with the contract conditions establishing owner-operator status. The truck owner-operator does not have to be on the subcontractor's list.

However, the contractor is responsible for reviewing the credentials of each owner-operator and approving that status. Prior to the review and approval of their credentials, owner-operators are treated as employees of the contractor and must appear as employees on the certified payroll.

Truck owner-operators must submit to the contractor their Alaska Driver's License, their truck registration, their Alaska Business License, and proof of ownership or their ownership interest in the truck. The contractor must review and approve this information before the contractor can list the owner-operator as such on their certified payroll. The contractor must maintain this documentation in the files for the period of time specified in the contract. In addition to these requirements, the truck owner-operator must qualify as an independent contractor under Alaska Department of Labor criteria; further details on this and on other owner-operator matters are contained in the contract.

If the Project Engineer receives notice of the *loss of a contractor's insurance coverage or bonding coverage*, through cancellation or insolvency, the contractor must immediately be notified that he or she must completely restore the lost coverage. The contract specifies the time frames, if any, that apply and the procedures the contractor must follow in replacing the coverage.

If a contractor wishes to designate a third party to receive the payments on the contract or wishes to transfer the remaining work to another contractor, this is known as an *assignment*. The approvals of the contracting officer and of the contractor's bonding agent are both required. The contractor must present a written request to the Project Engineer, in accordance with the contract. The request will be subject to the review of the contracting officer. If an assignment of payments is approved, it is for the contractor's convenience only, and does not relieve the contractor of any contract obligations. When applicable, withholding and/or liquidated damages are withheld, it is the same as if the assignment had not occurred.

8.5. Construction Progress Schedule

A copy of the contractor's current construction progress schedule should be posted in the field office. The contractor's progress on the individual pay items and the overall estimated value of work completed to date, should be calculated and posted on the schedule each week. This gives the Project Engineer and project staff members an idea of the contractor's actual versus intended progress.

If the contractor falls behind or consistently works ahead of the schedule, or if significant changes are made to the contract via contract change documents or quantity changes, to the extent that the dates and sequence of the information lose their significance as a scheduling or monitoring tool, the Project Engineer should request that the contractor submit a revised progress schedule. Revised schedules should be reviewed in the same manner as the original schedule (Section 3.5).

8.6. Coding, Monitoring Expenses & Reimbursement Requests

Staff members involved in coding invoices for payment, including contractor payment, must be careful to properly establish the eligibility for reimbursement of each item authorized for payment, and properly code each item. If questions arise concerning eligibility of the individual items, the Project Engineer should consult with the Group Chief/PM and Project Control.

The Project Engineer or regional traffic control coordinator should randomly spot check law enforcement billings to ensure the dates and times invoiced are in substantial agreement with the actual work. Ensure billing is consistent with the overall law enforcement agreement. Compare the billable hours with independent records in the project staff diary or daily report. If dates and hours are not in substantial agreement, resolve the billing discrepancies with law enforcement. Document the items spot checked, discrepancies found, and their resolution.

- On federally funded projects, construction costs are divided into two categories: participating expenses and non-participating expenses (Section 2.2). This breakout of expenses is shown on the progress payments on the Recapitulation Sheet (Form 25D-199) by properly coding the construction costs to either participating or non-participating phase codes.

The Group Chief/PM or designee should review total expenses in each funding category (participating and non-participating), and accumulation of expenses for each support group. The Group Chief/PM should periodically compare the buildup of expenses with the support groups' budgets categories. If expenses in any budget segment look out of place, review the individual charges via an ALDER on-line audit trail or request a printed audit trail from the project control unit. Any excessive or potentially erroneous expenses should be brought to the attention of the project control unit, and the support group that incurred the expense. If there is an error the responsible party must initiate the correction.

Support groups may submit a revised budget for the Group Chief/PM's or designee's approval. If the need for additional funding in the construction phase arises, the Group Chief/PM should coordinate with the project control unit. Each project's financial situation is unique, but in all cases the more advance notice that the project control unit has, the more likely it is that additional funding will be available.

On federally funded projects, the Department requests reimbursement for eligible expenses from the federal funding agency (14 CFR 151.61 ff and 23 CFR 140.105).

On FHWA-funded projects, the Department's Federal Aid unit prepares the project Progress Vouchers using the expenditure information in IRIS. One billing covering a number of projects is submitted directly to the FHWA. The Project Engineer and project staff involve themselves in this process through their review of their projects' expenditure information in IRIS.

On FAA-funded projects the reimbursement requests are prepared, on a grant-by-grant basis, according to regional procedures using the same IRIS expenditure information. Reimbursable Services Agreements (RSAs) or utility agreement billings are prepared by the regional finance unit, using the financial information in IRIS.

8.7. Recording As-Built Changes

The Project Engineer should clearly identify to all project staff members the set of drawings that is set aside for recording as-built changes (see Section 4.2). Throughout the project, as changes occur to the design shown in the plans and as new pay items are added to the contract and original items are deleted, project staff must revise and update the designated set of marked up as-built drawings in the field office on a timely basis. The Project Engineer should impress on each staff member the importance of entering the changes to the plans immediately on the drawings.

The Project Engineer or project staff member associated with the change should enter all corrections, revisions, or additions to the work on the

as-built drawings. New drawings or sketches should be added to the set as appropriate. Certain information on the drawings does not need to be updated, particularly information of no significance to the finished project like temporary construction features, staged construction schedules, or temporary traffic control measures.

Update the following information on the as-built drawings: changes in horizontal or vertical alignment; changes in typical sections or new typical sections; new or revised utility locations; changes to electrical wiring diagrams and installations; changes to automated traffic recorders; as-built location and dimensions of all structures; changes in survey control or right of way/property monuments; changes in drainage features; as-built data on materials sources including areas developed and waste areas (if included in the drawings); as-built location and dimensions of piles, foundation elevations and subsurface structural details; revisions/substitutions of materials or equipment; estimated quantities should be revised to final quantities; all change document work. In short, any change made during construction to a permanent feature of the project, should be correctly shown on the final as-built drawings.

8.8. Administrative Reviews & Inspections by Others

The Project Engineer and project staff, in addition to inspecting the contractor's operations, are themselves subject to inspections and reviews by numerous groups.

Periodically the Group Chief/PM will visit the project site, as may other regional employees including the contracting officer, the design engineer, traffic and safety, environmental, and maintenance and operations employees.

8.8.1 Regional Quality Reviews

On all projects, the regional quality assurance/review unit may make periodic field reviews to check project documentation, record keeping and progress payment quantity calculation procedures, as well as to inspect field laboratory equipment, record keeping, and testing procedures.

8.8.2 Annual Regional Traffic Reviews

Each region must conduct an annual work zone traffic control and safety review (except for the year the joint review is held in that region) according to P&P 05.05.015. The regional traffic coordinator may review the project similar to the review described for the annual joint traffic control review.

8.8.3 Annual Joint Traffic Control Review

D&ES will perform a joint traffic control review in one region each year as defined in P&P 05.05.015. The reviews are rotated each year, so each region has a review every three years. The reviews may evaluate all aspects of the traffic management plan (including TCP, PIP and TOP) implementation, traffic routing plans, impacts on traffic delay, safety, inter project coordination, quality of daily reviews by the contractor and Department personnel, project records, and other aspects of the project.

D&ES will write a review summary memorandum and distribute it to the regions and to the FHWA after the review. Significant issues identified in the review will be reported to FHWA and Department construction personnel at regional construction meetings.

8.8.4 Statewide D&ES Reviews

D&ES staff may review projects and project records to evaluate the implementation of TMPs, work zone traffic and safety, and SWPPPs, and for conformance with the *Alaska Construction Manual* and the Department's policy and procedures. D&ES staff will not direct the Project Engineer, project staff, or the contractor.

Regional construction management will be notified before a review occurs. Regional staff will, typically, participate in the review to assist and inform the reviewer. The results of the review will be distributed to the regional construction management.

8.8.5 Other State Reviews and Audits

The Department's Internal Review unit auditors and Legislative Budget and Audit auditors, may review the project's records as they relate to financial matters such as contractor and consulting engineering contract payments and reimbursement requests to federal and other agencies. DOLWD may conduct OSHA safety inspections. DEC may conduct SWPPP inspections.

8.8.6 Federal Reviews

On federally funded projects, federal agencies can inspect the contractor's operations and the field operations of the Department (14 CFR 151.49a). The funding agency, The Office of Management and

Budget, and the Inspector General may inspect the project's records.

The United States Coast Guard and the American Bureau of Shipping (and COE, USFW, NMFS, and DEC) may conduct periodic inspections of marine vessel projects to insure compliance with their agencies' regulations.

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9. Contract Administration in the Field

9.1. Relations with the Contractor

The key to a successful project is good communication. Having the Project Engineer as the single point of contact on a project gives them the authority needed to support good communication. In dealing with contractors and their organizations, the Project Engineer should cooperate as shown by the partnering concept (Section 3.9), and should convey to the project staff that they are working with the contractor to secure the best possible finished product; the attitude of the project staff should also reflect this cooperation. The prompt preparation and processing of contract change documents and progress payments exemplifies this spirit.

When the contractor requests information or a clarification, the project staff should respond promptly to the request. If the Project Engineer is unable to respond to a contractor's request for clarification on information, the Project Engineer should immediately seek the assistance of the Group Chief/PM or one of the support groups, and keep the contractor advised of the status of the request. In general, the Project Engineer and the project staff should do everything necessary to enable the contractor to work to their benefit and without delay, but they should not furnish any services that the contractor is responsible for providing.

If the communication link between the contractor and project staff is threatened, the staff member should ask the Project Engineer for advice, or, as a last resort, intervention. If the Project Engineer runs into a similar situation, they should turn to the Group Chief/PM for assistance.

If the Project Engineer receives claims for damage to property or for injuries allegedly resulting from the contractor's operations, the Project Engineer should refer the claims to the contractor. If claims are received for money owed by the contractor for material, supplies, or wages on the project, the Project Engineer should provide the claimant with the name of the contractor's bonding agent and a copy of the payment bond, and should advise the claimant to read AS 36.25.020(c) for further information; wage claimants should also be referred to the Alaska Department of Labor, Wage and Hour Division.

9.2. Contractor Surveying

Under terms of the contract, all construction surveying is the contractor's responsibility. The Department is responsible for establishing the horizontal and vertical control that the contractor will use for construction staking; this control is usually established during the design phase of the project. On projects that have spent a number of years undergoing design, the control survey may be a bit ancient by the time the contractor's surveyors arrive at the site. Because this is usually the first construction activity under way on the project, the Project Engineer should monitor this initial survey effort closely and be alert for any errors that may show up in the horizontal and vertical control. If the contractor discovers any problems with the survey control, the Project Engineer, after consulting with the Group Chief/PM and the design engineer, should take immediate action to correct the control data or to adjust the lines and grades of the finished structure.

The contract provides that contractor surveying which the contractor uses for the computation of pay item quantities is subject to random spot checks by the Project Engineer. The Project Engineer should spot check at least 5 percent of these surveys and should also spot check note reductions and other survey work

for accuracy. If the Project Engineer discovers errors, they should perform additional spot checks and bring the matter to the contractor's attention. The Project Engineer or project staff will take all survey notes for final quantities and completely check them.

9.3. Contractor's Equipment

When the contractor first mobilizes equipment to the project site, and as each additional piece of equipment arrives at the site, the Project Engineer and project staff should inventory the equipment. The contract, with a few exceptions, requires only that the contractor provide an equipment spread that is capable of completing the contract within the contract time; the choice of equipment is left up to the contractor. Contractor vehicles and equipment that require licensing must be licensed in Alaska at all times during their use.

Certain pay item specifications, primarily those dealing with asphalt paving, spell out in some detail the equipment (and its condition) that the contractor is to use; the Project Engineer is responsible for documenting the equipment and its condition. If the Project Engineer notices any deficiencies in the specified equipment, the Project Engineer should immediately bring the deficiency to the contractor's attention. The contractor should not allow specified equipment that does not meet contract requirements to work on the project until the contractor brings the equipment into compliance with the contract.

When the Project Engineer and project staff inventory equipment, they should gather basic information on each piece. Information should include the classification, make, model, year of manufacture, horsepower, attachments and optional features, capacity, engine fuel, serial number, and contractor's number. These data will help the Project Engineer establish a rental rate for each piece of equipment, if necessary. The project staff should use still photographs and videotape to document the initial condition of the contractor's equipment.

9.4. Legal Loads

The Project Engineer may permit oversize and overweight vehicle movements within the project limits provided the contractor submits a written request and an acceptable Traffic Control Plan. The Traffic Control Plan must describe:

- how and where overweight or oversize vehicles will be used
- Each vehicles axle spacing, gross axle weights, and tire widths
- Type of material or equipment being hauled

Weight restrictions still apply to all vehicles and equipment within the project limits, when hauling over:

- base course, surface courses, or structures that will remain, or become part of the finished roadway
- a structure that will be removed later, but is a route the public currently uses
- a structure that will be removed later, but is spanning over a route or other areas the public currently uses

Detailed analysis of structures and weight restrictions can be performed by the Division of Measurement Standards and Commercial Vehicle Enforcement (MSCVE) or the Bridge Section.

Temporary crossings designed by the contractor may support construction and public traffic if the crossing is designed to support those loads.

Beyond the project limits, size and weight limitations apply even though the highway may be a designated haul route. The MSCVE issues oversize and overweight permits for travel outside the project limits.

The Project Engineer and the project staff should be familiar with the size and weight limitations for the vehicles and equipment on their project, and with the effects of overweight operations on the project. Work sheets are available for calculating the maximum legal load for any given vehicle.

Where contractor-furnished weigh people operate the scales, the Project Engineer should monitor the weight tickets to make certain that the weigh people comply with the load limits. If enforcement of legal load limits becomes a problem, the Project Engineer should contact the Group Chief/PM. For further information on vehicle loads and permitting of nonlegal loads, consult 17 AAC 25 and the Department's *Alaska Oversize and Overweight Permit Movements* manual.

9.5. Site-Specific Hazard Awareness Training

In compliance with 30 CFR 46.11, the contractor's operator or commercial operator of the sand and

gravel surface mine (materials source) shall provide Site-Specific Hazard Awareness Training for all the Project Engineer's staff (non-miners) before beginning any operations in the surface mine. The training must be provided for each surface mine that is used to supply processed aggregates. A competent contractor's operator must provide the training in accordance with the operator's written training plan approved by the Mine Safety and Health Administration (MSHA). The training shall cover:

- Site-specific health and safety risks
- Recognition and avoidance of hazards
- Restricted areas
- Warning and evacuation signals
- Evacuation and emergency procedures
- Other special safety procedures
- A site tour

The Project Engineer's staff must sign the Visitor's Log Book after completing the training to indicate that training was provided.

According to the Compliance Guidelines for MSHA Part 46.1, Scope: Government Officials visiting a mine site generally are not required to receive Part 46 training. However, MSHA expects those government agencies whose personnel visit mine sites will ensure that their employees are provided with appropriate personal protective equipment, and receive adequate instruction and training. Where training is not provided, an experienced miner should accompany such government officials.

9.6. Asbestos in Aggregates

The DOT&PF Naturally Occurring Asbestos (NOA) program was established in 2012 by the Alaska state legislature. The law provides immunity under state law for the landowners, extractors, suppliers, transporters, and contractors for certain actions or claims arising in connection with the use of gravel or aggregate material containing NOA; if the applicant has a site specific plan approved by the Chief Engineer and they follow that plan during construction.

On projects with known NOA every person working in the project area must take the T2 Asbestos Awareness Training. All workers in the project area must follow the approved project site specific plan.

A list of best practices for NOA materials is posted at:

http://www.dot.state.ak.us/stwddes/desmaterials/noa.shtml

If NOA materials are found during construction immediately notify the Chief Engineer and stop work in the affected area. A site specific plan must be approved by the Chief Engineer before work can resume in the NOA area.

9.7. Airport Construction Safety

Airport safety requirements are described in FAA Advisory Circular (AC) 150/5370-2F, Operational Safety on Airports During Construction.

A Construction Safety and Phasing Plan (CSPP) is developed by the Department or the airport operator. The CSPP is normally submitted to FAA for approval during the design phase. The CSPP and any changes to the CSPP must be approved by FAA before implementation. The contract should comply with the requirements of the CSPP.

The contractor must submit a Safety Plan Compliance Document (SPCD) to demonstrate how they will comply with the CSPP. The SPCD may provide additional details (such as key personnel, construction phasing or equipment) that were not known at the time the CSPP was developed. The Project Engineer should review the SPCD, and approve the SPCD when it is in compliance with the CSPP.

Each contract for an airport improvement that affects an aircraft operational area (runway, taxiway, aircraft parking apron, and other facilities that adjoin these areas) has a special provision that specifically addresses that airport's traffic and safety requirements. The contract should also include drawings that depict runway and taxiway safety areas, vehicle movement setback lines, designated haul routes, obstacle free zones, temporary lighting requirements, and construction phasing information.

The two principal safety concerns when a contractor works on or adjacent to existing airport operational areas that are open to traffic are:

1. Marking the open portions of those operational areas, so moving aircraft know clearly where to taxi, takeoff, and land

2. Keeping construction equipment and construction project workers separated from moving aircraft

The contract requirements for airport traffic control and safety vary considerably from site to site, but generally include:

- Minimum length and width requirements for the runways
- Marking the closed portions of the runways or taxiways
- Strategic Event Coordination (SEC)
- Filing Notices to Airmen (NOTAMs) that describe the current status of the runway with the appropriate FAA Flight Service Station
- Providing plainly visible markings delineating the open portion of the runways (thresholds and edges), taxiways, and parking aprons from construction areas
- Aircraft frequency radio contact requirements
- Airport security requirements
- Scheduling or work sequencing requirements
- Coordination requirements

9.7.1 Notification Before Work

The Project Engineer shall write a letter to the appropriate FAA Flight Service Station (FSS), and send a copy to the FAA project manager, before the contractor begins work on an airport project. The letter should give the FAA/FSS basic information on the construction project including:

- The scope of work
- The duration of the contract
- The name of the contractor
- The Project Engineer's telephone number

Copies of the letter should be sent to the Regional Airport Safety and Compliance Officer, the DOT&PF airport manager, airport maintenance contractor (if appropriate), other adjacent FSSs, and the contractor.

Prior to starting work, the Project Engineer and the contractor's superintendent should meet with the airport manager and/or Regional Airport Safety and Compliance Officer and a local FAA tower or FSS representative, and air carrier representatives to establish communications, discuss the proposed work, review the CSPP and SPCD, and ensure that everyone fully understands the scheduling of construction activities in conjunction with aircraft operations.

9.7.2 Strategic Event Coordination (SEC)

Prepare and submit a Strategic Event Coordination form (FAA Form 6000-26, Airport Strategic Event Submission) when required. The SEC form must be submitted to FAA via email (send email to 9-AJV-SEC-WSA@faa.gov) at least 45 days prior to the strategic event. These are events that last for greater than 24 hours, or for 4 hours for consecutive days, and they include:

- NAVAID Shutdowns
- Full or partial runway closures
- Significant taxiway closures

9.7.3 Notices to Airmen (NOTAMs)

See Section 9.16 and FAA Advisory Circular 150/5200-28D for more information.

Prepare NOTAMs according to the Advisory Circular and the contract. The airport manager or authorized representative will review and sign the NOTAMs form, and will submit NOTAMs to the FAA.

Each time there is a change in an aircraft operational area (length, width, location, surface condition, lighting, personnel and equipment in the vicinity), a new NOTAM should be prepared and older NOTAMs may have to be cancelled. Only FAA may issue NOTAMs for navigation facilities and approach lights.

When work on the project is completed or is suspended for the season, the last construction NOTAM in effect should be cancelled or a new one issued to convey current runway, taxiway, and parking apron conditions to the FAA.

9.7.4 Radio Communications

At airports equipped with an Air Traffic Control Tower (ATCT), all movement of personnel, vehicles and equipment on open/active runways or taxiways are under direct radio control of the ATCT during hours of ATCT operation. When the ATCT is closed, see the following paragraphs.

At airports equipped with only an FSS, all movements on open/active runways or taxiways shall be coordinated with the FSS by radio on the airport's Common Traffic Advisory Frequency (CTAF).

At non-towered/non-FSS on-field airports, coordinate operations on the open/active runway or taxiway with the appropriate FSS on the airport's Remote Communications Outlet (RCO).

Using the CTAF, vehicle operators will be required to notify all aircraft using the airport of their location on the runway. This will require radios capable of

scanning multiple frequencies. Give all aircraft the right-of-way, and undertake all construction operations and movements on the airport using common sense and caution. All vehicles operating under these conditions should be equipped with radios containing the proper frequencies and operating amber beacons. If a radio isn't available in the vehicle, then the vehicle should be escorted by a properly marked vehicle capable of communicating on the proper frequencies or by a trained flagger using handheld radios.

9.8. Highway Traffic Control and Safety

Implementation of the Traffic Management Plan (TMP) allows for the safe passage of traffic through a highway construction work zone. Section 3.10 covers TMPs and their review and acceptance.

Refer to the contract for traffic control device payment details.

A TCP must be approved before construction starts. All traffic control devices required by the approved TCPs, in and around the active construction area, must be in place before construction starts, and must be maintained during construction. Project staff should monitor the TCPs. The Project Engineer is responsible for the daily measurement of pay item quantities and verifying the contractor's compliance with all requirements of the TCPs.

Each day, project staff must document in an Inspector's Daily Report (Section 10.3) that traffic control devices were checked and whether or not they were in compliance with the approved TCPs. Bring deficiencies in the traffic control setup to the attention of the Project Engineer.

Under the contract, the responsibility for placing and maintaining the traffic control devices rests with the contractor and must be in accordance with Section 643 of the *Highway Specification.*

Project staff must report device counts each day using the Traffic Control Signs and Devices Daily Report, Form 25D-103. It is signed and dated by both the Contractor's Representative and the Project Engineer's Representative.

The contractor must report each day using the Traffic Control Daily Review, Form 25D-104. It is signed and dated by the Contractor's Representative and submitted to the Project Engineer within 24 hours. The contractor's daily documentation on Form 25D-104 should include the TCP numbers in effect, the details of any variations from the approved TCPs, and indicate if any devices need to be repaired or replaced. Dimensional sketches, still, and video photography may be used to clarify the daily entries to document traffic control.

During construction, TCPs may require modification to meet changed construction schedules or conditions. A major revision to the TCP changes the basic application of the approved plan; treat the changes as a new TCP submittal. A minor revision is one that does not change the basic concept of the plan and can be reviewed by the Project Engineer. When a minor revision to the TCP is found to be acceptable, the Project Engineer will notify the contractor in writing. Record minor revision by annotating the approved TCP in the project files with the changes and the approval date.

Report any vehicular accidents within the project limits, or within the construction work zone (between construction warning signs), or involving traffic in a queue backed up from work with the project limits, on the Work Zone Accident Report, Form 25D-123 (Also see Section 6.2). Report accidents to the regional traffic and safety engineer, within 10 calendar days of occurrence. Submit a copy of the police report and other pertinent information upon receipt.

The *Alaska Traffic Manual* contains additional information on construction work zone traffic safety.

9.9. SWPPP & HMCP Implementation and Monitoring

See Section 3.11 for plan review requirements. See Section 9.17 for other agencies permits, environmental commitments, and contractor obtained permits. Environmental commitments that are identified in the permits or in the contract should be incorporated into the SWPPP.

Ensure that the contractor keeps the approved and updated SWPPP, HMCP and SPCC at the on-site project office, or a nearby office. They are the documents of record, and must be made available to any local, state or federal inspector who requests them.

Project Staff should keep a working copy of the contractor's SWPPP.

9.9.1 Signature Authority and Personnel Qualifications

When a SWPPP is required, the contractor must delegate responsibility and signature authority to a superintendent. The superintendent may delegate work to a SWPPP manager. The superintendent, and SWPPP manager, must have current certification as an Alaska Certified Erosion and Sediment Control Lead (AK-CESCL), or other qualifications that meet the CGP, Appendix C requirements for qualified person. The Project Engineer should verify that the SWPPP documents the contractor's personnel qualifications (certifications).

The Regional Director will delegate responsibility and signature authority to the Project Engineer. The Project Engineer, the project Stormwater Inspectors, and the Regional Construction Stormwater Specialist must have a current certification as an Alaska Certified Erosion and Sediment Control Lead (AK-CESCL), or other acceptable training that meets the CGP requirements for qualified personnel. The Project Engineer and project Stormwater Inspectors must send their certifications to the Superintendent for inclusion in the SWPPP.

When there is personnel turnover or a person assumes the duties of someone on leave: the new person must be AK-CESCL certified. Enter the new person's data on the SWPPP Project Staff Tracking log, Form 25D-127. Enter a copy of their AK-CESCL certification into Appendix E of the SWPPP. The new person's data must be documented before they can inspect or sign SWPPP documents.

9.9.2 Duties of Project Engineer and Inspector

The Project Engineer and the project Stormwater Inspectors must be familiar with the contractor's SWPPP (Section 3.11.), HMCP, the contents of the Department's *Stormwater Pollution Prevention Plan Guide*, and the CGP.

The Department and the contractor are co-permittees for the project SWPPP and HMCP. A violation of permit requirements may result in a monetary penalty for the Department and the contractor.

In addition to the inspections required under the CGP, the Project Engineer and project staff must keep daily watch on the contractor's operations and BMPs. Project staff must immediately report to the Project Engineer observations of inadequate BMPs, a need for new BMPs, or pollutant discharges. The Project Engineer will report them to the superintendent or SWPPP manager and ensure that corrective action is taken within applicable deadlines.

The Project Engineer must become familiar with the project site, and be alert to instances where the SWPPP is not adequate or where the contractor is not following the SWPPP. If there are instances of inadequate BMPs or noncompliance with the SWPPP or CGP, direct the contractor to take corrective action. Ensure that the contractor updates the SWPPP regularly and completes required record keeping. Ensure that SWPPP amendments are signed by the Superintendent or SWPPP Manager and approved by the Project Engineer.

9.9.3 Reporting non-compliance to DEC

If the contractor reports to the Project Engineer, or if the project staff observe: an incident that is (1) non-compliant with the CGP and (2) which may endanger health or the environment; then the Project Engineer must immediately report the incident to the Regional Construction Stormwater Specialist (or equivalent environmental position).

The Regional Construction Stormwater Specialist will determine whether the incident is reportable under the Standard Permit Conditions of the CGP and if so, will make a verbal and written report to DEC on behalf of the Department. The verbal report must be made within 24 hours of the first discovery of the incident. The written report must be filed within five days of the first discovery of the incident.

Verbal Reports should be made to DEC at:

- Outside of Anchorage: 877-569-4114
- Anchorage Area: 907-269-4114

The contractor is also responsible for reporting the same incident to DEC and other agencies as required by law. If possible the Department and contractor should coordinate reports to ensure a consistent explanation. If the contractor doesn't co-sign the Department's report, they must file their own written report with DEC. The contractor may file their own report even if the Department decides the incident is not reportable.

9.9.4 Public Notice, Forms and Permits

Ensure the contractor has posted public notices and SWPPP postings, as required in the contract and CGP.

The following plans, forms or permits are included in the contractor's SWPPP documents:

- SWPPP formatted per DOT&PF SWPPP template – contractor's document that requires approval from the Department
- 25D-105, SWPPP Subcontractor Certification - Subcontractor signs prior to commencing soil disturbing work
- 25D-106, SWPPP Pre-Construction Site Visit – contractor's document that SWPPP Preparer signs
- 25D-107, SWPPP Delegation of Signature Authority for CGP Documents - DOT&PF – Department's Regional Director signs
- 25D-108, SWPPP Delegation of Signature Authority for CGP Documents - Contractor – contractor's Corporate Officer signs
- 25D-109, SWPPP Certification for DOT&PF – The Project Engineer signs a certification when the SWPPP is approved
- 25D-111, SWPPP Certification for Contractor – The superintendent signs the certification when the SWPPP is approved by the Department
- 25D-125, SWPPP Training Log – contractor tracks personnel training
- Copies of eNOIs in effect and acknowledgement letters from DEC.
- HMCP - contractor's document that requires approval from the Department. It becomes part of the SWPPP.
- Reference the SPCC Plan (if required) – No approval required

The following forms are used by the contractor during construction and kept up to date in the SWPPP:

- 25D-100, SWPPP Construction Inspection Report – Must be completed by the superintendent or SWPPP manager/representative. Requires dual signature and certification by superintendent and Project Engineer after each joint inspection
- 25D-110, SWPPP Grading and Stabilization Activities Log – Superintendent or SWPPP manager/representative date and initial, used to record dates of land disturbance and stabilization measures
- 25D-112, SWPPP Corrective Action Log – Superintendent or SWPPP manager/representative date and initial, used to document timely maintenance or corrective actions
- 25D-114, SWPPP Amendment Log – Superintendent or SWPPP manager signs and dates amendment, project engineer initials to document approval, used to document changes to the SWPPP
- 25D-115, SWPPP Daily Record of Rainfall – Initials required, any worker can fill it out
- 25D-127, SWPPP Project Staff Tracking – contractor and DOT&PF tracks qualified personnel and positions
- 25D-129, SWPPP Visual Monitoring Data – Only used on selected projects and as required by special provision
- 25D-140, SWPPP Turbidity Monitoring Form – Only used on selected projects and as required by special provision
- 25D-143 SWPPP Noncompliance Notification – The contractor should coordinate with the Regional Construction Stormwater Specialist to fill out the report. The contractor signs their report and submits it to DEC.

The following forms are filled out by the Department and kept up to date in the SWPPP:

- 25D-113, SWPPP Delayed Action Item Report – The Project Engineer prepares the report and sends a copy to the Superintendent for inclusion in the SWPPP, used to document BMP actions that are not practicable to complete by the Complete by Date written on construction stormwater inspection report and to assign a new Complete by Date.
- 25D-127, SWPPP Project Staff Tracking – contractor and DOT&PF tracks qualified personnel and positions
- 25D-143 SWPPP CGP Noncompliance Notification – The Project Engineer notifies the Regional Construction Stormwater Specialist (RSWS) of reportable events. The Regional Construction Stormwater Specialist in coordination with the contractor fills out the report. The RSWS signs the report for DOT&PF and submits it to DEC.

9.9.5 Reduced Inspection Frequencies and Seasonal Suspension

When the entire site is stabilized according to the CGP, the Project Engineer may approve the reduction of the inspection frequency to once every 30 days. If the inspection frequency is reduced and the worksite is not actively staffed, the site does not have to be inspected after storm events. If the site is actively staffed, the site must be inspected within two working (business) days of the end of a storm event that resulted in a discharge from the site.

Indicate in the SWPPP why the site is eligible for reduced inspection frequency, and provide the beginning and ending dates. After the SWPPP amendment is approved by the Project Engineer, inspections can be conducted on the new schedule.

During reduced inspection frequencies, the contractor must inspect (preferably jointly with the Department), monitor, and report on BMPs, and take corrective action as required by contract and the CGP.

During seasonal suspension of work (CGP Appendix C calls this winter shutdown) the Project Engineer may approve the reduction of the inspection frequency to once every 30 days, or may waive inspections entirely after 14 days of freezing conditions until 21 days prior to the anticipated spring thaw.

If seasonal suspension is planned for a project, the anticipated dates of fall freeze-up and spring thaw for the site must be documented in the SWPPP. After the SWPPP amendment is approved by the Project Engineer, inspections can be conducted on the new schedule.

Acceptable control measures for stabilization must be provided for conveyance channels, disturbed soils, slopes and stockpiles; prior to, during, and at the conclusion of seasonal suspension. Frozen ground by itself is not considered adequate stabilization. In addition, erosion and sediment controls must be installed in anticipation of spring thaw.

When inspections occur during seasonal suspension or on a reduced inspection frequency, it is preferable that inspections are conducted jointly by the contractor and Department. However, if it is not practicable to conduct a joint inspection, the entity that conducts the inspection must explain why it was not practicable, and provide a copy of the inspection report to the other entity within three days of the inspection and document the submittal.

9.9.6 Final Stabilization and Notice of Termination

The contractor is responsible for all aspects of the SWPPP, including inspection requirements, until final stabilization is achieved. The Project Engineer, in consultation with the Regional Construction Stormwater Specialist and/or environmental personnel, is responsible for determining the date when final stabilization has been achieved. The contractor has 30 days after the date of final stabilization, to submit the Notice of Termination (NOT) to the DEC either by certified mail or through the APDES electronic filing system.

The regional director will sign the Department's eNOT, and they or the environmental section will submit the eNOT to DEC. Although the CGP allows 30 days to do this, it is best to file the Department's NOT as soon as final stabilization is determined. The Project Engineer should send copies of both eNOT submissions to the environmental section and ensure that copies of both are included in the SWPPP of record.

When the contractor's eNOI includes areas where the Department is not an operator (has a SWPPP and SWPPP2s), then the contractor may not be able to file an eNOT until all areas are stabilized. For further information see Highway Specification 641-3.01.6 (Airports P-641-3.1.f).

9.9.7 Project Reporting Requirements

The Department will store records including copies of the initially approved SWPPP, the final SWPPP, inspection reports, and other listed forms kept during construction.

The regions will use eDocs to transmit to Headquarters D&ES. Send the following documents on a regular basis during the construction season, and once every 30 days during a reduced inspection frequency:

- 25D-100, Inspection Report
- 25D-115, Daily Record of Rainfall
- 25D-110 Grading and Stabilization Log*
- 25D-112, Corrective Action Log*
- 25D-113, Delayed Action Item Report*
- 25D-114, SWPPP Amendments and Amendment Log*

- 25D-127, SWPPP Project Staff Tracking*
- Changes to Site Maps*

** Asterisked forms and data are transmitted if they were changed or information added during the reporting time period.*

When the contractor fails to meet an environmental requirement of the contract that is identified as SWPPP Liquidated Damages (LDs), then the Project Staff should document those LDs on Form 25D-126, SWPPP Liquidated Damages Calculation Table. The LDs will be reviewed by the region. After review the regional accounting office will bill the contractor. The Project Engineer may withhold project funds until the contractor pays the LD amount to the regional accounting office. Funds used for payment must be separate from project funding.

9.10. Oil and Hazardous Materials Reporting Requirements

In the event of a release, discharge or spill, of oil or hazardous substance, the Project Engineer and contractor should be notified immediately. The contractor should begin spill containment and cleanup as soon as practicable.

The contractor is responsible for reporting spills. The following state and federal reporting requirements should be included in the contractor's HMCP:

State DEC: Any release of a hazardous substance must be reported to DEC as soon as the person knows about the discharge.

The following are DEC requirements for reporting oil discharges:

- **To water:** Any release of oil into water must be reported as soon as the person knows about the discharge.
- **To land:** Any release of oil *in excess of 55 gallons* must be reported as soon as the person knows about the discharge. Any release of oil *in excess of 10 gallons but less than 55 gallons* must be reported within 48 hours after the person has knowledge of the discharge. A person in charge of a facility or operation must maintain and provide to the DEC on a monthly basis a written record of any discharge of oil from *1 to 10 gallons*.
- **To impermeable secondary containment areas:** Any release of oil *in excess of 55 gallons* must be reported within 48 hours after the person has knowledge of the discharge.

Notify the Alaska Department of Environmental Conservation (DEC) at one of the following telephone numbers, depending upon project location:

- Central (Anchorage) 907-269-3063
- Northern (Fairbanks) 907-451-2121
- Southeast (Juneau) 907-465-5340
- Outside normal business hours, call: 1-800-478-9300

DEC Reporting requirements and forms can be found on the web at:

http://www.dec.state.ak.us/spar/spillreport.htm

Via telephone, DEC will assist you in completing an Oil and Hazardous Substances Spill Form (Section 17). Submit it to DEC after telephone notification.

Federal: In the event of an oil spill that reaches any surface waters, or a spill on land of certain hazardous substances (listed in Table XII in Appendix 18.12) exceeding the Reportable Quantity (RQ) level, *the contractor must notify the National Response Center in Washington, D.C., immediately at (800) 424-8802.*

THE NRC web form can be reached at:

http://www.nrc.uscg.mil/nrchp.html

The contractor should document information about the spill, and the contractors spill response, containment and cleanup efforts. Other agencies may also inspect the cleanup efforts and make additional requests for cleanup actions.

9.11. Right-Of-Way Considerations

During construction, the Project Engineer may encounter situations that involve unavoidable construction work outside the Department's property or right-of-way limits or situations that involve an adjacent private property owner or lessee's encroachment onto the Department's property or right-of-way. The Project Engineer must obtain a construction permit from the private property owner, or an agreement from the lessee, before permitting the contractor to work outside the Department's property/right-of-way. If the Project Engineer encounters difficulties obtaining the necessary

permission, they should seek assistance from the regional right-of-way unit or the airport-leasing unit.

If the Project Engineer discovers encroachments in the right-of-way and no right-of-way document exists in the field records that permit the encroachment, contact the right-of-way unit for assistance in permitting them or in having them removed. The Project Engineer should give the right-of-way unit the opportunity to review all permits or agreements they initiate.

9.12. Differing Site Conditions

When the contractor encounters conditions in the progress of the work that they feel differs from those represented in the contract, the contractor must notify the Project Engineer in writing. Following the contractor's notification, the Project Engineer must notify the Group Chief/PM and should investigate and document the condition and the contractor's efforts in dealing with it. The Project Engineer and the project staff should thoroughly monitor the situation, including doing additional testing and documentation as required, until they resolve the matter.

If a change is found that the Department is responsible for, the Project Engineer should discuss the condition, along with possible actions to mitigate its effects, with the Group Chief/PM. The Project Engineer should attempt to resolve the situation with the contractor, regardless of where the responsibility may lie. If the Project Engineer and the contractor are unable to resolve the situation, the contractor has recourse under the claims and disputes clause in the contract.

This clause establishes a formal framework for handling disputes, and the Project Engineer and the project staff should be very careful to follow it. Once in the dispute status, the Project Engineer should continue to carefully review the documentation being gathered by the project staff. The Project Engineer should keep both the Group Chief/PM and the federal funding agency current on the status of the changed condition and its resolution. The Project Engineer should continue to fully monitor and document the condition, and the contractor's expense in dealing with it, until the matter is resolved.

The Project Engineer should also review project funding if it appears that the project will incur an additional financial liability from the dispute. Once the dispute is resolved, the tentative agreement must be formalized through a contract change document (Section 13.1.).

9.13. Claims and Disputes

The contract establishes a formal framework for the Department and the contractor to follow in the event of a dispute or a claim for an adjustment in the contract; the procedures outlined in AS 36.30.620 form the basis for this framework. If a conflict cannot be avoided, the contract language provides a mechanism for the contractor to seek relief over any contractual matter including interpretation of the contract, a question of fact, extension of contract time, or any act or occurrence that may form the basis for additional compensation.

The burden is on the contractor to first notify the Project Engineer of the situation. If the matter cannot be resolved within seven days of that notification, the contractor has 14 days to submit a written Notice of Intent to Claim to the Project Engineer. Try to resolve the issue based on the contract documents. The contractor must submit a written claim to the contracting officer within 90 days after the date the contractor became aware of the basis of the claim or should have known of the basis of the claim, whichever is earlier.

The claims package must include:

- Act, event, or condition giving rise to the claim
- Contract provisions that apply to the claim and provide the requested relief
- The items or items of contract work affected and how they are affected
- Specific relief requested
- Statement of accuracy and good faith

The contracting officer has 90 days from receipt of the claim package to issue a decision.

The contractor has 14 days after receipt of the decision to appeal to the commissioner. The commissioner may adopt the contracting officer's decision within 15 days after receipt of an appeal as the final decision without a hearing.

If the contractor is not satisfied after exhausting the administrative process, the contractor may pursue the matter through the judicial system.

Throughout this process, it is important for the Project Engineer and the project staff to thoroughly document all of the contractor's operations, keeping both written and visual records. It is most important for the Project Engineer to thoroughly review all of the staff's project reports each day to ensure that the project staff

remains vigilant but impartial in the dispute. In addition, keep both the Group Chief/PM and the federal funding agency current on the status of the dispute and its resolution. As with any dispute, once the parties resolve it, they must formalize the agreement through a contract change document and they must advise the federal funding agency of the terms of that resolution.

9.14. Partial Completion

The Department may accept, at its discretion, a substantially complete geographically separate portion of the project. When the contractor notifies the Project Engineer that work has been substantially completed at a geographically separate location, the Project Engineer should, after coordinating with the Group Chief/PM, schedule an inspection and follow the procedures outlined in Sections 15.1 and 15.3.

9.15. Airport Master Record

The Project Engineer collaborates with design and the airport manager in updating the Airport Master Record. Most updates are done on-line electronically. For links to electronic forms go to: https://nfdc.faa.gov/xwiki/bin/view/NFDC/PublicADC

FAA requires an Airport Data Change Form and electronic as-constructed (as-built) records of the airport layout.

Other forms or information (records) may be required for changes to:

1. Runway Length

   If this submission details runway length changes for runways with an Instrument Approach Procedure (RNAV, GPS, ILS, SID, STAR, etc.), then the data must be submitted via a survey. Federally-funded surveys must be submitted through the FAA Airports GIS program.

2. Traffic Pattern Altitude, Right Traffic, Declared Distances

   If this submission requires changes to any of the following items:

   - Traffic Pattern Altitude
   - Right Traffic
   - Declared Distances

   then you must submit an FAA Form 7480-1 to the appropriate Airports District Office (ADO).

3. ARFF Index

   If this submission requires changes to the Aircraft Rescue and Firefighting (ARFF) Index, please send the information to the appropriate regional ADO for approval and publication.

Submit information (records) two months before substantial completion of any airport project regardless of funding source. The Project Engineer should review the forms with the airport manager for changes in any of the data elements. The Project Engineer should field-review data elements such as:

- Airport manager information
- Services available to the airport
- Non-commercial landing fee
- Condition of the surface
- Current users of the airport
- As-constructed (as-built) information

Submit to the design section the information that reflect the changes (runway dimensions, surfacing, lighting changes, or navaid installation), and certificates, warranties and equipment maintenance information. Design should submit copies of the updated information to the maintenance and operations unit, and the airport manager.

The section (design, construction, or airport manager) responsible for submitting the Airport Data Change Form and other required information to the FAA varies by region.

9.16 Notices to Airmen (NOTAMs)

Refer to AC 150/5200-28D, *Notices to Airmen (NOTAMs) for Airport Operators,* and Section 17 for a sample FAA NOTAM. Also see Section 9.7.

A NOTAM is a notice containing information (not known sufficiently in advance to publicize by other means) concerning the establishment, condition, or change in any component (facility, service, or procedure) of, or hazard in, the National Airspace System (NAS); the timely knowledge of which is essential to personnel concerned with flight operations.

The function of the NOTAM system is to disseminate information until the associated aeronautical charts and related publications have been amended. It is not intended to be used to impose restrictions on airport access for the purpose of controlling or managing noise or to advertise data already published or charted.

FAA Flight Service Stations (FSS) and Automated Flight Service Station (AFSS) receive and manage most NOTAM information for processing and dissemination on the NOTAM system. The National Flight Data Center (NFDC) in Washington, DC, has national program management responsibilities for the system and has exclusive operational control of certain NOTAM elements.

The Project Engineer should maintain a file of existing NOTAMs in the project office. The Project Engineer should coordinate with the contractor and airport manager to provide information for NOTAMs. The Project Engineer may draft:

- requests for a new NOTAM,
- to extend an existing NOTAM time duration, or
- cancel the original NOTAM and reissue the data as a new NOTAM with a new time

Draft NOTAMs should be submitted to the airport manager or their authorized representative. Due to Advisory Circular requirements and the need to format information in specialized language, only the airport manager or an authorized representative listed with FSS can provide NOTAM information to the FSS.

Usually the FSS issues the NOTAM. Alternatively (if certified by FAA) the airport manager or authorized representative may use the digital NOTAM system to publish NOTAMs. The digital system is posted at: http://notamdemo.aim.nas.faa.gov/dnotam/

Normally notification should be made not more than 3 days before the expected condition is to occur.

The airport manager or authorized representative must coordinate the issuance, maintenance, and cancellation of NOTAMs about airport conditions resulting from construction activities with tenants and the local air traffic facility (control tower, approach control, or air traffic control center).

Only the FAA may issue or cancel NOTAMs on shutdown or irregular operation of FAA-owned facilities. Only the FAA may issue or cancel NOTAMs regarding navigation facilities and approach lights.

Any person having reason to believe that a NOTAM is missing, incomplete, or inaccurate should notify the airport manager.

9.17. Environmental Permits and Commitments

The Department and contractor must comply with all environmental permits and commitments required to construct a project. These are included in the contract documents.

See the *Alaska Environmental Procedures Manual* for additional information on environmental permits and approvals.

9.17.1 Alaska Pollutant Discharge Elimination System General Permit

In November 2009, the Alaska Department of Environmental Conservation took over primacy from EPA for the National Pollutant Discharge Elimination System (NDPES) and assumed full authority to administer the wastewater and discharge permitting and compliance program, and began the Alaska Pollutant Discharge Elimination System (APDES) General Permit for Construction Activities in Alaska. The Alaska Construction General Permit (CGP) authorizes stormwater discharges from both large and small construction-related activities that result in a total land disturbance of equal to or greater than one acre and where those discharges enter waters of the U.S. (directly or through a stormwater conveyance system) or a municipal separate stormwater sewer system (MS4). This permit requires preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP) during the construction phase of a project. All work must be conducted in accordance with the CGP, the SWPPP, and the contract. Both the contractor and the Department are fully liable for the SWPPP.

9.17.2 Permitting Agencies

- The U.S. Army Corps of Engineers issues permits for work in Navigable Waters of the U.S. (Section 10). Discharge of materials into any waters or wetlands of the U.S. is prohibited by the Clean Water Act (Section 404) without a permit. The act also prohibits transporting dredged material for disposal in ocean waters without a permit (Section 103).

- The U.S. Coast Guard permits bridges over navigable waters (Section 9) and private aids to navigation.

- The U.S. Department of the Interior, Bureau of Land Management (BLM) issues permits for material sites on BLM managed land in Alaska for

the sale of sand, gravel, and rock. The permit requires that material sites be developed in an environmentally sound manner.

- The Alaska Department of Fish and Game issues permits for work in special areas like fish habitat, state game refuges, critical habitat, or sanctuaries.
- The Alaska Department of Environmental Conservation issues permits for stormwater discharge, wastewater disposal, Section 401 Certificate of Reasonable Assurance (certifying that an activity is in compliance with the Clean Water Act), design plan approval for water and sewer facilities, and construction dewatering. They also handle soil and water contamination, fuel spill cleanup, fuel storage, and related issues.
- The Alaska Department of Natural Resources issues permits for tidelands, right of way, land use, temporary water use, water rights, and material sites on state land. The State Historic Preservation Office must review all material sites Material sites must also be developed in an environmentally sound manner.
- The Department permits designated material sites for projects that have designated sources.

9.17.3 Environmental Commitments

A Location Hydraulic Study may be required for cities and boroughs that have flood-plain management. These include Anchorage, Fairbanks, Kenai, Juneau, and the Matanuska-Susitna area.

National Marine Fisheries Service oversees the Marine Mammal Protection Act, Essential Fish Habitat, and the Endangered Species Act. The U.S. Fish and Wildlife Service also has jurisdiction over the Endangered Species Act, the Bald and Golden Eagle Protection Act, and the Migratory Bird Treaty Act. The Department may have commitments based on any of these laws. Commitments can be found in the project-specific environmental document, permits, environmental commitments memorandum, and project specifications.

9.17.4 Contractor Permits

The contractor permits contractor-furnished material sites. The contractor submits documentation from the following agencies for clearances or permits:

- The State Historic Preservation Officer's historic and archeological clearance.
- U.S. Fish and Wildlife Service clearances for eagle nests and threatened or endangered species.
- U.S. Army Corps of Engineers determination of no wetlands or a permit issued for working in wetlands.
- Alaska Department of Fish and Game fish habitat permit for work below ordinary high water.
- An approved Alaska Department of Natural Resources Mining and Reclamation Plan or an exemption.
- A material sales and/or land use agreement with the property owner.
- A MSGP permit or SWPPP2 permit with Alaska Department of Environmental Conservation. The contractor must file an NOI and NOT with DEC for projects where the total disturbed area (project, material sources, material disposal areas, and other areas with earth-disturbing activities that are directly related to the project) is more than one acre.

The contractor must submit a Hazardous Material Control Plan to the Project Engineer for approval, as well as a copy of the contractor's Spill Prevention Control and Countermeasure (SPCC) plan when fuel storage exceeds 1,320 gallons, and there is a reasonable expectation that a spill of these products could reach navigable waters of the United States.

The contractor may be required to obtain an APDES Excavation Dewatering General Permit from Alaska Department of Environmental Conservation. The contactors SWPPP must have a BMP plan for dewatering that provides assurance that all wastewater will be properly managed, treated, and discharged in accordance to the CGP.

Water use by the contractor may require Alaska Department of Natural Resources' Temporary Water Use Permit and an Alaska Department of Fish and Game Fish Habitat Permit.

Construction camps require Alaska Department of Environmental Conservation water and wastewater permits and the property owner's land use permit.

9.17.5 Achieving Permit Compliance

In order for your project to achieve compliance under these permits and commitments, you and your staff must pay close attention to:

- *The project's environmental document, permits, environmental commitments memorandum, and the project specifications.* Read them every time a new activity starts. Understand what each permit or commitment requires the contractor to do. Request assistance and clarification from the regional environmental manager on any portions that are ambiguous, or don't fit the field conditions.

- *Special conditions.* The Department must comply with the special conditions in permits. Special conditions are usually found in the U.S. Army Corps of Engineers' 404 permits, and may also be found in other agencies permits.

- *Expiration dates.* Permits are issued for a certain length of time and they expire. Verify the permit expiration dates. If they will expire before the projected project completion date, then the permit may need to be updated. Contact the regional environmental manager, who will refer you to the environmental analyst assigned the project and request a permit modification well in advance of the expiration date. Once a permit expires, usually a new one is required.

- *Making changes in permitted areas.* Do not make any changes to the footprint of a project, pipes, fill, or riprap in areas covered by the permit without contacting both the Designer of Record and the regional environmental manager. If there is a change, the permit may need modification.

- *Stormwater runoff.* Read the contract language regarding the Stormwater Pollution Prevention Plan (SWPPP). Incorporate and maintain all best management practices identified in the SWPPP into the project. Perform joint inspections and ensure the contractor corrects any deficiencies in the SWPPP. Make sure the contractor complies with the SWPPP, and the DEC Construction General Permit. See Sections 3.11 and 9.9 for additional requirements for the SWPPP.

- *Waste areas for overburden and excess subgrade.* All waste areas must be in uplands or in permitted wetlands. This includes waste areas on private property, and written permission from the landowner to use the area as a waste area. The law requires the contractor to have a U.S. Army Corps of Engineers permit before placing waste material in wetlands, stream channels, and other Waters of the U.S. DNR must approve state land outside the highway right-of-way for use as a waste area. Waste areas included in the SWPPP must be jointly inspected with the contractor for compliance.

- *Material sites.* Material sites have permitted quantities. If they are to be exceeded in quantity or duration, revise the permits before they expire. Material sites included in the SWPPP must be jointly inspected with the contractor for compliance.

- *Violations.* If you discover that the contractor is in noncompliance or is violating any condition of any permit, or is not complying with the SWPPP requirements, notify your project manager, the regional environmental manager, and the Regional Construction Stormwater Specialist. You may direct the contractor to stop work on that portion of the project. You may withhold progress payments to cover any fine that is a result of the violation. Penalties by the U.S. Army Corps of Engineers may be as high as $50,000/day in fines and from 1 to 3 years of imprisonment. Some permits hold the person(s) certifying compliance responsible and they, along with the Department and the contractor, may be cited for violations. See Highway specification 641-3.04 Failure to Perform Work, for more information.

- *Permit modifications.* Any variation from the issued permit or commitment requires project manager approval and concurrence from the regional environmental manager.

9.18. Nighttime Operations

Frequently the Special Provisions for a project restrict work on the existing traveled way to a specified period at night. Based on traffic counts, the regional traffic unit determines times for closing lanes and for nighttime work.

The effectiveness of handling traffic through night construction depends upon the Traffic Control Plans, lighting, and the details of the contractor's operations. The contractor is required to submit and obtain approval of his lighting plan before proceeding with nighttime work. Also, here are some details to consider:

- Changeable message signs in advance of the work may be used effectively to give advanced warning to motorist due to their lighted message. Consult

the regional traffic and safety unit on the use of changeable message signs.

- During daylight hours, mark signs and lane closure locations in advance. The Project Engineer should review lane closures' layouts for visibility and effectiveness..
- All staff, not just traffic control personnel, require high visibility pants at night. This applies to DOT&PF staff as well.
- When rain gear is necessary, it shall conform to the high visibility garments specification for tops and bottoms.
- Extra attention to work zone devices may be necessary as drivers knock over devices more frequently at night.
- Make sure that the TCP the contractor is using was approved for night work.
- Personnel, representing the Department and the contractor, who are capable of and empowered to make decisions quickly if the need arises, must be available at all times.

9.19Coordination with Bridge Section

Projects with permanent or temporary bridge work require coordination between project staff and the designer of record or a designee. Most permanent bridge design work is done by the Department's Bridge Section. Some permanent bridges and most temporary bridges are designed by a consultant. In both cases there will be a material and fabrication submittal and review process (Section 8.3.3). There may also be structural welding (Section 11.6), and off-site inspection and testing services (Section 11.7).

Project staff should notify the Bridge Section:

- two weeks prior to the anticipated opening of a permanent or temporary bridge to traffic
- the day a permanent or temporary bridge is opened or partially opened to traffic
- The day an existing or temporary bridge is taken out of service

The notifications will allow the Bridge Section to plan for "initial inspection" (term is defined by 23 CFR 630.305 as initial inspection after the bridge is completed) and entering data into the bridge inventory system within 90 days of bridge opening. Provide this notification to the Bridge Section regardless of whether a consultant or the Bridge Section is designer of record.

The designer of record will note critical dimensions (including height and width clearances) in the bid documents. The permanent bridge structure should be measured for as-built dimensions. Note height and width of clearances under/over railroad tracks, overpasses, traffic surfaces, and navigable waters. Where restrictions are tight, Project Engineer may require a professional surveyor to verify clearance. Notify the Statewide Bridge Section if critical clearances change from design.

The bridge load rating is determined by the designer of record (Bridge Section or a consultant). For a bridge designed by a consultant, verify that the load rating was submitted to and approved by Bridge Section, prior to opening the bridge to public traffic.

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10. Documenting & Reporting the Contractor's Progress

10.1. Inspection

Under authority delegated by the Project Engineer, inspectors are responsible for inspecting, testing, and documenting work performed by the contractor; on smaller projects, the Project Engineer and the inspector may be one and the same person. Proper inspections requires good judgment, diplomacy, common sense, and a thorough knowledge of the contract.

The inspector's primary duty is to observe the work to insure that the contractor's performance is in accordance with the contract, or that the contractor's performance yields an end product that is in accordance with the contract. The difference between these two types of inspection is subtle but very important. Some specifications in the contract call for an end product that meets certain requirements; the inspector tests pay items specified this way for conformance when the contractor completes them, and the contractor has the latitude to determine (within the limits of the contract) how they achieve that end result. Other specifications spell out the steps a contractor must follow in constructing an end product; the inspector inspects pay items specified this way for conformance to the construction methods and not for the end result. The inspector must know the difference.

Inspectors also document the work, keeping such records as are necessary to record manpower, equipment, and materials utilized, to establish contractor production rates and measure and verify quantities for acceptance and for payment. Section 10.3 covers the inspector's reporting requirements in detail. In addition, the inspector is responsible for timely testing or arranging for the testing of completed work segments. As the contractor completes pay items or segments of the project, the inspector should make a thorough inspection of the work in sufficient time to inform the contractor of any deficiencies. This will allow the contractor to make the necessary corrections or cleanup before they move their equipment to another area or operation.

The inspector should consider any work that deviates from the contract unauthorized work and the inspector should bring it to the contractor's attention. Deviations include work outside the lines and grades of the project, unauthorized extra work, unacceptable materials, and unacceptable workmanship. If the contractor disregards the notification of the inspector or the Project Engineer and continues to work, the inspector should inspect and measure the work, but must not submit unacceptable work or unauthorized extra work for payment. The inspector should notify the contractor and Project Engineer of unacceptable or unauthorized work. The Department's decision to inspect and measure unacceptable work or unauthorized extra work does not constitute acceptance of the work or commitment to pay the contractor for that work.

In the case of a dispute with the contractor over the quality of the work or acceptability of materials which the inspector is unable to resolve, the inspector should advise the Project Engineer. The Project Engineer has the authority to suspend the contractor's operations until they resolve the matter. The inspector must keep a detailed record of any such dispute in their inspector's daily report and they must keep the Project Engineer advised of the situation from the start. If the Project Engineer is unable to resolve the situation, advise the Group Chief/PM.

If the inspector encounters physical conditions that deviate from those described in the contract or in the permits, they should notify the Project Engineer immediately. If a permit modification or additional permitting appears necessary, the Project Engineer should notify the environmental unit, the right-of-way unit, or the airport leasing unit.

10.2. Directives

Directives are written communications from the Project Engineer to the contractor concerning topics that are within the scope and language of the contract. Directives are a simplified form of letter to the contractor, utilizing preprinted forms (Forms 25D-069 and 25D-065); the Project Engineer can also issue directives in the form of a letter to the contractor. The Project Engineer can use directives to: clarify

contract terms, suspend and resume work, document directions or instructions given to the contractor, reject non-specification materials or work, and initiate work on contingent sum pay items.

Identify directives alphabetically or numerically in the order issued for ease in record keeping. Although the directive form has a space for the contractor to sign acknowledging receipt, the form does not require the contractor's signature; a directive is in effect when physically delivered to the contractor.

10.3. Diaries, Daily Reports and Photography

Documentation records the events of the construction day, the observations, communications, measurements, and calculations of each employee, and is the responsibility of every member of the project staff. Documentation that records the acceptance of pay item quantities must meet the source document requirements of Section 4.4.

Documentation should follow the five C's: **be clear, concise, correct, complete and concurrent**. Do not include subjective or personal comments about workers or their personalities.

You can document through the preparation of diaries or daily reports (either written, audio taped and transcribed, or entered directly into a computer and stored on data storage devices), field and survey notes, photographs, and audio or video tapes; Section 4.3 covers backup of computer data.

Each project staff member has an area of inspection responsibility and they should confine their daily report to their area of responsibility. The Project Engineer is the only project record keeper who should provide an overview of all project operations. Employees should complete the diary/daily reports in real time; that is, during or at the end of the shift that the report covers.

The Project Engineer can use either the Engineer's Diary format or the inspector's daily report format to document project activity, depending on regional preference. When only one person is assigned to a project, only one daily report or diary is required from that person. The **Engineer's Diary,** while containing certain basic daily information (weather, temperature, general nature and location of the contractors principal work efforts that are underway), should be a reflection of the Engineer's day fully covering the events that involved the Project Engineer that day.

The following topics are the core of the Engineer's Diary:

- the substance of important conversations with the contractor
- decisions that were made
- directions that were given
- observations of the contractor's operations and overall progress
- changes in both Department and contractor project staffs or in staff assignments
- project inspections
- visitors to the project
- other significant events such as accidents, changes in traffic control, personnel matters, and completion/acceptance of work segments
- The Engineer's Diary should also include the information listed under the inspector's daily report for any of the contractor's specific activities that are not being covered by one of the inspectors.

The Engineer's Diary should start when the Group Chief/PM initially assigns the Project Engineer to the project. The Project Engineer should keep the Diary until the Project Engineer completes the last work on the project. When the project is not active and the Project Engineer is not at the project site, they do not have to make entries daily, but they should record all significant events. Explain any breaks in the daily entry routine in the following diary entry. Follow-up on all events mentioned in the diary to conclusion.

The contract may require, under the contractor surveying pay item, that the contractor keep a survey party chief's diary and record field notes. If so, the language of that section of the contract establishes the specific requirements for that record keeping. There are no other diaries, as such, required of the Project Engineer or the project staff.

Other project staff who report daily on project events to the Project Engineer, will use the **Inspector's Daily Report (IDR)** form (Form 25D-186) or diary. These reports start when the contractor begins work or when the Project Engineer first assigns the staff member to cover an operation; reports should cease when the contractor completes the particular operation being inspected. Each IDR should limit the scope of its coverage of project operations, to the scope of the authority and responsibilities of its author. On small projects, at the discretion of the Project Engineer the frequency of IDRs may be reduced; explain any

breaks in the daily entry routine in the following diary entry. Follow up on all events mentioned in the IDR to conclusion.

An IDR or diary prepared by an inspector should document the "**who, what, when, where, and why"** of daily activities. Include the following information:

- a detailed report of the contractor's and subcontractor's specific activities
- an equipment and labor listing; idle and down equipment
- observations on the contractor's and subcontractor's operations
- conversations with the contractor, subcontractors, Project Engineer, and other project staff members (that pertain to work)
- pay item work performed
- and may also include the measurement and acceptance of pay item work

Document the presence of local law enforcement personnel that worked on the project in a diary or daily report such as Form 25D-128.

Certain specialized operations such as time and materials work (Section 13.2), materials placement measured by the load, and pile driving operations, have **Specialized Daily Reporting Forms** that the Department has developed for documenting that work; the Project Engineer may elect to use any of these specialized forms/formats in lieu of, or in addition to, the Inspector's Daily Report. If you use these forms in lieu of the IDR, all of the daily information called for on the IDR must appear on the specialized form. The Department's specialized forms are

- Daily Concrete Placement Report (Form 25D-207)
- Daily Report – Labor, Equipment, and Materials for Time & Materials Work (Form 25D-195)
- Daily Force Account Summary Sheet (Form 25D-196)
- Traffic Flagging Report Book/Item 643(15) (Form 25D-037)
- Pile Driving Record (Form 25D-099)
- Pile Log – Boring Log (Form 25D-046)
- Truck Load Measure Record (Form 25D-192)

In addition to these forms, each region may have developed their own specialized worksheets to document certain construction activities, such as scales operation.

Documentation can also be accomplished through field notes, measurements, and survey records in **bound field books**. Certain daily report forms are available in bound book form (the IDR and some of the specialized daily reports). You may use field books to record field notes and survey notes for quantity measurement and to document the measurement and acceptance of most pay item work.

If you use field books for this latter purpose, you may use each book to document more than one pay item. Books may be set up to cover groups of pay items such as: all clearing and grubbing items, all earthwork items, processed base course materials, paving items, structures (major and minor), concrete and steel items, or electrical items. In some instances, you may do the calculation of pay quantities in the field books with the quantity measurements.

You may use **photographic records** to document the work. Each principal project staff member should have access to a camera, still and/or video, and should utilize it to supplement their daily reporting. You should use still photographs and videotape to record events or conditions such as,

- before and after site conditions
- routine progress during construction, unusual events
- heavy equipment set-up and utilization (crushers, hot plants)
- culvert installations
- the condition of materials sources (before, during and after)
- construction signing and safety marking
- accident or damage scenes
- emergency conditions
- differing site conditions and their resolutions
- the condition of the contractor's equipment

You should keep photographic records in accordance with Section 4.3.

10.4. Measurement of Pay Quantities/Quantity Documentation

The contract establishes the method of measurement for each contract pay item. Before measuring any quantities for payment, the Project Engineer and project staff should review the pay item specifications to be certain they understand what to measure and how to measure it. Refer to Section 4.7 for rounding procedures and significant decimals used in quantity

measurements. If you estimate interim quantities for progress payments, you must document the basis used in the progress summary.

Pay quantity measurements are source documents, and you must record them in accordance with Section 4.4. You may document pay item quantities in the Engineer's diary, inspector's daily reports, on any of the specialized daily report forms, in survey books, or in field books. Record documentation of the various measurements as follows:

- **Measurement by Volume, Area or Length:** Each set of measurements or survey notes taken for pay quantities should contain a validation statement recording that the contractor performed work and the inspector accepted it as shown in the notes; the inspector should sign and date this statement; use drawings or sketches in the notes, where necessary, to clarify the survey measurements; calculate quantities with the notes or reference the notes in the calculations.
- **Measurement by Lump Sum:** Partial payments are estimated on a proration basis or schedule of values (By station, type of work, percentage complete, subcontractor work, time, materials invoice, etc). If the contract does not specify a method for prorating partial completion, the Project Engineer and the contractor should work out a mutually agreeable proration basis; keep the documentation of that basis in the pay item file and reference it in the progress quantity calculations, which should contain a validation statement.
- **Measurement by Hours:** Each daily record sheet should contain all of the detailed information required by the form, all required signatures, and a validation statement.
- **Measurement by Item**: Each set of field book entries or inspector's daily report entries should identify the item by name and number and contain a validation statement.
- **Measurement by Volume Vehicle Measure:** Each inspector's daily report entry or daily load count record sheet should contain the contractor's signature and a validation statement; the Project Engineer and the contractor should measure each hauling unit before the start of the work, and place the records of those measurements in the pay item file.
- **Measurement by Load Count:** Use this method for estimating interim quantities only; each inspector's daily report entry of daily load count record sheet should contain the contractor's signature and a validation statement; estimate each hauling unit's capacity.
- **Measurement of Weight:** The scale diary form for each day contains an inclusive listing of weigh tickets issued, including exceptions; documentation of the taring of trucks and the status of scale certification; and a certification statement signed by the scale operator; the inspector should sign and date weigh tickets received on grade and note the location of placement of the material; obtain daily weights by summing the valid weigh tickets or obtain it electronically via computer directly from the scale house; both the inspector and the contractor should sign the daily summations.
- **Measurement by Time and Materials:** Each day's time and materials summary sheet, which includes a complete record of both labor and equipment identification and hours, contains a validation statement, and both the contractor and the Project Engineer or inspector sign it; Section 13.2 describes how to establish hourly rates for equipment; verify labor hours by reviewing the contractor's payrolls, and establish materials costs by purchase and shipping invoices provided by the contractor.
- **Measurement by Plan Quantity:** A method of measurement that relies on the estimated quantity shown in the plans, rather than a physical measurement in the field, to establish the pay quantity (used on items such as bridge railing).

The Project Engineer is responsible for measurement of attainment of the DBE Utilization Goal. Money received by the DBE for creditable Commercially Useful Function (CUF) work is determined by the Project Engineer in accordance with the statewide Special Provision Section 120. Report determination of CUF on DBE CUF Monitoring Report (Form 25A-298). On a monthly basis, using DBE Monthly Summary of DBE Participation (Form 25A-336), the Contractor shall report to the Civil Rights Office the payments made for the qualifying work, goods and services provided by DBEs.

10.5. Construction Progress & Other Reports

The Project Engineer is responsible for preparing certain reports during construction to keep the Group Chief/PM, the federal agencies, the support group staffs, maintenance and operations, and the general public advised of the progress of the work. When required by the Construction Engineer, the Project Engineer will submit a Project Construction Report (Form 25D-057) for each project, and a road condition report for each highway project. The Project Engineer is also responsible for submitting a Supervisor's Safety Meeting Report (Form 25M-063), following each safety meeting (Section 6.4 and 6.5).

The Project Engineer may also receive certain reports periodically from the contractor, the federal agencies, or other agencies with an interest in the project. The contractor is required to submit weekly SWPPP construction inspection reports to the Project Engineer during the life of the project or more frequently following continuous heavy rainfall. On marine projects, the Project Engineer may receive periodic inspection reports from the US Coast Guard and from the American Bureau of Shipping.

The **Project Construction Report** is to be submitted when required by the Construction Engineer. The Project Engineer may use Form 25D-057 or any other form or format that a region has adopted. The Project Engineer should submit the report from the time the field office is first opened until the project is completed. Submit the report at least monthly during periods of active construction and periodically during periods of work suspension; each periodic report should cover all project activity underway since the previous report. Accompanying each report should be copies of significant correspondence, directives, materials test results, inspection reports received from other agencies, and similar material.

The principal contents of the report should include the following:

- **Status of the Project:** Construction progress on the principal items of work; the status of contract changes; anticipated overruns/underruns on principal pay items; significant progress statistics—percent completion, scheduled and anticipated completion dates, latest revised construction contract amount.
- **Summary of Construction Activity:** Narrative summary of the contractor's and subcontractor's progress in each area of work; important matters discussed and/or resolved with the contractor; the completion and/or acceptance of any work segments; listing of the contractor's equipment and work force; the effects of weather on the work.
- **Project Staff Activity:** A summary of project staff activity, including each member's work assignment and their vehicle; a cumulative summary of estimated field engineering expenses to date, plus estimated support group expenses to date.
- **General Comments:** General observations on project progress; significant materials test results not already mentioned; visitors to the project; project funding status; any other significant project matters not mentioned above.

Maintenance and operations may require a periodic **road condition report** as a courtesy to them and to the general public. The report includes location of the project and condition of the road through the area; location and duration of any traffic control delays; length and conditions of detours; and a contact name and phone number for persons desiring more information. The Project Engineer submits the report to the Group Chief/PM and to maintenance and operations on a schedule dictated by regional policy.

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11. Sampling and Testing the Contractor's Work

11.1. Materials Acceptance

The Project Engineer is responsible for the acceptability of all material incorporated into the project. The contract, the project's Materials Testing Summary, and the Materials Certification List show the tests or certifications required to determine a material's acceptability. Materials, with few exceptions, must meet the contracts' quality requirements before they can be accepted and paid for; one notable exception is pay items that specify statistical quality level analysis to determine the estimated percentage of a material that falls outside the established specification limits as input into a pay factor equation used to advance payment to the contractor. Statistical quality level evaluation methods are used as an incentive to produce uniform quality materials for incorporation into the project. There are three general categories of materials that are incorporated into projects: (1) materials manufactured or fabricated off-site, which are accepted based on manufacturer's inspections, certifications, and independent laboratory test results; (2) materials produced off-site or on-site that the project materials staff test for acceptability at the point of incorporation into the project; (3) materials incorporated directly into the project without any processing, which the project materials staff test for acceptance at the point of incorporation.

The first category includes items typically found on the Qualified Products List (QPL). Acceptance of these items is based on the review and approval of materials submittals (Section 8.3). The second category is typified by processed aggregates and aggregate-based products, while the third category includes unprocessed materials such as soils, sands, or aggregates. On-site testing is the basis of acceptance of the last two categories of pay items.

11.2. Materials Testing Summary & Modifying MSTF Tables

During the course of the project, the Project Engineer uses the project's Materials Testing Summary to determine the frequency of tests to perform on each pay item. As the Project Engineer completes each type of test on a pay item, he/she should summarize the results of all those tests on the final Materials Testing Summary (Section 5.4). The Project Engineer is responsible for keeping the summary current as the project progresses toward completion. At project completion, the regional quality assurance/materials unit and the Project Engineer will review the completed summary prior to co-signing the Project Materials Certification.

The Materials Testing Summary is prepared by project staff and quality assurance staff. If it is prepared by project staff it should be reviewed by quality assurance staff. It provides the Project Engineer with a complete list of material tests and testing frequencies for all testable materials included under each pay item in the contract. The Materials Testing Summary is developed from the frequencies in the airport or highway Material Sampling & Testing Frequency (MSTF) tables, and the material quantities in the contract. The project staff will update the Materials Testing Summary if items are added by change documents or quantities change.

The Materials Testing Summary is provided to the contractor.

The Project Engineer uses the Materials Testing Summary as a baseline for scheduling project staff and material tests for acceptance. Complete a final Materials Testing Summary by the end of the project. See Section 5.4 for more information.

11.2.1. MSTF Tables

The non-project specific MSTF tables are on the D&ES Statewide Materials website at:

http://www.dot.state.ak.us/stwddes/desmaterials/mat_resource.shtml.

On FAA projects, modifying the Materials Sampling & Testing Frequency Table requires FAA approval if it reduces the frequency or type of testing.

For FHWA projects on NHS routes, modification of the Materials Sampling & Testing Frequency Table requires FHWA approval if it reduces the frequency or type of testing.

For FHWA projects on non-NHS routes and other non-FHWA highway projects, the Project Engineer may request a project specific modification to the testing frequency based on local conditions. The regional materials engineer/quality assurance engineer must approve any modification.

11.3. Mix Designs

11.3.1. Asphalt Paving

On projects containing asphalt paving, the contract specifies the design parameters of the mixture. The Department must approve the mix design before the contractor uses mix on the project. All mix designs, including transfers from previously approved mix designs on other projects, require the approval of the regional quality assurance or regional materials engineer (RQE or RME).

11.3.2. Department Furnished Mix Design

The contractor must submit samples of aggregate, asphalt, and anti-stripping agent, along with information on aggregate stockpile gradations, proposed blend ratios of stockpiles, and proposed gradation of final mix, to the Project Engineer. The samples must be submitted at least 30 days before production of hot mix asphalt.

The Project Engineer will transfer the contractor's samples and proposed aggregate gradations to the RQE or RME. The Department's materials lab will develop the job mix design in conjunction with RQE or RME and send test results and approved oil content in a lab report to the Project Engineer.

The Project Engineer will transmit the lab report to the contractor.

11.3.3. Contractor Furnished Mix Design

When the contractor is responsible for the job mix design, they must use an AASHTO accredited laboratory to prepare the contractor's mix design and an Alaska-licensed professional engineer must seal it (12 AAC 36.190). At least 30 days prior to the start of paving, the contractor must submit the sealed proposed mix design, along with laboratory test results from the design, to the Project Engineer at the time specified in the contract. The Project Engineer will transfer copies of the mix design to the RQE or RME.

The RQE or RME will review the mix design, and may require the contractor to submit materials for verification.

When the mix design is approved, the Project Engineer will notify the contractor.

11.3.4. Concrete

On projects containing structural concrete or concrete pavement, the contract specifies the requirements for the mix design. The Contractor will submit a written mix design, signed and sealed by a Professional Engineer registered in the State of Alaska, for each specified class of concrete and for each Specified Compressive Strength, to the Engineer at least 45 days prior to scheduled production. The mix design is to be submitted on Form 25D-203. All mix designs except prestressed concrete, including transfers from previously approved mix designs on other projects, require the approval of the RQE or RME. The RQE or RME may require the contractor to submit materials for verification. Mix designs for prestressed concrete members require the approval of the state materials engineer.

When the mix design is approved, the Project Engineer will notify the contractor.

11.4. Sampling, Testing and Transmitting Materials

The five broad categories of tests performed on project materials are:

- Contractor Quality Control
- Source Quality Testing
- Acceptance
- Independent Assurance
- Information

11.4.1. Contractor Quality Control (QC) – Contractor Testing and Process Control

The Contractor is responsible for the quality of construction and materials used in the work. Quality control is also process control, and includes all activities that ensure the construction and materials meet contract requirements. All QC work is performed by the contractor.

Contractor QC testing involves inspection, sampling and testing of materials, data analysis, and specific action to maintain the specified overall quality of the construction and materials. It requires the expertise to make timely corrective adjustments in order to achieve and maintain acceptable levels of quality or service. The contractor or supplier must maintain control of the manufacturing processes. In addition, QC work performed by the manufacturers or service provider includes inspection and adequate testing to ensure that manufactured items meet the contract requirements.

When the contract requires the Department to review a QC plan, the contractor must submit their QC plan to the Project Engineer, prior to the preconstruction conference. The Project Engineer or Regional Quality Assurance staff will review the submittal. When the QC plan is found to meet contract requirements, the Project Engineer will notify the contractor in writing.

QC elements may include, but are not limited to:

- Schedule for permits, working drawing submittals, materials submittals, and mix design submittals
- QC personnel and qualifications
- Methods for producing and controlling the materials
- Regularly sampling and testing the materials
- Evaluating test results including action and suspension limit charts
- Adjusting the control process when needed, to produce materials within specifications
- Monitoring trends making refinements when needed
- A corrective action plan describing the action that will be taken when a process is out of control
- Inspection (plant, materials, and construction techniques)

11.4.2. Source Quality Testing

Usually the Department performs tests on aggregate material sources prior to the contractor developing the material source or prior to transporting aggregate to a project. Aggregate material is tested to determine soundness, wear, deleterious substances, and physical and chemical properties. The project staff is responsible for taking representative samples and shipping them to the regional lab for testing.

The contractor may also sample source material in the presence of project staff.

The project staff should be aware that sources may have variability.

11.4.3. Acceptance Testing

The Department is responsible for performing acceptance sampling and testing. The contractor QC test results are not allowed for use in acceptance testing determination.

Acceptance tests determine the acceptability of a particular lot of material incorporated into the project. The contract spells out the particular tests required. The Alaska Test Methods Manual describes most of the required test procedures for earthwork, bases and aggregates, asphalt, and concrete.

Technician Qualifications and Certifications

Material Acceptance (Section 11.1) and Independent Assurance (IA) sampling and testing (Section 11.4.7) shall be performed using WAQTC certified technicians who have been qualified in those modules they have been assigned to perform. Technicians, whom having been trained and formally qualified to be proficient in those methods/protocols not covered under the Department's WAQTC field technician-training program, are qualified to perform sampling and testing specific to their training and qualification.

Note: When a material is required to be sampled by others (i.e. hot asphalt at the plant), a Department representative shall be present as a witness and to immediately take the sample into custody for testing.

A list of WAQTC Certified Technician's and their qualification status can be found at the following link: www.dot.state.ak.us/stwddes/desmaterials/mat_resource.shtml.

Active Materials Testing Technician

A WAQTC certified and qualified technician achieves Active Materials Testing Technician (ATT) Status when, within a specific reporting period, they are actively performing project material acceptance sampling and testing.

Laboratories and Equipment

Per 23 CFR 637.209 Consultant Laboratories used in the material acceptance decisions, Independent Assurance program, or for dispute resolution testing shall be accredited by AASHTO's Accreditation Program (AAP), or a comparable laboratory program approved by FHWA. Accredited laboratories are exempt from the Department's Independent Assurance (IA) program.

Qualified Field Laboratory

A Qualified Field Laboratory is minimally defined as meeting three primary requirements:

1. A building, or mobile, structure that meets all applicable building codes, and is clean, weatherproof, and well secured (lockable and free of vibrations), adequate in size, having a local exhaust system, and the ability to maintain ambient air temperature between 59°-77°F.
2. Staffed with certified, and or qualified, material sampling and testing technicians, and
3. Equipped with properly maintained, calibrated, and checked test equipment.

Laboratory test equipment shall conform to AASHTO R 18, Annex A-EQUIPMENT CALIBRATION, STANDARDIZATION, CHECK, AND MAINTENANCE TABLES , the ATMM, and when applicable the manufactures recommendations. Qualified field laboratories and technicians are subject to the Department's Independent Assurance (IA) program.

11.4.4. Acceptance Test

The two categories of acceptance tests for pay items are:

- Pass/fail sampling and testing,
- Quality level analysis (QLA) sampling and testing, used when specifications include price adjustments

Pass/Fail

The Project Engineer or the materials inspector select the time and place of pass/fail sampling and testing.

In obtaining a representative sample, it is important to eliminate sampling bias by; (a) following a standardized sampling procedure associated with the testing protocol being used, and (b) when numerous samples are required for testing and evaluation, by following a reliable randomized sampling system specific to the material being tested.

Follow ATMM sampling procedures.

A passing test result allows full payment for that lot of material, assuming that the contract requirements for the pay item are met.

Failing test results require the following actions:

- Notify the Contractor as soon as possible.
- Determine conformity per the governing contract specification; Section 105-1.03 or GCP 50-03:

If the material is deemed unacceptable: the material should be removed and replaced, or corrective action taken to bring the material into conformance (and workmanship) to meet contract requirements.

If the material is deemed reasonably acceptable but at a reduced price: then sign a change order establishing the new price, and document with further explanation according to ACM 16.12 for Project Closeout.

If corrective action is performed in response to a failed test, retest the material and cross reference the new test to the original failed test.

Quality Level Analysis

The Project Engineer uses the project's Materials Testing Summary to determine the frequency of tests to perform on each pay item. A stratified random sampling program determines sampling points for QLA testing. The test results are statistically analyzed to determine the overall quality level of the material and construction. The amount paid to the contractor is adjusted for the pay item to account for the quality level using a specified table or formula. The contractor may request a retest, if allowed by the contract.

11.4.5. Signing and Releasing Test Results

Project staff shall make every reasonable effort to sample and test material in a timely manner. The testing technician shall provide the Project Engineer with test results as soon as practicable after the test is complete.

The Project Engineer shall provide the contractor with acceptance test results as soon as practicable after the acceptance tests are complete and the results are available.

For acceptance testing the person performing the test and the person checking the results must both sign the test report.

Upon request from the contractor the Project Engineer (including consultants) will provide hot mix asphalt draft test results. This is with the understanding that the test results are not checked and they may contain errors. All such tests results should be marked "DRAFT".

11.4.6. Off-Site Laboratories

Samples sent to an off-site laboratory must have a transmittal sheet identifying the sample. Retain a copy of the transmittal sheet for the field lab records. Include the following information in the transmittal sheet to help the receiving lab positively identify the sample (see SP 12 in Alaska Test Methods Manual or Table VII in the ACM Appendix):

- Department, project name, and number
- Type of sample and sample number
- Tests required
- Source the material came from
- Location where the sample was taken indicated by station, offset, and layer or depth; or by GPS coordinates
- Specification pay item and quantity represented by the sample
- Description of the sample
- Date of the sample and the name of the sampler with WAQTC qualification number
- Do not write information on sample lids.

11.4.7. Independent Assurance Program

The Department's Independent Assurance (IA) Review Program serves to assure an unbiased and objective evaluation of the equipment, sampling and testing procedures, and reliability of the test results used in the acceptance program.

The IA Program is defined as activities that form an unbiased and independent evaluation of all the sampling and testing procedures and equipment used in the project materials acceptance program.

The IA Program is a distinctly separate audit process maintained by personnel other than project personnel. IA Test results are not to be used for acceptance decisions, and the contractor may not request a retest of the IA test results.

There are two methods to IA: the Project Approach and the System Approach. The RQE will select either the Project or System approach to be used on each project.

IA Inspectors (Quality Assurance Rovers or agency designated representatives) perform IA evaluations.

All test procedures used in the IA Program can be found in *The Alaska Test Methods Manual* (ATMM), AASHTO Standard Specifications for Transportation Materials and Methods of Sampling and Testing, and Provisional Standards, or ASTM Standards & Publications.

The IA tests and frequencies listed in the MSTF Table are minimums, additional evaluations and testing may be performed at the discretion of the Project Engineer, RQE or IA Inspectors.

When acceptance testing is performed in the Department's Regional Laboratories that are accredited in the specified test method, IA testing is not required

Project Approach

The Project Approach evaluates project test equipment as well as the project testing personnel sampling and testing procedures being used in the acceptance decision. The Project Approach requires IA personnel evaluations frequencies on a per pay item, per project basis, as detailed in the MSTF tables.

The Project Engineer must provide advanced IA evaluation testing notice to the RQE for scheduling project IA inspectors. The RQE is responsible for planning, coordinating, and initiate RQE IA personnel's time and travel so as to meet the MSTF IA frequency demands as required by the Project's Materials Testing Summary.

Lab Tests

To perform acceptance/IA laboratory testing (e.g. split sample for aggregates, soils, HMA) the technician shall:

1. Sample the material
2. Split the acceptance/assurance sample in the presence of the IA Inspector, when possible.
3. Test the acceptance portion (or split) in the field lab
4. Submit the assurance portion through the IA inspector to the Regional Materials Lab
5. Report acceptance test results through the IA inspector to the Regional Materials Lab

Using Table 11-1, the Regional Materials Lab reports the comparison of IA and field acceptance test results, to the Project Engineer and the IA inspector. The IA Inspector will investigate, report, and correct findings that have resulted in the out-of-tolerance variances between the acceptance and IA test results.

Field Tests

To perform acceptance/IA field testing (e.g. concrete, densities) the technician shall:

1. Sample in presence of the IA Inspector
2. Test concurrently with or while being observed by, the IA Inspector
3. Report acceptance test results to the IA Inspector
4. Obtain the report from the IA Inspector that compares the acceptance and IA test results

The IA Inspector will investigate out-of-tolerance variances in the test results and report findings to the RQE and Project Engineer.

Use Table 11-1 when comparing acceptance and independent assurance test results. The RME, RQE, or designee must validate that a comparative analysis has been made.

System Approach

The System Approach evaluates Active Testing Technicians (ATT) and acceptance testing equipment on an annual basis.

ATTs will be evaluated, at a minimum, once per calendar year for each test method the technician performs. IA evaluations will be performed by an IA Inspector using a standard checklist of sampling and testing performance criteria. Additional evaluations may be performed at the discretion of the project engineer, RQE or IA Inspector.

The goal is to perform at least 90% of the IA evaluations during the reporting period.

ATTs are required to report to the RQE, within 7 days of testing, when they become an Active Testing Technician in a Test Method.

ATTs will be evaluated using one or more of the following methods:

- Observation of test method performance
- Concurrent tests
- Split sample comparisons according to Table 11-1
- Proficiency sample comparisons according to guidelines established by the regional lab

Equipment will be evaluated once per project per calendar year using one or more of the following methods:

- Verification of calibration
- Verification of critical dimensions
- Concurrent tests
- Split sample comparisons according to Table 11-1

Table 11-1
Guidelines for Comparing Independent Assurance and Acceptance Test Results

Type of Test	Maximum Difference
Sieve Analysis Sieves with Openings -	
Greater than 3”	7%
2” to 3”	6%
3/8” to 1-1/2”	5%
No. 50 to No. 4	4%
No. 100	3%
No. 200	2.0%
Liquid Limits	3%
Plasticity Index	4%
Fracture	10%
Flat and Elongated	2%
Sand Equivalent	8
Moistures Content of Soils and Aggregates	1.0%
Densities of Soils, Gravels, Sands, and Combinations -	
Standard Density	4 pcf
In-Place Field Density	4 pcf
Asphalt Content -	
Ignition oven	0.4%
Nuclear Content Gauge	0.4%
Maximum Specific Gravity	0.020
Percent Compaction of Asphalt Pavements	1.5%
Portland Cement Concrete -	
Slump: less than 3”	3/4”
Slump: 3” to 5”	1”
Slump: Greater than 5”	1-1/2”
Unit Weight	2 pcf
Air Content	1.0%
Compressive and Flexural Strength	15%
Grout Cubes – Comp. Strength	20%

- Proficiency sample comparisons according to guidelines established by the regional lab

At the conclusion of the IA evaluation, the ATT and supervisor will be provided with an evaluation of the results.

Unsatisfactory performance or deficient equipment will result in a failing evaluation. Deficient equipment shall be repaired or replaced, and the repaired or replaced equipment must be calibrated or verified prior to use.

After a failing evaluation, the IA Inspector will schedule a re-evaluation of the technician to occur as soon as possible, but no later than 30 days after the initial evaluation. Upon request, the re-evaluation may be performed by a different IA Inspector. The re-evaluation should be performed in the same manner as the initial evaluation.

An ATT, who refuses to participate in an evaluation, will be considered to have failed the evaluation and may be barred from acceptance testing.

An ATT who fails three evaluations of the same test method in a single reporting period will be referred to the RQE to determine if the failures warrant action; up to being barred from acceptance testing.

IA-Systems Approach Reports

By January 31, each Region using the IA-Systems Approach will report regional findings to D&ES for the previous calendar year. An annual report will be prepared by D&ES and transmitted to FHWA and FAA Division Offices for those evaluations performed in the System Approach.

The report will include:

1. The number of:
    a. Statewide certified technicians
    b. active technicians in the System Approach
    c. technicians evaluated by IA in the System Approach
    d. percentage of evaluated technicians/active technicians
    e. IA reported deviations
2. Summarize corrective actions, by test method, describing how deviations from allowable tolerances and ATMM procedures were addressed
3. Potential systematic solutions to recurring deficiencies

11.4.8. Informational Testing

The Project Engineer has the discretion to take tests for information**.** These tests may be used for, but are not limited to:

- Evaluate materials placed in a stockpile prior to making stockpile payment
- Evaluate early concrete strength
- Provide helpful information in reviewing changes in materials sources

11.5. Dispute Resolution

At the first level of dispute between test results, accredited laboratories with certified technicians will have precedence over non-accredited laboratories. AASHTO-accredited laboratories will have precedence over other laboratories.

11.6. Structural Welding

Structural welding is a critical item of work that requires close coordination between the Project Engineer, Group Chief/PM, the contractor, the design engineer of record (DER), the technical welding advisor (TWA),the state quality assurance consultant (when used) and the state materials engineer (SME). Close coordination is required prior to and during construction. The administrative requirements for structural welding are complex and may often involve all of the aforementioned project team members. This Section describes areas of responsibility and procedures specific to structural welding (e.g. AWS D1.5, D1.1, etc), unless otherwise stated in the contract.

11.6.1. General

The contractor is responsible for quality control (QC) welding submittals, inspections, and testing. The Department has the prerogative to conduct quality assurance (QA) and acceptance inspection and testing.

The chief bridge engineer may designate a staff member to be a technical welding advisor (TWA). The primary responsibilities of the TWA are:

1. Assist the DER in developing the scope of QC inspection required for the plans and specifications;
2. Review or develop the scope of services for contracting the quality assurance welding inspection and nondestructive examination (NDE) when required; and

3. Review the contractor's welding plan and inspection reports when QA consultants are not utilized.

The Statewide Materials Section maintains a consultant term contract for QA welding inspection and NDE conducted on materials fabricated outside of Alaska.

If the project involves structural welding, the Project Engineer shall contact the TWA during the initial review of the project plans and specifications. The TWA will review specifications, plans, NDE requirements, and in conjunction with the DER and Project Engineer, determine if a QA consultant is required to inspect the welding and/or fabrication. If a QA consultant is required, the Project Engineer must follow the Term Contracts and Job Order Procedures in Section 11.7.

11.6.2. Shop Welds

The fabricator (that is, the contractor) is responsible for the QC welding submittals, welding inspection, and testing.

All shop welding is subject to QA inspection at the Department's discretion. When QA is required, the Project Engineer will forward the fabricator's welding submittal and plan to the QA consultant. The QA consultant will review the required Welding Procedure Specifications (WPSs), the Procedure Qualification Records (PQRs), Welder Performance Qualification Records (WPQRs), fabricator's QC inspector qualifications, fabricator's NDE technician qualifications, and the fabrication quality control (QC) program.

Once the contractor's welding submittal and plan satisfies contract requirements, the QA consultant forwards the documents to the Project Engineer with a recommendation for approval. The QA consultant will monitor fabrication and/or welding and conduct/supervise NDE testing as required by the contract project scope of services. The QA consultant will forward post-fabrication inspection/NDE reports to the Project Engineer. During the welding fabrication process the QA consultant will keep the Project Engineer advised as to whether or not the welding fabrication is maintaining conformance to the project's contract requirements.

When the QA consultant is not used, the Project Engineer will submit the fabricator's welding plan to the TWA. The TWA will review the contractor's welding plan and advise the Project Engineer on whether or not the welding plan satisfies contract requirements. The TWA's points of contact would be the Project Engineer and the DER for all welding matters concerning the structure.

11.6.3. Field Welds

The contractor is responsible for QC welding submittals, welding inspections, and testing.

All field welding is subject to QA inspection at the Department's discretion. When QA is required, the Project Engineer forwards the contractor's welding submittal and plan to the QA consultant. The QA consultant will review the required WPSs, the PQRs, WPQRs, qualifications of the contractor's QC inspector, and the contractor's NDE technician qualifications. The QA consultant will also review materials certifications and statements of origin. Once the contractor's welding submittal and plan is found to be in conformance with the contract requirements, the QA consultant forwards the documents to the Project Engineer with a recommendation to approve.

The QA consultant will inspect the field welding and conduct/supervise NDE testing as required by the contract. If the QA consultant recommends a field weld NDE inspection and testing, it is the Project Engineer's responsibility to coordinate and schedule the inspection with the contractor. If the QA consultant determines that field welding is not in conformance with the contract, the QA consultant will, as soon as possible, notify the Project Engineer and the TWA. The QA consultant will forward post-welding/NDE reports to the Project Engineer.

If the quality assurance consultant is not used, the Project Engineer submits the contractor's welding plan to the TWA. The TWA will review the contractor's welding plan and advise the Project Engineer on whether or not the welding plan satisfies contract requirements. The TWA's points of contact would be the Project Engineer and the DER for all welding matters concerning the structure.

11.7. Term Contracts and Job Order Procedures

Statewide Materials manages six QA term contracts. The State Materials Engineer is the contracting officer and will assign a contract manager to each term contract. The Project Engineer oversees the work of the term contractor or consultant.

At this writing, term contracts are available for:

- Pre-stressed and precast concrete inspection, sampling & testing (2 contracts).
- Field welding and coating inspection (2 contracts).
- Soils, aggregate, asphalt and concrete inspection, sampling, and testing (2 contracts).
- Out-of-state fabrication, inspection, sampling, and testing.

For each of the Term Contracts a Regional Notice to Proceed (NTP) is prepared for each regional Construction Section, for the purpose of issuing Job Orders for work not exceeding $60,000. A project specific NTP will be issued for all project related work that will exceed $60,000.

11.7.1. Procedures

At a minimum of 30 calendar days prior to fabrication, contact the Statewide Materials contract manager to request services. The Statewide Materials contract manager will coordinate with the Group Chief/PM or Project Engineer to:

- develop a Request For Proposal (RFP)
- contact the term contractor with the RFP for cost estimate,
- prepare pre-proposal estimate (required for work over $60,000)
- negotiate the scope & budget with term contractor
- get approval to issue the job order or NTP

The Statewide Materials contract manager will prepare the NTP (or job order) documents, prepare a Record of Negotiations (if required), acquire approval/acceptance signatures, encumber the funds, issue the approved NTP or job order, and maintain an accurate log of job order activity.

The Statewide Materials contracting officer approves each NTP for work over $60,000.

Work that is less than $60,000 will be issued as a Job Order under a Regional NTP. Only the Regional Construction Engineer or the Statewide Materials contracting officer may approve a job order.

When time is of the essence, the, Group Chief/PM or Project Engineer or the Statewide Materials contract manager may conduct the request for proposal and negotiation process orally. Following these negotiations, the Statewide Materials contracting officer may orally authorize a NTP, and will follow it with a written confirmation, generally within two working days of the verbal Notice To Proceed.

Authorization for overtime may be included in the job order/NTP; or in a written directive by the Group Chief/PM or Project Engineer. Amendments to the term contract are by the contract manager and approved by the contracting officer. Authority to issue verbal notice to proceed is given only to the contracting officer.

Total job orders may not exceed the total of the regional NTP for that term contract. A new job order is required if there is a change in:

- Performance period
- Scope of services and/or
- Compensation amount

11.7.2. Payments

On FAA projects, the payment method shall be cost plus a fixed fee or fixed price. Payment on the basis of time and materials is allowed with prior approval from FAA project manager. At the time of this writing FAA must also give approval to hire consultants to perform contract inspection work for each specific project. Usually Department project managers seek FAA approval via email.

On FHWA projects, allowable payment methods are: time and materials, cost plus fixed fee, fixed price, or fixed price plus expenses.

The term contractor shall not perform any services or incur billable expense without receipt of an approved NTP or job order or a verbal NTP. The term contractor may only work overtime on a project when given written authorization in advance.

All invoices on Inspection Term Agreements will be processed through the Statewide Materials Contract Managers desk and approved by their Contracting Officer.

Inspection services performed by non-approved QA inspectors will not be acceptable, and the Department will not reimburse associated costs. The Department reserves the right to withdraw approval of any inspector by written notice to the term contractor.

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12. Contractor Payments

12.1. General

A primary duty of the Project Engineer and the project staff is to see that the contractor receives timely progress payments for work acceptably completed. The Project Engineer must accept both the material and its installation before authorizing payment.

Base payment on quantities calculated from source document measurements and linked by a clear audit trail between the source document and the calculations.

All pay item quantities used in progress payments should appear in the progress summary referencing the pay item's quantity calculation file and the item's source documents measurements.

The contract establishes the method of measurement and the basis of payment for each contract pay item. Use these methods for calculating pay quantities, except on progress payments where interim quantities on pay items not yet completed may be estimated.

12.2. Calculation of Quantities

The Project Engineer is responsible for keeping adequate project records that establish the accepted quantity of work the contractor has completed under each pay item.

The Project Engineer and the project staff should be thoroughly familiar with the methods of measurement for each pay item, and should measure them accordingly.

If a pay item involves more than one source of funding, establish separate records for the quantities allocated to each source of funds. For partial completion of a pay item, you may estimate the interim quantity as long as the estimate has a justifiable basis (load counts, three-point cross-sections, or similar measurement).

Measure and compute all final pay item quantities as soon as possible after completion of all work on the pay item.

Compute and check quantities of pay items before entering the quantities in the progress summary and using them for a progress payment. You may calculate earthwork quantities using the Earthwork and Mass Quantity Computation sheets (Form 25D-40A). Refer to Section 4.7 for rounding procedures and significant decimals to be used in quantity calculations.

Someone other than the original calculator must check all computations of pay quantities; correct errors and recheck the quantity.

The signatures of the calculator and the checker, along with the date, must appear on the first page of any computations, with initials and dates on successive pages. If it is necessary to change or correct any calculations, you must follow the source document procedures shown in Section 4.4.

Programmable calculators or computers may be used to calculate pay item quantities if the procedures or the program is listed in the file containing the computation sheets. Back up all computer-entered or -generated data as described in Section 4.3. Use sketches, diagrams and drawings whenever necessary to explain or enhance the quantity calculations.

In all cases, clearly show and reference the steps involved in going from the source document measurements, through the computation process, to the resultant quantity to establish a clear audit trail.

Take measurements of each pay item in the field or make them in the office in accordance with the methods established in the contract (Section 10.4) or as noted above. The quantities calculated from those measurements should follow these guidelines; enter quantities in the progress summary.

- **Payment by Volume** (Cubic Yard, MBM): calculate from source document measurements using computer or calculator programs, or longhand using the average end area method or using simple dimensional calculations.
- **Payment by Area** (Acre, Square Yard, Square Foot): calculate from source document measurements using computer or calculator

programs (complex acreage calculations for example), or using simple dimensional calculations.

- **Payment by Length** (Linear Foot, Mile): take measured lengths directly from the source documents to the progress summary.
- **Payment by Lump Sum**: calculate partial completion percentages in accordance with a proration method, as discussed in Section 10.4, and the calculations should contain a validation statement.
- **Payment by Hours**: recorded hours may be extracted directly from the source document into the progress summary.
- **Payment by Item** (Each, Only): you may extract recorded quantities directly from the source document into the progress summary.
- **Payment by Volume Vehicle Measure** (Cubic Yard Vehicle Measure): extract daily quantities resulting from the daily load counts and vehicular dimensional measurements directly from the load count record sheets into the progress summary.
- **Payment by Weight** (Ton, Lb.): extract daily recorded weights directly from the source documents into the progress summary.
- **Payment by Time and Materials**: extract the cumulative recorded cost directly from the daily time & materials summary sheets (Section 10.3) onto the progress estimate.
- **Payment by Plan Quantity**: inspector's acceptance statements establish the basis for paying for the item; take the quantity from the plans.
- **Estimated Payment by Load Count** (volume measurement): not normally specified in the contract as a method of measurement, you may use this method to determine interim quantities on pay items measured by volume; extract daily quantities resulting from the daily load counts and vehicular dimensional measurements directly from the load count record sheets into the progress summary.

12.3. Stockpiled Materials

Stockpiled materials are materials destined for incorporation into the project that have either been manufactured or removed from their initial position and placed into storage until ready for use. Stockpiled materials fall into the three general categories described in Section 11.1:

1. materials manufactured off-site by others, purchased by the contractor, transported , and placed in storage;
2. materials manufactured on- or off-site by the contractor or a subcontractor, transported or not, and placed in storage; or
3. on-site or off-site materials removed from their original position and placed in storage.

In the former category, purchase and freight invoices form the basis for stockpile payments. In the latter two categories, compare the cost allowed for production/removal and stockpiling of the material to the cost of incorporating the material into the project, and then allocate the item's unit price accordingly.

The contract spells out in detail all of the conditions that must be met before payment can be authorized for stockpiled materials. Generally they include the following conditions:

1. Materials must meet contract requirements and be stored on the project site, or other location accessible to and acceptable to the Project Engineer;
2. Approved materials submittals, test reports, and certifications must be on file and verification made that the certifications and test results apply to the delivered materials;
3. If materials is stored at an approved off-site location, the contractor must insure the materials (if required by the contract), segregate them from the contractor's other operations, and identify the materials as pertaining to the project; and
4. For materials produced by the contractor or a subcontractor, the Project Engineer must have records and measurements to document both the quality and quantity of materials.

When the Department makes a stockpile payment, the material becomes the property of the Department.

The contractor cannot dispose of the material outside of the project, and they must record any transfers, waste, etc. of the material and debit it out of the stockpile pay quantity. Similarly, when removing material from the stockpile for incorporation into the project, make an appropriate reduction in stockpile quantity and credit a similar increase into the pay item.

Give a stockpile allowance for the invoice price of the materials plus freight charges to the approved stockpile location. If the bid unit price does not reflect the true cost of the work, prorate the allowance for the stockpiled material to leave enough money for installation. The quantities of stockpiled materials paid for should never exceed the total estimated quantity required to complete the item.

Any materials included in a stockpile payment which the contractor does not incorporate into the project will be debited out of the stockpile total when the need for the material no longer exists.

Handle excess stockpiled materials produced from Department-furnished sources in accordance with contract language. Other excess stockpiled materials revert to the contractor unless the Department purchases them.

12.4. Progress Summary

The progress summary is the start of the audit trail from the calculated quantity back to the source document. Its purpose is to gather all the calculated quantities for a pay item together in one location and lay out an audit trail, from the resultant quantity back through the calculations to the original source document measurement and acceptance.

The progress summary, in the form of an estimate book or estimate files, is a cumulative compilation by contract pay item of quantities (interim through final) of work completed to date. The summary also contains information on where and how the quantity was calculated and on the source of the quantity measurements.

The format of the estimate book or estimate files may vary from project to project. One acceptable format is to use standard forms designed for setting up an estimate file with separate pages used for each pay item.

- Index sheet (Form 25D-162)
- Earthwork pay items measured by the station w/ Continuation sheet (Forms 25D-163 and 25D-065)
- Excavation pay items w/ Continuation sheet (Forms 25D-164 and 25D-065)
- Weighed pay items w/ Continuation sheet (Forms 25D-166 and 25D-065)
- Stockpiled materials (Use Regional form or spreadsheet if needed)
- Item summary (Form 25D-170)
- Summary book (Form 25D-171A)

Items running the length of the project (clearing, grubbing, earthwork) can be broken into sections for ease of measurement. On items paid by weight, enter the daily total weights on the form.

The forms should indicate the pay item's name and number, the method used to calculate the quantities, the location of the calculations, and the source of the measurement data (the source document).

Fill out the estimate columns as you complete the calculations. If the contractor does not complete work on an item in a pay period, note that on the form. Once the contractor completes work on an item, no further entries are necessary.

If you estimate the quantities, spell out the basis for the estimate. Retain calculation sheets for both estimated and calculated quantities in the pay item files. Examples of all these forms are in Section 17 Exhibits.

Interim quantities calculated for the progress summary need not be exact. But estimated quantities must be reasonably commensurate with the work actually accomplished and a sufficient audit trail left in place back to the source documents.

12.5. Preparation of Progress Estimate

The contract details payment frequency, but we normally make progress payments at least once each month during periods of active work. The contract may allow twice monthly payments if the contractor requests it. In either case, prepare payment estimates promptly at the end of each pay period and develop them in accordance with the contract.

The contractor is entitled payment for the value of work that is satisfactorily performed to date. Base

progress payments on estimated quantities. Whether based on unit measure, breakdown of lump sum items, load count, engineering judgment, or another method, document the basis the Project Engineer uses for establishing estimated quantities in the progress summary.

The Project Engineer must insure that the materials and work represented in the estimate conform to contract requirements and that the project records include all required documentation including materials submittals, invoices, and test results.

12.5.1 Writing a Progress Estimate

Take pay item quantities from the progress summary and show them on the progress estimate. Show interim quantities to the nearest whole unit; show final quantities to the appropriate significant decimal as outlined in Section 4.7. Break the items out according to funding source and eligibility (participating or non-participating). This quantity breakout is necessary to insure that we pay the contractor the proper funds and to keep an accurate track of funding status throughout the project.

Carry the funding breakout forward to the recapitulation sheet; and show it by program number, phase code, activity code, and object code. Code all contractor payments to the same activity code, except for:

- Contractor-furnished CE items such as field office, field lab, vehicles, meals, and lodging.
- ARRF vehicles and airport snow removal equipment purchased by the Department on FAA-funded projects.

Each separate source of funding also requires an individual breakout on the recap sheet.

Report the cost of work accomplished under any change documents on the estimate under the respective bid items or show each change document separately at the end of the original pay items. If a change document establishes a new item of work, enter the change document on the estimate at the end of the original pay items.

Maintain project records in such a manner that supporting data for payments made under each pay item and each category of funds is readily discernible.

On the recapitulation sheet, the "Original Contract Amount" is the original contract award amount.

The "Amended Contract Amount" is the award amount adjusted by any approved change documents and quantity overruns/underruns; use this amount to verify encumbrance revisions.

Use another calculation, the "Probable Final Contract Amount," on FAA-funded projects in place of the Amended Contract Amount. The Probable Final Amount is the amended amount adjusted by anticipated quantity overruns/underruns and by anticipated additional work or claim settlements not formally added to the contract. Use this amount to forecast the need for grant increases.

12.5.2 Withholding and Liquidated Damages

If withholding and liquidated damages are applicable, calculate them in accordance with the contract and show them on the recap form also.

The Department may withhold part or all of a payment to a contractor, only for reasons covered in the contract. Reasons for withholding include liquidated damages, unsatisfactory performance by the contractor, the contractor's failure to pay subcontractors, or the subcontractor's failure to pay lower tier subcontractors.

Liquidated damages may be assessed for non-completion of work within time deadlines; failure to meet requirements of 641 Erosion, Sediment and Pollution Control; failure to meet requirements of 643 Traffic Maintenance; and other LDs as listed in the contract.

The Project Engineer will notify the contractor in writing within eight working days of a request for a progress payment of the amount being withheld, the reasons why the amount is being withheld, and what actions may be taken by the contractor to receive full payment.

The Project Engineer should show the amount withheld on the Progress Estimate, and continue to withhold that amount until notified that the contractor has satisfied the cause for the withholding.

12.5.3 Review with Contractor

Review progress payment quantities with the contractor prior to finalizing the forms as a matter of courtesy and to eliminate the possibility of processing delays due to disagreements. Once the Project Engineer receives the signed estimate back from the contractor, they should sign and date the estimate in the *Date Received from the Contractor* signature

block. The Project Engineer should immediately forward the estimate to the Group Chief/PM.

12.5.4 Prompt Payment

As an incentive to promoting prompt payment, AS36.90.200 provides for paying interest to the contractor if prompt payment is not made.

For projects using state money, the contractor should be paid within 30 days of the dates both the contractor and the Project Engineer signed and dated the progress estimate (based on the last date signed).

For projects using federal (or grant) money, the contractor should be paid within 21 calendar days of the dates both the Project Engineer and the contractor signed and dated the progress estimate (based on the last date signed), or within 21 calendar days of the date the state actually receives the federal (or grant) money, whichever is later.

If payment deadlines are not met, the Department will pay the contractor interest on the late payment at the statutory rate upon written request from the contractor. Interest payments are made from state monies, they are non-reimbursable from federal funds.

Timely preparation and prompt processing of progress payments are one of the Project Engineer's most important responsibilities.

The prime contractor must pay each subcontractor within eight working days after receiving payment from which the subcontractor is to be paid (AS 36.90.210). Per AS 45.45.010 (a), the contractor must pay the subcontractor interest on the unpaid balance from the time the payment was due until it is paid.

12.6. Encumbrance Revisions & Revised PDAs

As the project progresses, the Project Engineer (or Group Chief/PM) should keep a close watch on the remaining balance of funds encumbered to the contractor versus the estimated amount that will be paid to the contractor. The Group Chief/PM or Project Engineer should complete an Encumbrance Memo and request PDA modification from Project Control when the estimated amount is more than the encumbered balance.

The need for an increased encumbrance could result from a contract change document, or a quantity overrun.

The Project Engineer should prepare the Encumbrance Memo listing the reasons for the increase and including supporting documentation (copies or listing of change documents, quantity calculations), and submitting it to the Group Chief/PM.

Any time there is a financial change or the possibility of a financial change in the contract amount, the Project Engineer should check the construction phase funding to see if there are sufficient funds to finance the change. The Project Engineer should communicate the need or possible need for additional funding to the Group Chief/PM as early as the need is recognized, as additional funding is not always available. The Project Engineer should communicate the possible decrease in funding needed to the Group Chief/PM, as this may free funding for other projects. The Project Engineer and Group Chief/PM should notify the project control unit of the situation at this point.

If an increase or decrease in funding is necessary and funds are available, the Group Chief/PM or Project Engineer should contact Project Control and request a modification to the PDA (Project Development Authorization) Provide justification for the increase or decrease citing change documents, changes in quantities, or other reasons.

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13. Contract Changes

13.1. General

Contract change documents refer to changes to the contract that are executed after the contract has been awarded. They may include the modification of bid items, quantities, material requirements, specifications, contract time, or details of construction; and the resolution of disputes, equitable adjustments, or any other deviations from the original contract. Once executed the change document becomes a part of the contract.

Changes within the scope of the project are made using a change order. Change orders are described in more detail in Sections 13.2 and 13.3. For federal aid projects also reference 23 CFR 635.120–121.

An Interim Work Authorization (IWA) may be used to initiate changes to the contract on an interim basis until a subsequent change order is executed. IWAs are described in Section 13.4.

All technical changes need to be reviewed, approved and sealed by a professional engineer as described in Section 13.5.

Contract changes outside the scope of the project are made according to the procurement code (AS 36.30). If the work is awarded to the current prime contractor, then you may use a supplemental agreement to the existing contract. Supplemental Agreements are described in Section 13.6.

For changes to the contract, the Project Engineer can initiate work with an IWA or a change order. In such cases the Project Engineer must keep the Group Chief/PM and the Department employee with Delegation of Authority informed of estimated costs. Normally the Project Engineer and contractor will fully execute the change document before work begins. No payment for proposed changes will be made to the contractor until after the change document is signed by both parties and approved.

For major changes (as defined by the stewardship and/or oversight agreement) and supplemental agreements to federal-aid projects, the Department and the federal agency must authorize the changes prior to the start of new work.

Contracts administered for other agencies may require their approval before start of new work. Refer to the individual project agreements or memoranda of understandings.

When emergency conditions occur that threaten the safety, health, welfare, or sanitary conditions of the public, DOT&PF infrastructure, or the environment; the Project Engineer may verbally initiate changes to the contract with change documents to follow as soon as practicable. The Department employee with Delegation of Authority must approve the verbal authorization prior to beginning work, unless communications are unavailable or delayed. In this case, the Project Engineer may assume this responsibility and will notify the Department as soon as practicable.

Do not separate an issue into multiple IWAs or change orders to avoid the major change order threshold.

The regional staff person assigned to coordinate DBE matters should coordinate with the Statewide Civil Rights Office when there are changes relating to EEO, OJT, and DBE (Section 7.2).

13.2. Change Order Process

Either the Department or the contractor may initiate a request for changes to the contract. See Figure 13-1 for a flow chart of the Change Order Process.

The Project Engineer, in consultation with the group chief/PM, should determine the following things about the proposed change:

- Is it a change?
- Which party pays for the change?
- Is the change outside the scope of the project?
- Is funding agency concurrence needed?
- Are modifications required for any environmental documents or permits?
- Is there sufficient funding available, or will other project reductions be necessary?
- Is this a technical change requiring a professional seal? If so, who will seal the change order?

Discuss the need for a change with the involved parties. The proper disciplines should be involved in

the change order discussions. Consult with the funding agency when required by agreement. The Department employee with Delegation of Authority to approve the change order must decide whether a change order is needed.

If the Department decides a change order is needed, there are two ways that a contractor's proposal may occur:

1. If the contractor initiates the proposed change, require them to submit a proposal with work description, and detailed cost and time data. The Project Engineer should verify that the description is accurate, and the cost and time proposal includes certification that the data is accurate (required by AS 36.30.400[a]); or
2. If the Department initiates the proposed change, the Project Engineer will issue a Request for Proposal (RFP) to the contractor by Form 25D-067, or by letter or email.

   The contractor should submit a proposal based on the RFP, with detailed cost and time data, and a certification that the data is accurate (required by AS 36.30.400[a]).

A contractor signature on the RFP Form 25D-067, when used as a cover page for the proposal data, is sufficient to certify that the data is accurate.

The Project Engineer must prepare an adequate and independent cost and time estimate of the proposed work. They may use Form 25D-049 or regional equivalent.

Compare the engineer's cost and time estimate with the contractor's proposal. Prepare the change order if the estimate and proposal are similar. Negotiate cost and time with the contractor if the estimate and proposal are different; when agreement is reached prepare the change order.

If an agreement cannot be reached with the contractor the Department has four options:

1. Don't perform the work.
2. Bid the work and issue a new contract for the work.
3. Perform the work with Department personnel.
4. Issue a unilateral IWA or change order to the contractor based on:
   a. Time and Materials; or
   b. Items of change work.

The next step in the change order process is for the Project Engineer to prepare the change order and backup documentation. Changes in contract time must be justified and documented. The justification should include analysis of controlling items of work, to determine how the change affects the time to complete the project. See Sections 13.2.3 and 14.4 for more information.

A technical change order must be sealed. See Section 13.5 Requirements for Professional Seals.

The group chief/PM reviews the change order, and it is approved by the Department employee with the appropriate Delegation of Authority for the dollar amount of the change order. The exact process may vary by region. If additional funding is required, request a Project Development Authorization (PDA) revision. Obtain approval from the funding agency when required by agreement.

13.2.1 Federal Agency Approvals

On federally funded projects, consult with the funding agency when:

- There are questions about financial eligibility of the change order.
- Contract time affects the cost.
- Before authorizing a supplemental agreement
- The FHWA Stewardship and Oversight Agreement requires their approval.
- FAA projects may require a grant amendment to fund the change order when the contract amount exceeds the budgeted amount plus contingency.

13.2.2 Time and Materials Basis

The time and materials basis (federal language calls it force account procedure), is a contractually specified method of compensating the contractor directly for hourly equipment and labor costs, and the cost of purchased materials.

Federal time and materials procedures (23 CFR 635.120 [d]) should only be used when strictly necessary, such as:

1. When agreement cannot be reached with the contractor on the price of a new work item,
2. When the extent of work is unknown, or

3. When the work is of such character that a price cannot be determined to a reasonable degree of accuracy.

The Project Engineer must document the reason for using time and materials in the change order backup.

Certain types of extra work where the scope cannot be adequately defined, such as emergency work or differing site conditions are often documented using this approach.

Pay for time and materials work according to the contract. The work may be initiated with an IWA (see Section 13.4) and later finalized in a Change Order with appropriate units of measurement.

Use Form 25D-195, to record labor, equipment and materials, on a daily basis for the duration of the work. Monitor the cumulative costs closely because of their open-ended nature.

13.2.3 Preparing the Change Order

The change order should describe what is being changed. The backup information should describe why it is being changed and the justification for approving the changes in cost or time.

Prepare the contract change using Change Order and Continuation Forms 25D-068 and 25D-065. Describe what is being changed, and the amount and cost of such change. List changes in categories such as:

- Modify Specification
- Modify Plan Set or Detail
- Increase or Decrease Quantity
- Deleted Item Number
- New Item Number
- Contract Time Change

For more information on increase or decrease of quantity, see Section 13.3 Equitable Adjustments.

Summarize backup information for the change order using the Change Order Support Information/Backup and Continuation Forms 25D-064 and 25D-065.

Backup information should include:

- the reason for the change,
- the contractor's proposal,
- the engineer's estimate,
- an explanation or justification for the costs and time adjustments,
- justifications for using time and materials method, and
- other agency concurrence if required.

Label backups and attachments so that they are associated with the project and change order.

If the change is technical, it must be sealed according to Section 13.5. If the change is not technical, then note on the change order in the area for the seal that it is not required.

On state-funded work, changes to the materials listed on the Alaska products preference worksheet Form APPW, may result in a penalty to the contractor. When applicable, note material revisions on Form APPW and attach the form as a backup document to the change order.

Note on change order whether the subcontractors previously submitted on the Contractor Self Certification for Subcontractors Form 25D-042, are approved for new work.

Changes to contract time are shown in the "Change Order Summary" box on Form 25D-068 as either an increase or decrease in calendar days, or as a new completion date depending on the type of contract. Changes in contract time must be justified and documented in the change order backup form. The justification should include analysis of controlling items of work, to determine how the change affects the time to complete the project. See Section 14.4 for more information.

If a change order adds contract time, the construction department or project control, should extend the ATP end date by an equal amount of time. Submit a revised Project Information Document (PID). See ACM 2.3.2 for more information.

Once the scope and estimated cost of a contract change is known, the Project Engineer should verify with the Group Chief/PM that there are sufficient construction phase funds to pay for the work. If not, refer to Section 12.6 for the steps needed to secure additional funding. Once the change document is signed, encumber additional funds as needed.

The amount of the change order determines which Department employee has Delegation of Authority and can authorize the work by signing the "Approved By" line. Signature authority is established by regional policy.

The contractor has two choices when signing Change Order Form 25D-068. Typically the contractor signs and dates it as accepted. This constitutes a bilateral agreement to terms, conditions, and prices stated. When the contractor does not agree with the change, they should sign that they acknowledge the change order. This indicates receipt of the change order, but not the mutual agreement on the basis of payment and/or time allowance (unilateral). Document if the contractor won't sign the change order.

Further disputes may be settled at the Project Engineer level, or the contractor can follow Highway Specification 105-1.17 Claims (Airport GCP 50-17) to initiate the claims process.

After change orders are signed, copies must be provided to the funding agencies, as required by agreements between the Department and funding agency.

13.3. Equitable Adjustments

The Standard Specifications define an equitable adjustment as an increase or decrease in Contract price or time calculated according to the terms of this Contract.

An equitable adjustment is necessary:

1. If the contractor finds differing site conditions (Highway 104-1.03 or Aviation GCP 40-03, Differing Site Conditions) and an increase or decrease in the cost of, or the time required for, performance of the contract. The Project Engineer will prepare a change order for an equitable adjustment to the contract. The contractor must cooperate with the Project Engineer to reach a prompt and fair settlement.
2. If the contractor agrees to cooperate when:
    a. A contract requires a mandatory source or designates the material source (Highway 106-1.02 or Aviation GCP 60-02, Material Sources), and
    b. The quality and quantity of material produced from it is not as represented, making a change of source necessary.
3. If the final quantity of a major contract item varies more than 25 percent above or below a bid quantity (Highway 109-1.04 or Aviation GCP 90-04, Compensation for Altered Quantities). Either party to the contract may request an equitable adjustment in the contract unit price of that item. If the final quantity of work is greater than 125 percent of the bid quantity, the equitable adjustment will be made only for those units that are in excess of 125 percent of the bid quantity. If the final quantity of work is less than 75 percent of the bid quantity, the equitable adjustment will be made for those units of work done and accepted, with the total payment limited to 75 percent of the amount bid for the item.
4. If a major contract item is eliminated (Highway 109-1.09 or Aviation GCP 90-09, Eliminated Items)
5. If the contractor finds conflicts with existing utilities or utilities that are not shown or described in the contract (Highway 105-1.06 or GCP 50-06, Utilities)
6. If a contractor requests additional time due to the Project Engineer's suspension of work (Highway 108-1.06 or Aviation GCP 80-06, Contract Time, Extension of Contract Time and Suspension of Work)

See Section 18.16 of this manual, for more on Calculating Equitable Adjustments.

13.4. Interim Work Authorization

Interim Work Authorization (IWA) can be used to initiate any type of change to the contract that can be made by change order except changes to contract time. An IWA initiates a change on an interim basis until a subsequent change order is executed.

For FHWA-funded projects, the IWA should only be used to initiate changes to the contract when a delay would:

1. Jeopardize life, property or result in environmental damage;
2. Unduly delay the time of completion of a project; or
3. Unduly increase the cost of a project.

The IWA or its backup documentation must identify the situation that warrants the IWA implementation.

The IWA does not relieve the Project Engineer of the responsibility to document the associated change order. However the IWA provides written

authorization for the contractor to begin and get paid for change work.

If an IWA or series of related IWAs may become a major change order, discuss the IWA with the federal funding agency before issuing it.

The Project Engineer may issue the IWA only after obtaining verbal or written approval from the person having the Delegation of Authority for the estimated amount. Write that person's full name on the IWA.

Both the Project Engineer and the contractor's representative must sign and date the IWA.

Note on the IWA whether subcontractors previously submitted using Contractor Self Certification for Subcontractors Form 25D-042, are approved for new work.

The "Basis of Payment" field must have the appropriate box checked: Work shall be paid:

- On a time and materials basis,
- At an agreed unit, or
- Lump sum price.

Prepare the IWA using Forms 25D-070 and 25D-065.

IWAs may be started in one unit of payment and converted to a different unit of payment (such as lump sum) in the change order. The subsequent change order shall address changes in contract time, if required.

IWAs should be converted to change orders as soon as practicable, but no later than March 31 in the year after the IWA was issued. If more time to convert is necessary, document the reason in the project files.

13.5. Requirements for Professional Seals

Policy and Procedure 70-1003 requires that plans, drawings, plats, and all reports or similar documents that the public relies on for the design or construction of a project be sealed by the designer of record or by the person under whose direct supervision they were prepared. It can be found at the D&ES Construction Standards website.

Technical change orders made during construction that fall within the practice of architecture, engineering, or land surveying must be sealed by the designer of record or shall bear the seal, date and signature of those making the design change or under whose direct supervision the change was made. See AS 08.48.341 (9, 10, and 11) for the definitions of the practice of architecture, engineering, or land surveying.

Seal Required

Some examples of technical change orders that require a professional seal are:

- structural changes to a bridge, building, piling, footing, retaining wall, pier or dock,
- changes related to type or quality of material requirements,
- revisions in geometric design (alignment, and/or grade),
- revisions of pavement structural section,
- changes to safety appurtenances,
- technical specification changes, and
- typical section modifications.

Seal Not Required

Some examples of nontechnical change orders are:

- administrative matters, such as quantities and payment amounts,
- extension of contract time,
- changes to methods of measurement and basis of payment,
- specification changes not related to structural elements (seed specifications, paving deadlines, surface tolerances, color selections, staking requirements, temporary facilities, etc.),
- changes to utilities requested by the utility owner, or repairs to utilities, that do not affect the road structure,
- changes to drainage features that do not affect the road structure or clear zone requirements, and
- temporary erosion, sediment and pollution control BMPs.

The seal must comply with 12 AAC 36.180. The regulation allows for a similar electronic or digital representation of the seal.

If other registered professionals prepare portions of plans, documents, or other professional work, a registrant may seal only the portion of the work for which it has direct professional knowledge and direct supervisory control (12 AAC 36.185.7[b], Use of Seals).

The Project Engineer, in consultation with the Group Chief/PM, *should decide early* in the change order

process if the change is technical and if it is necessary for the change to be sealed.

The change order form has an area for a seal to be applied or inserted. If not required, note it as "not required" or "N/A." The seal may be affixed to an attachment instead of the change order form. Note on the change order form that the attachment is sealed.

13.6. Supplemental Agreements

Supplemental agreements cover changes to the contract that the Department considers outside the scope of the contract, and that are awarded to the current prime contractor. See Figure 13-2 for General Guidelines for the Supplemental Agreement Process. Handle all supplemental agreements in accordance with the procurement code (AS 36.30.300). All supplemental agreements are bilateral agreements.

The Department describes the additional work required. The chief procurement officer makes the determination of whether the proposed additional work falls within or outside the scope of the contract.

13.6.1 Small Procurement

If the amount of the supplemental agreement is less than the small procurement threshold (State $200,000; Federal $150,000) the Department may acquire the additional services through the Small Procurement process (AS 36.30.320, 2 CFR 200.88 and 48 CFR 2.101).

13.6.2 Limited Competition Procurement

A Limited Competition Procurement (AS 36.30.305) may be made for amounts less than $100,000, when there are only two contractors and when competitive sealed bid processes are impractical or contrary to the public interest. See DPDR 10.01.040, Alternate Procurements, for the procedure for limited competition procurements.

13.6.3 Single Source Procurement

Supplemental agreement work may use Single Source Procurement (AS 36.30.308).

The Project Engineer prepares an Engineer's Estimate and a written determination using the Waiver Request for Alternate Procurement Methods (Form 25D-026). Cite the specific reasons why a competitive process is not practicable. Provide the specific and significant interests of the State that justify awarding a contract as a single source. Specify the duration of the work in the determination. The determination should demonstrate the cost effectiveness of performing the work by single source procurement, and address any public necessity that cannot be delayed.

Send the Waiver Request to the regional director if it is under the small procurement threshold (State $200,000, Federal $150,000); and to the commissioner if it is equal or greater than those amounts. If the waiver is denied or the contractor refuses the work, then the work shall be competitively bid.

If the commissioner or regional director approves the waiver, then the contracting officer negotiates the terms as to price and delivery of the proposed work with the prime contractor. The Project Engineer prepares the supplemental agreement (Forms 25D-066 and 25D-065) and Support Information/Backup Sheet (Form 25D-064). The latest state and federal wage rate decisions are included as a part of the supplemental agreement.

Supplemental Agreements that depend on federal funding will require the funding agencies approval before adding the work. Depending on federal funding source, send:

- A cover letter and a copy of the Waiver Request for Alternate Procurement Methods and the Supplemental Agreement to the FHWA for approval.
- A cover letter and the Supplemental Agreement to the FAA for approval.

13.6.4 Emergency Procedures

Procurements may be made under emergency conditions (AS 36.30.310) as defined in regulations adopted by the commissioner when there exists:

- a threat to public health, welfare, or safety;
- when a situation exists that makes a procurement through competitive sealed bidding or competitive sealed proposals impracticable or contrary to the public interest; or
- a need to protect public or private property.

The Project Engineer need not prepare an Engineer's Estimate. The Project Engineer prepares the documents required in Figure 13-2.

13.6.5 Competitive Sealed Bid

Procurements may be made using Competitive Sealed Bidding (AS 36.30.100). If the bid is awarded to the existing prime contractor, the work may be added to

the current contract by Supplemental Agreement. If the bid is awarded to a different contractor, then the work is added with a separate contract.

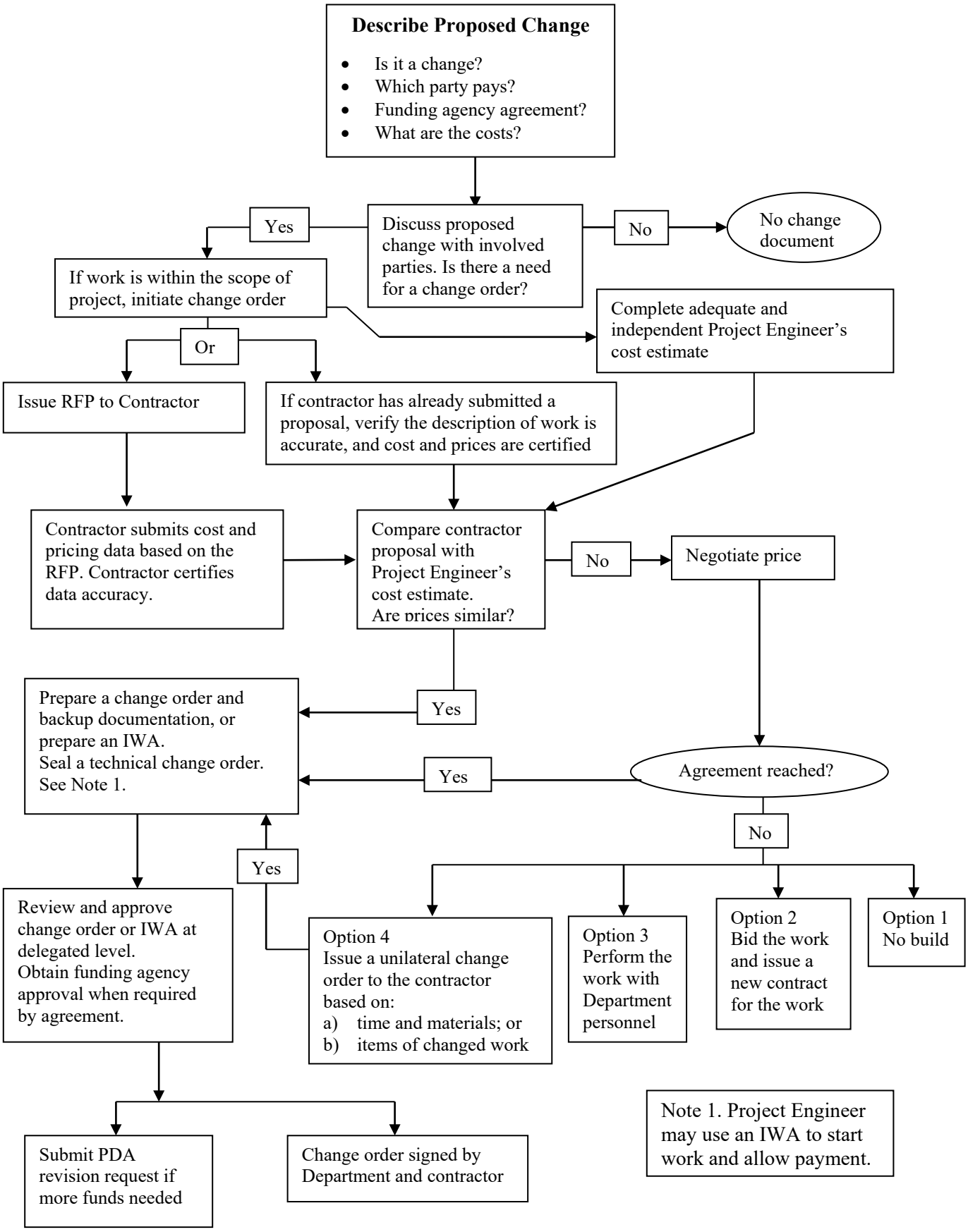

Figure 13-1
Change Order Process

General Guidelines for the Supplemental Agreement Process[1]	
Cost of Change	**Steps Required[2]**
$0 ≤ $10,000	1. Engineer's Estimate 2. Obtain bid(s) (1 contractor minimum) 3. Approval by Department employee with Delegation of Authority 4. Supplemental Agreement and Backup Forms
Greater than $10,000 and less than Small Procurement Threshold State $200,000 FAA $150,000 FHWA $150,000 FTA $150,000 for grants issued after 12/26/2015; or older grants that are amended with new money after 12/26/2015	Option A (Small Procurement): 1. Engineer's Estimate 2. Request bids (three contractors minimum) 3. Supplemental Agreement and Backup Forms Option B (Limited Competition)(must be less than $100,000): 1. Engineer's Estimate 2. Request bids (two contractors minimum) 3. Waiver Request for Alternate Procurement Methods (Form 25D-026) 4. Obtain approval for limited competition from the regional director 5. Supplemental Agreement and Backup Forms Option C (Single Source) 1. Engineer's Estimate 2. Waiver Request for Alternate Procurement Methods (Form 25D-026) approved for single source by the regional director 3. Obtain bid (one contractor only) and negotiate scope and price 4. Supplemental Agreement and Backup Forms Option D (Emergency Procedures) 1. Waiver Request for Alternate Procurement Methods (Form 25D-025) 2. Obtain approval from the chief procurement officer Option E (Competitive Sealed Bidding) 1. Follow regular bid procedures
Equal or greater than Small Procurement Threshold	Option C (Single Source) see above, except the Waiver Request for Procurement is approved by the commissioner Option D (Emergency Procedure) Same as above Option E (Competitive Sealed Bidding) follow regular bid procedures

Figure 13-2
General Guidelines for the Supplemental Agreement Process

[1] All requirements of the Procurement Code (AS 36.30), the Procurement Administrative Regulations (2 AAC 12), and the Policy and Procedure 10.01.040 Alternate Procurements must be followed.

[2] Additional Requirements: All quotes must come from a contractor currently under contract with the state. If the contract is federal-aid, all quotes must come from a contractor currently under contract on a federal-aid project. If the project is FHWA-funded, a copy of the Waiver Request for Procurement shall be included with the supplemental agreement when sent to the FHWA for approval. Help with the supplemental agreement process is available from the contracts section.

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14. Contract Time

14.1. General

Each construction contract contains a specific period of time within which the contractor must complete the project. The completion date or the time allowed for completion is determined during the design stage, based on the estimated time required for construction or the date the completed facility is needed.

The methods most frequently used to state completion time are either a fixed completion date or a set number of calendar days.

In some instances the contract may contain several completion dates, each for a different portion of the work and each containing its own liquidated damages; dates other than the contract completion date are known as intermediate (or interim) completion dates.

The effect of a delay in completing the contract within the specified time limit varies greatly from one project to another and is difficult to determine. When a contractor does not complete a contract in the allotted contract time, including authorized extensions, the contractor is assessed liquidated damages. These damages, shown in the contract, are meant to compensate the Department for its additional engineering costs owing to the delayed completion (see Section 3.3).

On a calendar day contract, the count of contract time starts on the day stated in the contract. Time is not counted during the winter period that is spelled out in the contract. The count of contract time ceases on the date stipulated in the Letter of Project Completion.

14.2. Temporary Suspension of Work

The Project Engineer may temporarily suspend the work at any time for reasons spelled out in the contract, and contract time will continue to be charged during those periods.

If the Project Engineer suspends work on a pay item that is a controlling factor in project progress, the suspension may entitle the contractor to an extension of contract time. The Project Engineer will issue all temporary suspension orders and order to resume work in writing. They may use the Directive form (Section 10.2) or issue the order in the form of a letter to the contractor. Orders to resume work will state the remaining contract time.

When the temporary suspension of work changes the completion date, or adds calendar days to the contract time, a change document must be issued. Only whole days of contract time are charged, beginning and ending at midnight.

14.3. Seasonal Suspension of Work

On calendar day contracts, the count of contract time stops only during the calendar dates shown in the contract.

The timing of the seasonal shutdown as well as the resumption of work, is dependent on the weather, the nature of the project, the contractor's plans, and the concurrence of the Project Engineer.

Depending on the language in the contract, either the contractor or the Department may be responsible for maintenance during the seasonal suspension.

It is incumbent on the Project Engineer, the contractor, and the maintenance and operations representative to work together in advance of the shutdown to document the condition of a partially-completed facility and to assure that it is in safe maintainable condition before the contractor suspends work.

Prior to the work suspension, the Project Engineer should record the condition of the facility using a video camera (if available) or a still camera. The Project Engineer should repeat the recording following the seasonal suspension.

The Project Engineer will issue the seasonal suspension order and the resume work order in writing. Use the Directive (Form 25D-069) and Continuation Sheet (Form 25D-065), or issue orders in the form of letters to the contractor.

The order to resume work should state the remaining contract time, and should provide notice to the contractor that the Department will be terminating seasonal maintenance (if this applies).

If the Department maintained the facility during the suspension, either maintenance and operations or the contractor, under a change document, should repair any significant change/damage to the partially-completed facility resulting from seasonal maintenance.

14.4. Extension of Contract Time

The contract establishes the completion time or date based on the estimated quantities of work. If greater quantities of work or different items of work are necessary for satisfactory completion of the project, contract time may be increased based on the amount and difficulty of the additional work and/or the estimated time to complete it.

When overruns in quantities occur or new items of work are added that increase the time required for completion, or when the Project Engineer suspends work on pay items of work that are controlling factors in job progress, the Project Engineer should grant an equitable extension of contract time using a change document.

Any additional time granted to the contractor should be for reasons outlined in the contract and should be requested by the contractor in accordance with the contract. One reason for granting additional time is when the project is complete except for reaching final stabilization of grass, or plant establishment; and the weather precludes grass or plant growth.

14.5. Liquidated Damages/Incentives & Disincentives

The contractor's failure to complete the project by the completion date or within the allotted contract time, establishes the basis for the assessment of liquidated damages. Liquidated damages are intended to compensate the Department for its additional construction engineering (CE) costs resulting from the contractor's failure to complete the project on time.

When the Department must assess liquidated damages, it calculates them in accordance with the contract, using the daily charge established by the Original Contract Amount. The amount of liquidated damages changes (drops to 20%) after substantial completion, and stops at project completion.

Before assessing liquidated damages, the Project Engineer should discuss the situation with the contractor and provide both the contractor and their bonding agent with written notice.

Liquidated damages are shown as deductions on all subsequent progress payments, including the final estimate, and appear on the recapitulation sheet. Those contracts that contain intermediate completion dates may require the assessment of liquidated damages at specified rates for failure to complete by that intermediate date. These liquidated damages are shown in the same manner on the recapitulation sheet.

Incentives & Disincentives

Occasionally a contract contains a clause that provides for a daily incentive payment to the contractor for early completion of the project, or a portion of the project.

An incentive clause is normally coupled with a disincentive clause, which specifies a daily disincentive for the contractor's failure to complete by a specified date.

Incentive/disincentive clauses are used infrequently and only in situations where timely completion is of the utmost importance to the Department.

15. Final Field Construction Activities

15.1. Final Inspection

A final inspection is used to show representatives of the owner agency and the funding agencies that a project was completed according to the plans and specifications. The inspection also gives maintenance and operations personnel a detailed review of the facility and allows them to plan for resuming or assuming their maintenance activities.

Preliminary Punch List: When all of the significant items of work on the project are nearing substantial completion, the project staff should thoroughly review the entire project. Review the contractor's SWPPP and identify remaining actions that should be taken before a Notice of Termination can be filed with DEC. Prepare a preliminary punch list consisting of a comprehensive list of items the contractor must complete. The Project Engineer should discuss the list with the contractor, and give a copy to them to help them plan and focus their resources to complete the project.

After the contractor notifies the Project Engineer of the date that the contractor expects to reach substantial completion, the Project Engineer should review the project to verify that it is likely to be ready for a final inspection. On projects with fall completion dates, it's better to schedule the inspection early to avoid bad weather, than it is to wait for completion and risk having the project site covered with snow.

Once the Project Engineer is satisfied that the project will be ready; schedule the final inspection by coordinating with the Group Chief/PM, the federal funding agency, and the contractor. The size of the final inspection group depends on the nature and magnitude of the project, but generally you should invite the following people:

- Contracting Officer or their designee;
- Group Chief/Project Manager
- Project Engineer;
- Contractor Representative;
- M&O Representative;
- Design Engineer, Design Consultant, or Naval Architect

As appropriate, also include the following groups:

- FAA, FHWA or FTA Representative;
- Other governmental agencies whose acceptance of the project is required;
- Other departmental units with significant involvement in the project, or whose acceptance of the project or of a portion of the project is required;
- Utility companies with direct involvement in the project.

At final inspection, the Project Engineer should present the project to the group. The Project Engineer should acquaint the group with history of the project, including the conditions of the facility prior to the start of construction and the upgrading accomplished under the contract. The Project Engineer should review the construction with the group before discussing the field inspection and any design changes made during construction.

The final inspection should include a physical inspection of the entire project, and should be accomplished on foot to the extent possible; where the length of the project dictates the use of vehicles, the group should make frequent stops to inspect the facility in as much detail as the group desires. The inspection may include an evaluation of whether final stabilization, as defined under the DEC's Construction General Permit, has been achieved.

Following the field inspection, the group should review and revise the preliminary punch list to include any additional items of work that members of the inspection group feel are not in acceptable condition.

The Project Engineer, the contractor, and the maintenance representative should discuss the timing of the transfer of the maintenance responsibility back to the Department.

When the group completes the final inspection, the project will fall into one of three categories of completion, each of which generates a different written record of the inspection:

- If all construction work on the project is complete with both the contractor and Department's staffs ready to depart the site, the Project Engineer prepares the Letter of Project Completion and proceeds as shown in Section 15.6;
- If a geographically separate portion of the project is ready for Partial Completion, the Project Engineer prepares a Letter of Partial Completion and follows the guidance of Section 15.3; or
- If the contractor must complete remaining work following the final inspection, including minor punch list items, or if the Project Engineer intentionally scheduled the inspection early to avoid weather conditions, the Project Engineer prepares a Report of Final Inspection letter as described in Section 15.2, and work continues on the project.

15.2. Additional Work or Corrective Work Remaining

When the final inspection is held intentionally early and the project is not substantially complete, or if the final inspection reveals the need for additional work including minor punch list items, the Project Engineer will prepare a Report of Final Inspection letter to the contractor. The letter, prepared for the Group Chief/PM's signature, serves to document the final inspection, and contains the following essential information:

- Date of the final inspection;
- List of attendees;
- List of additional work required prior to Partial Completion;
- Statement that either another inspection will be scheduled following completion of the additional work or that Partial Completion will be issued when the Project Engineer advises that all the additional work or punch list items have been satisfactorily completed;
- Reminder that contract time will continue to be charged until Project Completion. For calendar day completion contracts, the number of calendar days remaining should be stated.

When the contractor does notify the Project Engineer that they have completed all of the listed additional work, the Project Engineer will either conduct an inspection of the project, or schedule a second final inspection, at the discretion of the Group Chief/PM. Following a satisfactory inspection, the project is ready for the Partial Completion steps in Section 15.3.

15.3. Partial Completion

When the final inspection or a subsequent inspection on an agreed upon geographically separate portion of the project, discloses that all work is substantially complete, the Project Engineer may prepare a Letter of Partial Completion for the Group Chief/PM's signature accepting the physical project or portion of the project from the contractor. It should contain the following information:

- Date of the final inspection (or subsequent) inspection;
- List of attendees (if applicable);
- Describe portion of project that is partially complete
- Statement that the contractor has constructed the applicable portion of the physical project in accordance with the contract, and the Department takes Partial Completion as of the date of the inspection by the Department;
- Date upon which the Department will resume/assume maintenance responsibilities;
- Reminder that contract time will continue to be charged until Project Completion; on calendar day completion contracts, the number of calendar days remaining should be stated.
- Statement that this acceptance does not relieve the contractor from their remaining contract obligations.

A copy of the Letter of Partial Completion is sent to the regional maintenance and operations head; this transmittal formally transfers the maintenance responsibility for the completed portions of the project to the maintenance and operations unit as of the date in the letter. In addition to formally transferring the maintenance responsibilities, the letter also transfers the responsibility for all related electrical utility bills for that portion of the project, to maintenance and operations.

15.4. Notice of Landing Area Proposal for Airports

FAA Form 7480-1 is required when you do any of the following to an airport:

1. Construct or otherwise establish a new airport or activate an airport
2. Construct, realign, alter, or activate any runway, or other aircraft landing or takeoff area of an airport
3. Construct, realign, alter, or activate a taxiway associated with a landing or takeoff area on a public-use airport
4. Deactivate, discontinue using, or abandon an airport or any landing or takeoff area of an airport for a period of one year or more
5. Deactivate, abandon, or discontinue using a taxiway associated with a landing or takeoff area on a public-use airport
6. Change the status of an airport from private use (use by the owner or use by the owner and other persons authorized by the owner) to an airport open to the public or from public use to another status
7. Change status from IFR to VFR or VFR to IFR
8. Establish or change any traffic pattern or traffic pattern altitude or direction

The FAA requires Form 7480-1 at least 90 days before any construction, alteration, activation, deactivation, or change to the status or use of a civil or joint-use (civil/military) airport. Submit Form 7480-1 according to regional policy.

15.5. Navigational Aid Facilities for Airports

Refer to the FAA/DOT&PF Reimbursable Agreement for the scope of services and responsible parties associated with relocated FAA facilities.

When navigational aid facilities for airports are relocated or constructed, usually the FAA requires a joint final inspection between DOT&PF and the FAA. Before navigational aid facilities become operational, the FAA requires flight checks, which may affect the contractor's schedule.

15.6. Project Completion

When the contractor has completed physical construction on the project, including all punch list items and final clean up, the project is ready for Project Completion. The Project Engineer prepares the Letter of Project Completion for the Group Chief/PM's signature, which contains the following elements:

- Statement that the contractor has completed all physical work on the project.
- Statement that contract time was stopped as of the final completion date. For calendar day contracts, the letter should also state the number of days used to complete the contract.
- Statement that this acceptance does not relieve the contractor from their remaining contract obligations.

For Facilities, the Project Engineer prepares the M&O Facility Form. The Group Chief/PM signs the form and sends it to M&O.

A copy of the Letter of Project Completion is sent to the regional maintenance and operations head; this transmittal formally transfers the maintenance responsibility for the project to the maintenance and operations unit as of the date of the letter. In addition to formally transferring the maintenance responsibilities, the letter also transfers the responsibility for all related electrical utility bills for that portion of the project, to maintenance and operations.

For FHWA-funded projects, the Project Engineer also prepares a Final Inspection of Federal-Aid Project form (Form FHWA-1446C-AKDO) for the Contracting Officer's Signature. After the Contracting Office signs the FHWA 1446-C-AKDO, a copy is sent to the Regional Construction Engineer, SDESD Director, Director of Administrative Services and the FHWA Engineer.

A copy of the Letter of Project Completion and (where applicable) the Final Inspection of Federal-Aid Project form should be promptly sent to the federal agency on federally-funded projects. These documents usually mark the end of field construction activities but before leaving the field, the Project Engineer should thoroughly document the finished condition of the project using both a still camera and a video camera. The remaining closure paper work is

usually accomplished with a reduced engineering staff in the regional office.

For FHWA- funded projects, within 30 days of Project Completion the Group Chief/PM creates a revised cost estimate consisting of the projected final estimate and Construction Engineering costs required to reach final acceptance. The Group Chief/PM should submit the revised cost estimate to project control.

16. Project Closeout

16.1. Project Closeout Overview

This section covers all of the administrative requirements that both the contractor and the Project Engineer must comply with before the construction contract can be closed out, the project's records can be properly disposed of, and the final billing sent to the federal funding agency.

With a few exceptions, most of the records needed to accomplish all of this have already been prepared during the course of the contract. The most important things that remain for the Project Engineer to do are secure additional certifications and documents from the contractor, prepare the final estimate, complete the project history (for FAA projects only) and assemble the final construction report.

The Exhibits include a Project Closeout Checklist that outlines all the significant closeout steps leading to the Final Completion Report. The Final Construction Report summarizes the project through the following:

- materials testing summary;
- project materials certification;
- memorandum of exceptions to the project materials certification;
- explanation of overruns, underruns, and change documents;
- final estimate;
- report on any design recommendations;
- report on any claims; and
- as-built drawings.

The Department retains the report indefinitely.

Following acceptance and distribution of the Final Construction Report, the remaining project field records are combined with the regional office records and they are either micro-filmed and the originals destroyed, scanned and uploaded for electronic document storage and the originals destroyed, or they are placed in storage for the required period of time. Then the project's construction phase financial account is closed out and preparations are made to final bill the federal funding agency. All of these steps are explained in more detail in the following sections.

16.2. Contractor's Administrative Requirements

Before processing the contractor's final payment, the Project Engineer must insure that the contractor has complied with all of the administrative requirements of the contract.

Additional administrative requirements the contractor must meet vary from contract to contract. The contractor's failure to comply with these requirements may result in the deduction of monetary damages from the contractor's final payment. Most of the following examples of requirements have limited applicability, but give a general idea of what the Project Engineer should expect from the contractor:

- Maintenance and operating manuals and warranties for equipment purchased under the contract;
- As-built drawings for specialty items such as electrical work or structures;
- Records to document the use of Alaskan Products on state-funded projects containing Alaska Product Preference requirements (AS 36.30.322-4 and 3 AAC 92.050);
- An Electrical Administrator's Certificate of Personal Supervision for all electrical installations (AS 08.40.195 and 12 AAC 32.900);
- Copy of Notice of Completion approved by DOLWD Wage and Hour Division (may be submitted with Final Estimate)
- Copy of contractor's Notice of Termination from DEC

- Unbonded contractors must provide written certification that all persons supplying materials or labor have been paid (AS 36.25.010 and 3 AAC 92.050).

When the following is applicable to the project, the contractor must submit the required information to the DOT&PF Civil Rights Office (CRO):

- Evidence to verify payments to DBE subcontractors, manufacturers, brokers and regular dealers on the DBE Monthly Summary (Form 25A-336) ;
- Federal Aid Highway Construction Contractor's Annual EEO Report (Form PR-1391) required from all contractors and subcontractors on FHWA funded projects.

The Department must request clearance for the contractor's DBE and OJT (if applicable) from the CRO. The CRO may request additional submittals from the Department, such as final DBE quantities. Clearance can be given by email.

The Department must verify, in written form, that the contractor has tax clearance from the Department of Labor and Workforce Development (DOLWD) Employment Security Division. The Department must receive written tax clearance from the Alaska Department of Revenue that confirms the contractor is current on their tax payments to the state. Tax payments to the state must be current through the end of the last calendar quarter that the contractor had employees working on the project. Confirmation is usually sought from the tax offices closest to the contractor's home area.

16.3. Final Estimate Assembly/Final Payment

The final estimate assembly is essentially the contractor's final pay estimate plus a certificate of release. The Project Engineer should compute the final quantities as soon as possible after issuance of the Letter of Project Completion, preferably within thirty days. The forms used for the final estimate and the format of presentation may differ from the progress pay estimates used throughout the project, depending on regional preferences.

Calculate quantities and show them to the appropriate significant decimal (Section 4.7). Coordinate the calculation of all final costs associated with the Training Program pay items with the regional contract compliance officer.

The Project Engineer may use the:

- Summary of Quantities form (Form 25D-025) to prepare the final estimate;
- The quality assurance/review unit reviews the final estimate and signs both the Final Estimate Review Report (Form 25D-031) and the Certification of Final Estimate (Form 25D-116);
- Both the Project Engineer and the Contractor, use the certification form (Form 25D-116) to certify the Final Estimate; and
- Obtain the certificate of release from the contractor on the Contractor's Release form (Form 25D-117), or on the Assignee's Release form (Form 25D-118) if the contractor has assigned their payments to a third party.

The final estimate contains several sections. The first is a numerical listing of contract pay items and final quantities, which includes the FA Code for each pay item on FHWA-funded projects (Section 2.3).

List original contract pay items first, followed by a listing of change documents with the pay items that were added listed under each change document (or list change orders in the order of the item numbers added).

If the contract contains both participating and non-participating pay items, divide the list into two sections. If there is more than one source of funds within either of those categories, the list is subdivided further.

On FHWA-funded projects, the second section contains a summary showing the cumulative costs in each of the FA Code categories, including any CE costs paid to the contractor (23 CFR 140.203b).

The final section of the estimate is a summary listing of all contractor payments, including the final, broken out by funding source and eligibility (participating or non-participating).

Once the Department receives clearance from Alaska Department of Revenue and Civil Rights/DBE Office, the Project Engineer should sign the Certification of Final Estimate and send it through the Group Chief/PM to the regional quality assurance/review unit for review and approval.

The regional quality assurance/review unit will review the Final Estimate in accordance with P&P 05.01.050 Concurrent Review of Construction Projects. When they have completed the review, that unit will complete and sign the Final Estimate Review Report, sign the certification, and return the estimate assembly to the Project Engineer.

The Project Engineer or Concurrent Review Section, should send the Final Estimate and Certificate of Release to the contractor. When the contractor returns the forms acceptably completed and has submitted the approved Notice of Completion from DOLWD, send the forms through the Group Chief/PM to the finance unit, for final payment. If the Project Engineer or Concurrent Review Section, is aware of any outstanding claims or unresolved disputes, carefully review the contractor's release or written certification before determining whether to proceed with processing the final payment.

16.4. Final Acceptance

The final acceptance by the Department of all work and obligations under the contract, and the formal closure of the contract, is made through the Letter of Final Acceptance to the contractor.

Final acceptance is made following receipt by the Project Engineer of the signed final estimate and an acceptable certificate of release from the contractor. Since the final estimate is not sent to the contractor until the contractor has satisfied all of the physical and administrative requirements of the contract, the Letter of Final Acceptance constitutes the last contractual act.

The Project Engineer prepares the letter for the Contracting Officer's signature including a statement relieving the contractor of further obligations under the contract, except for those involving warranties or guarantees.

Distribute copies of the letter to other units in the Department, other entities directly involved with the contract, and to the federal agency on all projects involving federal funds.

16.5. Engineer's Administrative Responsibilities

After closing out the contract, completing the Final Construction Report should be the top priority. However, before the Project Engineer can submit the Final Construction Report, they have certain administrative responsibilities they must complete.

These responsibilities vary from project to project but may include any of the following:

- **Airport Layout Plan (ALP):** provide Design with any changes in the ALP for them to complete and submit to FAA.
- **Airport Master Record:** The Project Engineer collaborates with Design and the Airport manager in updating FAA Form 5010. FAA requires Form 5010 and a sketch two months before substantial completion of any airport project regardless of funding source. The form contains each individual airport's operational characteristics.

  The Project Engineer estimates the date of substantial completion and reviews the form with the Airport Manager for changes in any of the data elements. Advise Design of each change. The Project Engineer shall review data elements in Form 5010 in the field for Design such as:

  - Airport Manager information
  - As constructed information
  - Condition of the surface evaluation
  - Inventory of current users of the airport
  - Services available to the airport
  - Non-commercial landing fee verification

Design receives the data changes and updates the form and sketch to reflect the changes (runway dimensions, surfacing, lighting changes, or navaid installation). They forward the updated information on Form 5010 to the maintenance and operations unit and the Airport Manager. The section (Design, Construction, or Airport Manager) responsible for submitting FAA Form 5010 to the FAA varies by region. See FAA Order 5010.4 Airport Safety Data Program for additional information.

- **Airport Sign Plan:** provide design with any changes to the airport sign plan for them to complete and submit to FAA. (49 CFR Part 139 airports only).
- **Alaska Railroad Release:** requires a release from the railroad on all projects interfacing with the railroad.
- **Exhibit A, Airport Property Map:** on projects that have acquisition of land, provide design with any changes to Exhibit A, Airport Property Map, for them to complete and submit to FAA.

- **FAA Sponsor Certification Construction Project Final Acceptance:** a certification signed by the Group Chief/PM on all FAA-funded projects that certifies that the Department has complied with the twelve requirements of the federal aid airport grant program (49 CFR 18.50).
- **Proof of Construction for Right of Way:** a Department form (Form 25D-173) required on projects involving the acquisition of public land or rights-of-way across public lands. The form certifies that the project conformed to the right-of-way limits. If the form does not apply to a project, it is not required.
- **Proof of Use for Materials Sources:** Form 25D-174 to be submitted on projects involving Department-furnished materials sources, whether the sources were used or not. Complete a form for each source and include a plan view of the source showing the condition of the source at the end of the project along with a tabulation of quantities of materials removed. If there were no Department-furnished sources in the contract, the form is not required.
- **Transmittal Letters and Memoranda:** written records required to document: that as-builts, and pile and boring logs have been transmitted to the bridge design unit; that as-builts have been transmitted to maintenance and operations/international airport management, and the FAA; and that a complete set of materials, maintenance, and operating manuals and warranties have been sent to maintenance and operations or to the owner agency.

16.6. Final Construction Report

The key to contract closeout is the Final Construction Report. It is primarily a compilation of the most important documents generated during the project (or a listing of those documents). There are a number of elements that are required in each final report, and several more that are necessary only if applicable to the particular project:

Required

- Final Construction report summary sheet (Section 16.11);
- Final Estimate Assembly (Section 16.3);
- Materials Summary and Materials Certification (Section 16.11);
- As-built drawings (Section 16.10);

As-Applicable

- Explanation of Overruns, Underruns, and Change Documents (Section 16.11);
- Report on Design Recommendations, if any (Section 16.8);
- Report on Claims, if any (Section 16.9)
- Memorandum of Exceptions (Section 16.12)
- Final Federal Billing verification (Section 16.14).

The noted sections of the manual contain detailed descriptions of each of these elements.

When you have assembled the Final Construction Report and completed all of the administrative requirements outlined in section 16.5, submit the report to the regional quality assurance/review unit for their final review, through the Group Chief/PM. When the review has been acceptably completed, copies of the report are distributed based on regional distribution procedures. The report is then placed in the permanent construction file.

Send one copy of the entire Final Construction Report, except for As-built drawings, to Statewide D&ES, D&CS Administrative Assistant.

On federally-funded projects, the last document is added to this permanent project record at a later date: on FAA funded projects, this is the FAA's grant closure letter, and on FHWA-funded projects, it is the Final Voucher submittal letter.

16.7. Reserved

16.8. Report on Design Recommendations

The Project Engineer should report on any Design recommendations that have been encountered during the construction of the project.

16.9. Report on Claims

A report should include information on all claims and their resolution; if any claims remain unresolved at the time the Final Construction Report is prepared, their status should be reported in detail.

16.10. As-Built Drawings

The Project Engineer and project staff must carefully and accurately prepare the final set of marked-up as-built drawings. If, during the course of construction, you recorded all field changes on the marked-up drawings in a timely fashion, there should be very little additional information that needs to be added to them in the contract closeout phase. Once the final pay item quantities have been calculated, reviewed, and approved for payment, they should replace the estimated quantities on the marked-up drawings.

The Project Engineer should initial and date each sheet and sign and date the cover of the marked-up set to indicate that each sheet was completed and checked. Either the marked-up set (copied to mylar) or redrafted original drawings (updated to reflect as-built status) may be used as final as-built plans, depending on regional policy. Additional sheets and copies of approved shop drawings, schematics, or other working drawings should be added to the original plan sheets as needed to accurately portray the completed project.

If the Final Construction Report is completed prior to completion of as-built plans, it should include a record of the as-built's status (e.g. transmittal memorandum). Final as-built plan sets are distributed as follows: to the FAA on FAA-funded projects (14CFR 152.213c); to the regional maintenance and operations head, the international airport manager, or the owner agency on projects built by the Department for others; to the Highway Data Group on highway projects; and to the Final Construction Report (to replace the transmittal memorandum, if applicable).

16.11. Other Elements of the Final Construction Report

The principal elements of the Final Construction Report are described in other sections; the remaining elements of the report are covered briefly here.

Final Construction Report Summary Sheet

This is the final description similar to that contained in the Invitation for Bids. The summary sheet also gives very basic information about the project including identifying the Project Engineer and the contractor, significant contract dates, and significant contract financial information.

MCL, Final Materials Testing Summary and Project Materials Certification

This is the quantity of all materials tests taken during the project and whether they passed or failed are shown in the Materials Testing Summary (Section 5.4).

The MCL and Material Testing Summary are submitted to the regional quality assurance/materials unit, along with the Project Materials Certification and an attached Memorandum of Exceptions (if necessary).

The regional quality assurance/materials unit reviews the MCL, Materials Testing Summary, signs the Project Materials Certification, and forwards it with the Memorandum of Exceptions (if necessary), to the Project Manager.

Explanation of Overruns, Underruns and Change Documents

A listing of only those original major pay items whose final quantity varied more than 25 percent from the estimated quantity and a brief explanation for each quantity change.

List and briefly explain each change document. On multiple project contracts, separate comparison listings for each project are not necessary.

If there are no overruns, underruns, or change documents on the project, this item is not required.

16.12. Project Materials Certification for Project Closeouts

All federal and state funded airport and highway projects require a Project Materials Certification, which is prepared by the Project Engineer for review and signature by the Regional Quality Assurance Engineer. Use the Project Materials Certification to indicate whether there are:

- no exceptions to the material requirements,
- minor exceptions to the material requirements, or
- exceptions to the material requirements as listed in an attached Memorandum of Exceptions.

The Project Materials Certification is provided to FHWA on all NHS projects. Non-NHS projects shall have a Project Materials Certification, but it is not included in the project closeout package to FHWA.

All FAA projects require a Project Materials Certification to be included in each closeout report to FAA.

All State funded airport and highway projects require a Project Materials Certification to be included in each closeout report.

See Section 17 for a Project Materials Certification Letter example that is signed by the Project Engineer and the Quality Assurance Engineer.

16.12.1 Memorandum of Exceptions

When a Memorandum of Exceptions is required, it is prepared by the Project Engineer from the Project Exception List, and submitted for concurrence to the Regional Quality Assurance Engineer. The Memorandum of Exception is required in the following cases:

- More than 10 percent of the required acceptance tests for any construction product fail to meet contract requirements or are missing from project records.
- Any required acceptance test that has structural implications, fails to meet contract requirements or is missing from project records.

The above guidelines are not intended to reduce testing requirements as set forth in the project Materials Testing Summary.

The Memorandum of Exceptions provides a basis for acceptance of the nonconforming material. An engineering analysis of the nonconforming material's test values should be made to determine the magnitude and extent of the material; and to determine acceptability based on performance and the anticipated service life. If the engineering analysis indicates the construction project can be expected to provide a reasonable but reduced service life, limited Federal participation may be allowed.

16.12.2 Minor Exceptions, Price Adjustment, and Change Orders

If there are exceptions to the material requirements, but those exceptions do not warrant a Memorandum of Exceptions, then those exceptions are considered minor and are listed on the Materials Testing Summary.

Asphalt (or other material) that is subject to price adjustment through the contract language (e.g. Highways QLA or Airports PWL process) is not considered a materials exception.

When a change order alters the terms of a contract so that non-conforming material satisfies the changed contract conditions, that material is not considered a materials exception.

16.13. Project Financial Closure

After the project control unit receives the Letter of Final Acceptance (Section 16.4), they will send a Project Completion Form (PCF) to the Group Chief/PM, the designated construction phase financial manager (Section 2.2).

The construction phase financial account in IRIS cannot be closed to charges until all contracts have been closed, all encumbrances have been liquidated, all final audits of consultant contracts and utility agreements have been completed by Internal Review, and all further charging of expenses to the account have ceased. The PCF form, when signed by the Group Chief/PM, certifies that all construction phase activity is complete, both physically and financially, and allows the construction account to be closed to further charges.

The Group Chief/PM is responsible for contacting all of the support groups that have charged to the construction phase financial account to determine the current status of their involvement with the project and to advise them that the construction account is being closed to further charges. The Group Chief/PM needs to make certain that all consultant/utility contracts, involving payments out of the construction account, have been completed and are financially closed.

The remaining balance in all encumbrances in the construction phase, including the encumbrance to the construction contractor, must be liquidated. If the Internal Review audits have not been completed, the Group Chief/PM should provide the Internal Review unit with a list of all construction phase contracts and with the information they need to audit each one.

If the construction phase is still active when the Group Chief/PM receives the PCF form, they should return the form to the project control unit giving them an estimated closure date. When they reach that date, they repeat the procedure. When all of the construction phase work is ultimately complete, the Group Chief/PM authorizes the financial closure of the construction financial account.

16.14. Final Federal Reimbursement

Statewide Grants & Projects in the Administrative Services Division prepares and processes the billings

for FHWA and FAA final reimbursement (Final Billing) in the same manner as the interim billings. The Project Engineer is not directly involved in the billing process.

Statewide Grants & Projects prepares the Final Billing after reviewing the financial data in IRIS, the final estimate assembly, and the Letter of Final Acceptance, and closing all of the project's financial phase accounts.

After Final Billing is complete, the Final Voucher is compiled. Statewide Planning Division prepares the Final Voucher for submission to the FHWA and closure of the project.

The FHWA will not process the Department's Final Voucher until receipt of:

- A copy of the Final Inspection Form FHWA-1446C-AKDO
- The Final Construction Report, including the:
    - Final Estimate Assembly
    - Project Materials Certification (in the format shown in 23 CFR 637.207)
    - Explanation of change documents and claims

After closing an FAA's project financial phase accounts, the Final Billing (the Final Grant Reimbursement Request) is prepared.

The FAA will process the final payment request after receipt of the closeout report. Project Control prepares the closeout report which includes:

- Final construction Report
- Final Outlay Report and Request for Reimbursement for Construction Projects (Form SF-271)
- Final Federal Financial Report (Form SF-425)
- Sponsor Certification for AIP Grant Close-out
- Final Payment Summary Worksheet
- Inventory of Non-Expendable Personal Property (if an Equipment Acquisition project)

After the FAA's final grant payment, they issue their Grant Closure letter to Statewide Aviation and the regional office.

16.15. Record Retention & Disposal

Place the field records and regional office records on the project in storage. When the Project Engineer completes all work on the project, transmit to the Group Chief/PM for storage:

- All of the field records including files,
- conformed contracts & plans,
- engineer's diary,
- inspector's daily reports,
- survey books,
- materials test results,
- scale tickets,
- photographic records,
- Certified Payrolls,
- SWPPP with amendments, and
- SWPPP inspection reports.

According to regional policy or practices, store or transmit to the owner agency, regional maintenance and operations, or the international airport:

- A complete set of materials submittals,
- maintenance and operating manuals,
- warranties,
- a set of the completed as-built drawings (FAA allows CAD as-built drawings on CD),
- field survey books on airport projects to the aviation design unit, and
- field survey books on highway projects, dealing with original survey monuments, to the right-of-way unit.

➢ Personnel records should be removed and destroyed.

Store and maintain the original records (may also be microfilm or electronic records) for the following minimum periods of time:

- State-funded projects – three years from the date of final acceptance

- State Student Loan Corporation funded projects – three years from the date of final acceptance or until July 1, 2021; whichever is later
- FAA-funded projects – three years from the date of final grant payment (14 CFR 151.55c)
- FHWA-funded projects – three years after submittal of the Final Voucher (49 CFR 18.42b)
- SWPPP records for minimum three years after NOT with DEC

In the event of a lawsuit, the records should be kept three years after all court settlements.

Figure 16-1
Project Closeout Schematic

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17. Exhibits – Index, Forms, Letters and Worksheets

There are exhibits - Check with the regional office and Construction Standards Website for current forms.

17.1. Alaska Products Preference Worksheet (APPW Form)

17.2. Alaska Products Preference Worksheet Instructions

17.3. Alaska Veteran's Preference Affidavit Form 25D-17

17.4. Asphalt Adjustment (xls) Form 25D-075

17.5. Assignee's Release (Form 25D-118)

17.6. Bidder Registration Form 25D-6

17.7. Bridge Formula Chart for Gross Vehicle Weights (April 2010)

17.8. Bridge (Temporary) Submittal Checklist (Form 25D-080)

17.9. Building Facilities Form

17.10. Certification of Final Estimate (Form 25D-116)

17.11. Change Order (Form 25D-068)

17.12. Continuation Sheet (Form 25D-065)

17.13. Contractor Self Certification for Subs. and Lower Tier Subs

17.14. Contractor Intent to Claim (Form 25D-18

17.15. Contractor's Release (Form 25D-117)

17.16. Daily Concrete Placement Report (Form 25D-207)

17.17. Daily Force Account Summary Sheet (Form 25D-196)

17.18. Daily Report for Time & Materials Work (Form 25D-195)

17.19. Delegation of Authority Letter

17.20. Delegation of Authority to Assistant

17.21. Directive (Form 25D-069)

17.22. DBE CUF Monitoring Report (Form 25A-298)

17.23. DBE Contact Report (Form 25A-321A)

17.24. DBE Monthly Summary of DBE Participation (Form 25A-336)

17.25. Earthwork & Mass Quantity Computation Sheets (Form 25D-40A)

17.26. Encumbrance Memo

17.27. EEO Monthly Employment Utilization Report (25A-303)

17.28. FHWA Contractors Annual EEO Report (Form PR-1391

17.29. Estimate of Cost (Form 25D-049)

17.30. "Estimate.xls" Instructions

17.1. Alaska Products Preference Worksheet (APPW Form)

ALASKA PRODUCTS PREFERENCE WORKSHEET

(See Reverse Side for Instructions)

Project Name and Number: _____

Bid Phase: _____ Contractor: _____

PRODUCT	MANUFACTURER	CLASS & PREFERENCE PERCENTAGE	TOTAL DECLARED VALUE	REDUCTION AMOUNT
			TOTAL	

(APPW) Form Alaska Product Preference Worksheet, Page ____ of ____ Revised 4/97

17.2. Alaska Products Preference Worksheet Instructions

INSTRUCTIONS FOR ALASKA PRODUCTS PREFERENCE WORKSHEET

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

BIDDERS INSTRUCTIONS:

A. General. The contracting Agency may request documentation to support entries made on this form. False presentations may be subject to AS 36.30.687. All Bidder's entries must conform to the requirements covering bid preparations in general. Discrepancies in price extensions shall be resolved by multiplying the declared total value times the preference percentage and adjusting any resulting computation(s) accordingly.

B. Form Completion – BASIC BIDS.

(1) Enter project number and name, the words "Basic Bid" and the CONTRACTOR'S name in the heading of each page as provided.

(2) The Bidder shall compare those candidate products appearing on the preference listing (see Special Notice comments above) against the requirements of the technical specifications appearing in the contract documents. If the Bidder determines that a candidate product can suitably meet the contract requirements, then that product may be included in the worksheet as follows:

(3) For each suitable product submitted under the "Basic Bid" enter:

- The product name, generic description and its corresponding technical specification section number under the heading "PRODUCT",
- The company name of the Alaska producer under the heading "Manufacturer", and
- The product class (I, II, or III) and preference percentage (3, 5, or 7% respectively) under the "CLASS/% heading.

(4) For each product appearing on the list and to be utilized by the CONTRACTOR enter:

- Under the heading "TOTAL DECLARED VALUE" the manufacturer's quoted price of the product, (caution: this value is to be the manufacturer's quoted price at the place of origin and shall not include costs for freight, handling or miscellaneous charges of incorporating the product into the Work,) and
- The resulting preference – i.e. the preference percentage times the total declared value amount – under the heading "REDUCTION AMOUNT".

(5) Continue for all "suitable" basic bid products. If the listing exceeds one page enter the words "Page # ___ SUB" in front of the word "TOTAL" and on the first line of the following pages enter "SUBTOTAL OF REDUCTION AMOUNT FROM PREVIOUS PAGE".

(6) On the final page of the listing enter "BASIC BID PREFERENCE GRAND" immediately before the word "TOTAL".

(7) Total the entries in the "REDUCTION AMOUNT" column for each page by commencing at the first entry for that page. If a continuation page exists, ensure that the subtotal from the previous page is computed into the running total. Number pages as appropriate.

(8) Compute a Grand Total for the Basic Bid Preference. Enter the amount on the final page of the worksheet. (Note: When solicitations require written bids this amount should also be entered on line "C" of the Basic Bid Schedule.) Submit worksheet(s) with the Bid Schedule.

C. Form Completion – ALTERNATE BIDS.

(1) Enter project number and name, the words "ALTERNATE BID # __", and CONTRACTOR'S name in the heading of each page as provided.

(2) On the first entry line enter "ADDITIONAL ALASKA PRODUCTS FOR ALTERNATE BID # __", and repeat procedures 2 through 5 under part B these Bidder's instructions except that references to "Basic Bid" shall be replaced with the words "Alternate Bid # __".

(3) Following the listing of all additional Alaska products enter the words "ADDITIONAL PRODUCTS PREFERENCE FOR ALTERNATE BID # __ - SUBTOTAL" and enter a subtotal amount for all additional products as listed. Subtotal amount to be determined by adding all additional product entries in the "REDUCTION AMOUNT" column.

(4) Skip three lines and enter "LESS THE FOLLOWING NON-APPLICABLE ALASKA PRODUCTS:

(5) Beginning on the next line, enter the product name and manufacturer of each Alaska Product appearing on the "Basic Bid" listing which would be deleted or reduced from the Project should the "Alternate Bid" be selected. Details of entry need only be sufficient to clearly reference the subject product. (i.e. "Pre-hung doors by Alaska Door Co., Anchorage.") Products being reduced shall specify the amount of the reduction. Should no products require deletion enter "None". When a product is listed as a "NON-APPLICABLE ALASKA PRODUCT" for this alternate bid and if under the basic bid the Bidder received a preference on his basic bid as a result of that product, then the applicable entries under the headings "TOTAL DECLARED VALUE" and "REDUCTION AMOUNT" (for each product and from the basic bid listing) shall also be entered into the corresponding headings of this form. Where only a portion of the products has been deleted, the entry (which will differ from those on the basic bid listing) may be "pro-rated" or as otherwise substantiated.

(6) Following the listing of all non-applicable Alaska products enter the words "NON-APPLICABLE PRODUCTS PREFERENCE FROM BASIC BID ____ SUBTOTAL" and enter a subtotal amount for all non-applicable products listed. Subtotal amount to be determined by adding all non-applicable entries in the "REDUCTION AMOUNT" column.

(7) At the bottom of the final page enter the words "ALTERNATE BID # ____ PREFERENCE GRAND" immediately before the word "TOTAL".

(8) Compute a Grand Total for the Alternate Bid Preference (for Alternate # ____) by subtracting the non-applicable product preference subtotal from the additional product preference subtotal. Enter on the final page. (Note: When solicitations require written bids this amount should also be entered on line "C" of the Alternate Bid Schedule.) Submit separate worksheet(s) with each Alternate Bid.

17.3. Alaska Veteran's Preference Affidavit Form 25D-17

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

ALASKA VETERAN'S PREFERENCE AFFIDAVIT

In response to the Invitation to Bid for:

Project Name and Number_____.

I certify under penalty of perjury that _____
(Name) qualifies for the Alaska Veteran's Preference under the following conditions:

(a) If a bidder qualifies under AS 36.30.170(b) as an Alaska bidder and is a qualifying entity, a five percent bid preference shall be applied to the bid price (preference may not exceed $5,000). In this subsection, "qualifying entity" means a:

(1) Sole proprietorship owned by an Alaska Veteran;
(2) Partnership under AS 32.06 or AS 32.11 if a majority of the members are Alaska Veteran's;
(3) Limited liability company organized under AS 10.50 if a majority of the individuals are Alaska Veterans.
(4) Corporation that is wholly owned by individuals and a majority of the individuals are Alaska veterans.

(b) To qualify for a preference under this section, a bidder must add value by the bidder itself actually performing, controlling, managing and supervising a significant part of the services provided, or the bidder must have sold supplies of the general nature solicited to other state agencies, governments, or the general public.

(c) In this section, "Alaska Veteran" means an individual who is a:

(1) Resident of this state; and
(2) Veteran; means an individual who:

(A) Served in the:

(i) Armed Forces of the United States, including a reserve unit of the United States armed forces; or
(ii) Alaska Territorial Guard, the Alaska Army National Guard, the Alaska Air National Guard, or the Alaska Naval Militia; and

(B) Was separated from the service under a condition that was not dishonorable.

_____
Authorized Signature

_____ _____
Printed Name Date

Form 25D-17 (June 2012) Page 1 of 1

17.4. Asphalt Adjustment (xls) Form 25D-075

#	Sample No.	Date Sampled	1"	3/4"	1/2"	3/8"	#4	#8	#16	#30	#50	#100	#200	%AC	%Comp
Rev.	Upper Spec. Limit		0	0	0	0	0	0	0	0	0	0	0	0	98
7/22/9	Target Value														
	Lower Spec. Limit		0	0	0	0	0	0	0	0	0	0	0	0	92
			LOT:	>>>Enter Job & Lot Name Here<<<								Press F9 for calculations			
1															
2															
3															
4															
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15															
16															
17															
	Mean														
	Standard Deviation														
	Largest Deviation				######	######	######	######	######	######	######	######	######	######	######
	Test Criterion		0	0	0	0	0	0	0	0	0	0	0	0	0
	Critical Test Crit		#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

OUTLIERS

Sample No.	1"	3/4"	1/2"	3/8"	#4	#8	#16	#30	#50	#100	#200	%AC	%Comp
	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
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	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

INLIERS

	1"	3/4"	1/2"	3/8"	#4	#8	#16	#30	#50	#100	#200	%AC	%Comp
	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
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	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
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	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Number of Samples		#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Mean Average													
Standard Deviation													
Upper Quality Index				######	######	######	######	######	######	######	######	######	######
Lower Quality Index				######	######	######	######	######	######	######	######	######	######
Percent in Upper Limit			######	######	######	######	######	######	######	######	######	######	######
Percent in Lower Limit			######	######	######	######	######	######	######	######	######	######	######
Quality Level				######	######	######	######	######	######	######	######	######	######
Pay Factor				#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Weight Factor		0	4	4	4	4	5	5	5	5	20	40	
Price Adjustment		#####	######	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	
Composite Pay Factor	#VALUE!												
Density Pay Factor	#N/A												
Minimum Pay Factor	**#VALUE!**												

17.5. Assignee's Release (Form 25D-118)

25D-118
(5/83)

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

ASSIGNEE'S RELEASE

RE: Project No(s). _____

Project Name _____

Pursuant to the terms of the written contract dated _____, 19____,

for the construction of _____
Project Number(s)

and in consideration of the total final sum of _____

_____

Dollars ($ _____) which has been or is to be paid under said contract by the STATE OF ALASKA

(hereinafter called the STATE) to the Contractor or his assignees, the _____
Assignee's Name and Address

_____

(1) a corporation organized and existing under the laws of the State of _____,

(2) a partnership consisting of _____,

(3) an individual trading as _____,

(hereinafter called the Assignee), upon receipt of that part of the said sum due under his assignment does remise, release and discharge the STATE, its officers, agents and employees, of and from all liabilities, obligations, claims and demands whatsoever under or arising from the said contract, whether known or unknown and whether or not ascertainable at the time of the execution of this instrument, except claims asserted in accordance with the provisions of the above-named Contract.

The Assignee agrees, in connection with claims which are not released as set forth above, that final payment under the said contract does not modify the requirements and limitations imposed by the Contract, including without limitation those provisions relating to notification to the Contracting Officer and relating to the prosecution of claims.

IN WITNESS WHEREOF, this release has been executed this _____ day of _____, 19____.

(Assignee) _____

WITNESS _____

BY _____

TITLE _____

(NOTE: In the case of a corporation, witnesses are not required, but certificate below must be complete.)

CERTIFICATE

I, _____, certify that I am the _____

(official title) of the corporation named as Assignee in the foregoing release; that _____

who signed said release on behalf of the Assignee was then _____ (official title)

of said corporation; that said release was duly signed for and in behalf of said corporation by authority of its governing body and is within the scope of its corporate powers.

_____ (Signature)
Name:

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year written above.

My Commission Expires: _____
Notary Public

17.6. Bidder Registration Form 25D-6

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**.

Form 25D-6 (1/16)

SMALL BUSINESS ENTERPRISE PROGRAM (SBE) SELF-REGISTRATION

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.

[Complete the Section below only if you are a Self-Certified SBE Firm] All businesses wishing to be eligible as a SBE are required to submit a SBE Self-Registration form. The SBE Self-Registration form 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 99519-690
Phone: (907) 269-0851
Fax: (907) 269-0847

A. SBE Directory Information

1. Can you verify at time of award that your firm (including affiliates) does not exceed the small business size standards as described by the Small Business Administration (SBA) for the last three years of gross annual receipts per 49 CFR 26.65(a)? To find more information about the SBA size standards, visit the SBA website https://www.sba.gov/content/small-business-size-standards. ◯ 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 (including affiliates) 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. Can you verify at time of award that each individual owner of 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*

4. Contact Info.

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

Form 25D-6 (1/16)

17.7. Bridge Formula Chart for Gross Vehicle Weights (April 2010)

BRIDGE FORMULA WEIGHTS

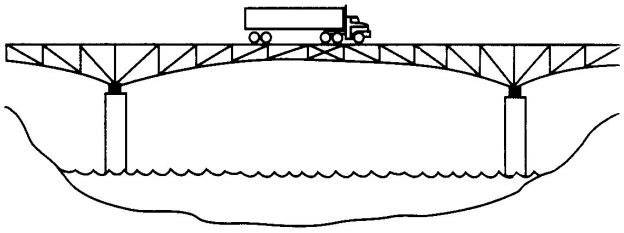
U.S. Department
of Transportation

Federal Highway Administration

January 1994

NOTE- For additional copies contact:
Federal Highway Administration
400 7th Street, SW
Washington, D.C. 20590
(202) 366-2212

$$W = 500\left[\frac{LN}{N-1} + 12N + 36\right]$$



Publication No. FHWA-MC-94-007
HIA-20/1(15M)E
HIA-10/R1-96(7.5M)
HIA-20/10-98(10M)

Three questions are addressed by this pamphlet with regard to the Bridge Formula: What is it? Why is it necessary? How is it used?

WHAT IS IT?

$$W = 500\left[\frac{LN}{N-1} + 12N + 36\right]$$

W = the maximum weight in pounds that can be carried on a group of two or more axles to the nearest 500 pounds.

L = the distance in feet between the outer axles of any two or more consecutive axles.

N = the number of axles being considered.

This formula limits the weight on groups of axles in order to reduce the risk of damage to highway bridges. Allowable weight depends on the number of axles a vehicle has and the distance between those axles. However, the single- or tandem-axle weight limits supersede the Bridge Formula limits for all axles not more than 96 inches apart.

WHY IS THE FORMULA NECESSARY?

Bridges on Interstate System highways are used by a wide variety of traffic. They are designed to support expected loadings. However, as trucks grew heavier in the 1950's and 1960's, something had to be done to protect bridges. The solution was to tie allowable weights to the number and spacing of axles.

Axle spacing is as important as axle weight in bridge design. A bridge is analogous to thin ice on a pond. Walking on the ice concentrates a person's weight on the small area covered by the individual's feet, and the ice may break. Lying down, however, spreads the same weight over a much larger area, and the ice is less likely to break. Consider trucks crossing a bridge:

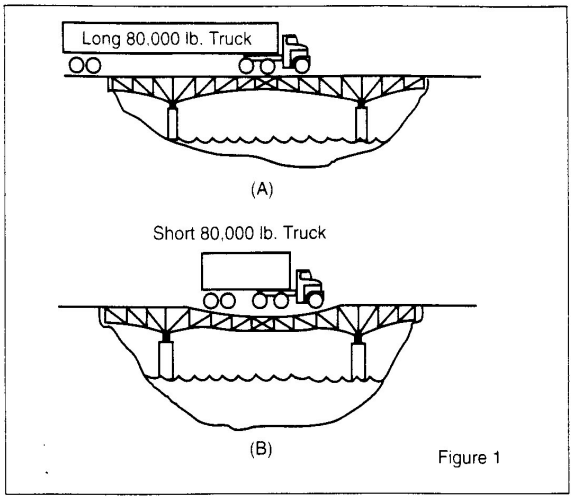


Figure 1

In Figure 1(A), the stress on bridge members as the longer truck rolls across is much less than that caused by the short vehicle in Figure 1 (B), even though both trucks have the same total weight and individual axle weights. The weight of the longer vehicle is spread out, while the shorter vehicle has all of the weight concentrated on a small area.

The Federal-Aid Highway Amendments of 1974 increased the weights allowed on the Interstate System to 20,000 pounds on a single axle, 34,000 pounds on a tandem axle, and 80,000 pounds gross weight (23 U.S.C. 127). But Congress balanced this concession to productivity by enacting the Bridge Formula. The result is that motor vehicles may be loaded to the maximum weight only if each group of axles on the vehicle and their spacing also satisfy the requirements of the Formula. This prevents the vehicle from overstressing bridges in the same way that a person lying down on thin ice woulci minimize the risk of breaking through.

Until 1982, Federal law set only upper limits (or ceilings) on Interstate System weight limits. A few States retained significantly lower weight limits which eventually became barriers to long-distance truck traffic. In 1982, Federal law was amended to make Interstate System weight limits, including the bridge formula limits, both the maximum and the minimum weights (i.e., floors and ceilings) that States must allow on the Interstate System.

HOW IS THE FORMULA USED?

Some definitions are needed to use the Bridge Formula correctly.

Gross Weight—the weight of a vehicle or vehicle combination and any load thereon. The Federal gross weight limit on the Interstate System is 80,000 pounds.

Single-Axle Weight—The total weight on one or more axles whose centers are not more than 40 inches apart. The Federal single-axle weight limit on the Interstate System is 20,000 pounds.

Tandem-Axle Weight—The total weight on two or more consecutive axles more than 40 inches but not more than 96 inches apart. The Federal tandem-axle weight limit on the Interstate System is 34,000 pounds.

Interstate System weight limits in some States may be higher than these figures due to "grandfather" rights. When the Interstate System axle and gross weight limits were adopted in 1956, States were allowed to keep or "grandfather" those which were higher. In 1975, States were also allowed to keep "grandfathered" bridge formula limits which were higher than those established for the Interstate System.

Bridge Formula calculations yield a series of weights (pages 6-7). However, the single-axle weight limit replaces the Bridge Formula weight limit on axles not more than 40 inches apart, and the tandem-axle weight limit replaces the Bridge Formula weight limit for axles over 40 but not more than 96 inches apart. At 97 inches apart, two axles can carry 38,000 pounds and three axles 42,000 pounds, as shown in Figure 2.

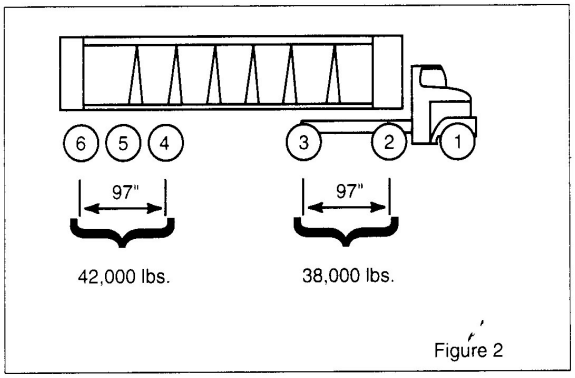


Figure 2

Federal law provides that any two or more consecutive axles may not exceed the weight computed by the Formula even though single axles, tandem axles, and gross weight are within legal limits. In other words, the axle group that includes the entire truck—sometimes called the "outer bridge" group—must comply with the Bridge Formula. But interior combinations of axles, such as the "tractor bridge" (axles 1, 2, and 3) and "trailer bridge" (axles 2, 3, 4, and 5), must also be in compliance with weights computed by the Formula (Figure 3).

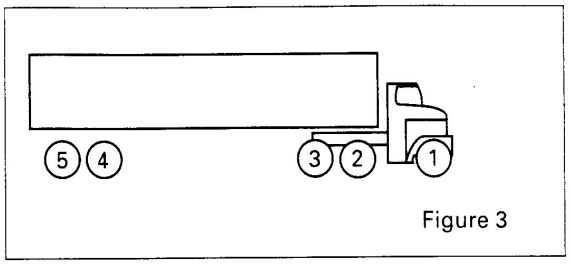


Figure 3

The most common vehicle checked for compliance with weight limit requirements is shown in Figure 3. While the Bridge Formula applies to each combination of two or more axles, experience shows that axle combinations 1 through 3, 1 through 5, and 2 through 5 are critical and must be checked. If these combinations are found to be satisfactory, all of the others on this type of vehicle will normally be satisfactory.

The vehicle with weights and axle dimensions as shown in Figure 4 will be used to illustrate a Bridge Formula check. (Continued on page 8.)

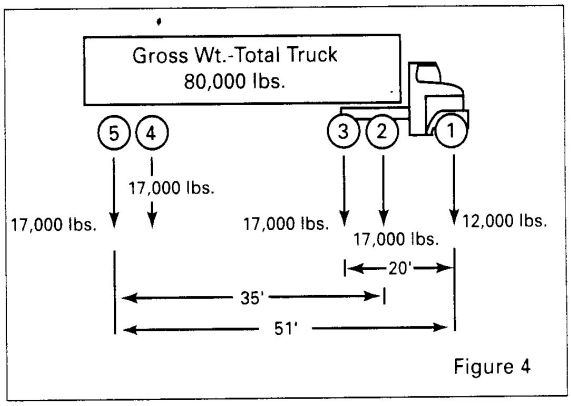


Figure 4

PERMISSIBLE GROSS LOADS FOR VEHICLES IN REGULAR OPERATION [1]

Based on weight formula $W = 500\left[\frac{LN}{N-1} + 12N + 36\right]$

Tandem Axle Weight (see pages 4 & 5)

Distance in feet (L) between the extremes of any group of 2 or more consecutive axles	Maximum load in pounds carried on any group of 2 or more consecutive axles							
N =	2 AXLES	3 AXLES	4 AXLES	5 AXLES	6 AXLES	7 AXLES	8 AXLES	9 AXLES
4	34,000	----------	----------	----------	----------	----------	----------	----------
5	34,000	----------	----------	----------	----------	----------	----------	----------
6	34,000	----------	----------	----------	----------	----------	----------	----------
7	34,000	----------	----------	----------	----------	----------	----------	----------
8 & less	34,000	34,000	----------	----------	----------	----------	----------	----------
more than 8	38,000	42,000	----------	----------	----------	----------	----------	----------
9	39,000	42,500	----------	----------	----------	----------	----------	----------
10	40,000	43,500	----------	----------	----------	----------	----------	----------
11	----------	44,000	----------	----------	----------	----------	----------	----------
12	----------	45,000	50,000	----------	----------	----------	----------	----------
13	----------	45,500	50,500	----------	----------	----------	----------	----------
14	----------	46,500	51,500	----------	----------	----------	----------	----------
15	----------	47,000	52,000	----------	----------	----------	----------	----------
16	----------	48,000	52,500	58,000	----------	----------	----------	----------
17	----------	48,500	53,500	58,500	----------	----------	----------	----------
18	----------	49,500	54,000	59,000	----------	----------	----------	----------
19 ---Example---	----------	50,000	54,500	60,000	----------	----------	----------	----------
20 -(see page 8)-	----------	51,000	55,500	60,500	66,000	----------	----------	----------
21	----------	51,500	56,000	61,000	66,500	----------	----------	----------
22	----------	52,500	56,500	61,500	67,000	----------	----------	----------
23	----------	53,000	57,500	62,500	68,000	----------	----------	----------
24	----------	54,000	58,000	63,000	68,500	74,000	----------	----------
25	----------	54,500	58,500	63,500	69,000	74,500	----------	----------
26	----------	55,500	59,500	64,000	69,500	75,000	----------	----------
27	----------	56,000	60,000	65,000	70,000	75,500	----------	----------
28	----------	57,000	60,500	65,500	71,000	76,500	82,000	----------
29	----------	57,500	61,500	66,000	71,500	77,000	82,500	----------
30	----------	58,500	62,000	66,500	72,000	77,500	83,000	----------
31	----------	59,000	62,500	67,500	72,500	78,000	83,500	----------
32	----------	60,000	63,500	68,000	73,000	78,500	84,500	90,000
33	----------	----------	64,000	68,500	74,000	79,000	85,000	90,500
34	----------	----------	64,500	69,000	74,500	80,000	85,500	91,000
35	----------	----------	65,500	70,000	75,000	80,500	86,000	91,500
36	----------	Exception	66,000	70,500	75,500	81,000	86,500	92,000
37	----------	(see page 10)	66,500	71,000	76,000	81,500	87,000	93,000
38	----------	----------	67,500	71,500	77,000	82,000	87,500	93,500
39	----------	----------	68,000	72,500	77,500	82,500	88,500	94,000
40	----------	----------	68,500	73,000	78,000	83,500	89,000	94,500
41	----------	----------	69,500	73,500	78,500	84,000	89,500	95,000
42	----------	----------	70,000	74,000	79,000	84,500	90,000	95,500
43	----------	----------	70,500	75,000	80,000	85,000	90,500	96,000
44	----------	----------	71,500	75,500	80,500	85,500	91,000	96,500
45	----------	----------	72,000	76,000	81,000	86,000	91,500	97,500
46	----------	----------	72,500	76,500	81,500	87,000	92,500	98,000
47	----------	----------	73,500	77,500	82,000	87,500	93,000	98,500
48	----------	----------	74,000	78,000	83,000	88,000	93,500	99,000
49	----------	----------	74,500	78,500	83,500	88,500	94,000	99,500
50	----------	----------	75,500	79,000	84,000	89,000	94,500	100,000
51	----------	----------	76,000	80,000	84,500	89,500	95,000	100,500
52	----------	----------	76,500	80,500	85,000	90,500	95,500	101,000
53	----------	----------	77,500	81,000	86,000	91,000	96,500	102,000
54	----------	----------	78,000	81,500	86,500	91,500	97,000	102,500
55	----------	----------	78,500	82,500	87,000	92,000	97,500	103,000
56	----------	Interstate Gross	79,500	83,000	87,500	92,500	98,000	103,500
57	----------	Weight Limit	80,000	83,500	88,000	93,000	98,500	104,000
58	----------	(see page 4)	----------	84,000	89,000	94,000	99,000	104,500
59	----------	----------	----------	85,000	89,500	94,500	99,500	105,000
60	----------	----------	----------	85,500	90,000	95,000	100,500	105,500

[1]The permissible loads are computed to the nearest 500 pounds as required by statute.

[2]The following loaded vehicles must not operate over H15-44 bridges: 3-S2 (5-axle) with wheelbase less than 38 feet; 2-S1-2 (5-axle) wih wheelbase less than 45 feet; 3-3 (6-axle) with wheelbase less than 45 feet; and 7- 8- and 9-axle vehicles regardless of wheelbase.

6 7

Before checking a vehicle for compliance with the Bridge Formula, its single-axle, tandem-axle, and gross weight should be checked. Here the single axle (number 1) does not exceed 20,000 pounds, tandems 2-3 and 4-5 do not exceed 34,000 pounds each, and the gross weight does not exceed 80,000 pounds. These preliminary requirements are thus satisfied. The first Bridge Formula combination is checked as follows:

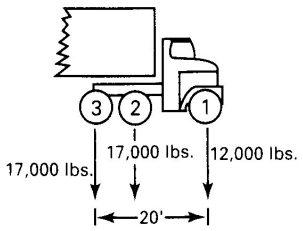


Figure 5

Check of 1 thru 3 (Figure 5)
Actual weight = 12,000 + 17,000 + 17,000 = 46,000 pounds.
N = 3 axles.
L= 20 feet.

$$W = 500\left[\frac{LN}{N-1} + 12N + 36\right]$$

$$W = 500\left[\frac{(20 \times 3)}{(3 - 1)} + (12 \times 3) + 36\right] = 51{,}000\#$$

W maximum = 51,000#, which is more than the actual weight of 46,000#, so the Bridge Formula requirement is satisfied.

Example—From the Bridge Table (pages 6 & 7)
This same number (51,000#) could have been obtained from the Bridge Table by reading down the left side to L = 20 and across to the right where N = 3.

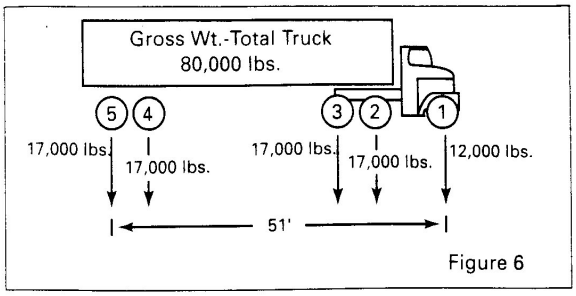


Figure 6

Now check axles 1 thru 5 (Figure 6)
Actual weight = 12,000 + 17,000 + 17,000 + 17,000 + 17,000 = 80,000#.
W maximum, from the Bridge Table for "L" of 51 feet and "N" of 5 = 80,000#.

Therefore, this axle spacing is satisfactory.

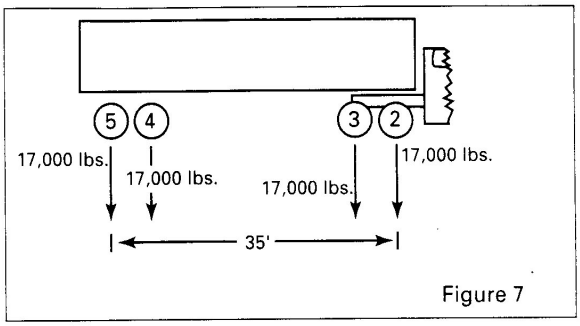


Figure 7

Now check axles 2 thru 5 (Figure 7)
Actual weight = 17,000 + 17,000 + 17,000 + 17,000= 68,000#.
W maximum, Bridge Table for "L" of 35 feet and "N" of 4 = 65,500#.

This is a violation because the actual weight exceeds the weight allowed by the Bridge Formula. To correct the situation, some load must be removed from the vehicle or the axle spacing (35 feet) must be increased.

EXCEPTION TO FORMULA AND BRIDGE TABLE

Federal law (23 U.S.C.127) includes one exception to the Bridge Formula and the Bridge Table—two consecutive sets of tandem axles may carry 34,000 pounds each if the overall distance between the first and last axles of these tandems is 36 feet or more. For example, a five-axle tractor-semitrailer combination may carry 34,000 pounds both on the tractor tandem (axles 2 and 3) and the trailer tandem (axles 4 and 5), provided axles 2 and 5 are spaced at least 36 feet apart. Without this exception, the Bridge Formula would allow an actual weight of only 66,000 to 67,500 pounds on tandems spaced 36 to 38 feet apart.

BRIDGE FORMULA APPLICATION TO SINGLE UNIT TRUCKS

The procedure described above can be used to check any axle combinations, but several closely spaced axles usually produce the most critical situation.

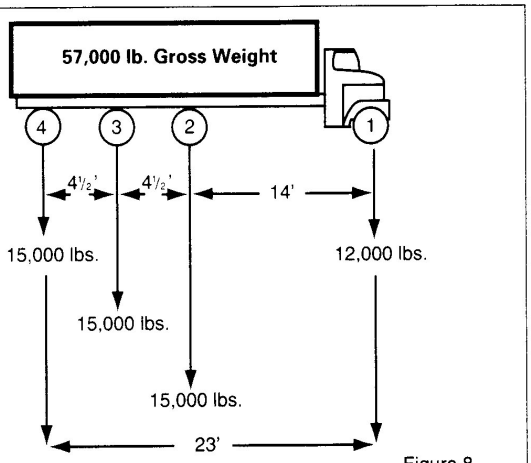


Figure 8

The truck in Figure 8 satisfies the single axle weight limit (12,000# is less than 20,000#), the tandem axle limit (30,000# is less than 34,000#) and gross weight limit (57,000# is less than 80,000#). With these restrictions satisfied, a check will be made for Bridge Formula requirements, axles 1 through 4.

Actual weight = 12,000 + 15,000 +15,000 + 15,000 = 57,000#.
W maximum for "N" of 4 and "L" of 23 feet = 57,500 from the Bridge Table.
Since axles 1 thru 4 are satisfactory, check axles 2 thru 4:
W (actual) = 15,000 + 15,000 + 15,000 = 45,000#.
W maximum for "N" of 3 and "L" of 9 feet= 42,500# (From the Bridge Table).

This is a violation. The load would have to be reduced, axles added, or spacing increased, to comply with the Bridge Formula .

CAUTION

This pamphlet paraphrases the actual provision in 23 U.S.C. 127 and 23 CFR 658 for the sake of clarity. In case of a dispute, the statue and regulations will govern.

Previous editions of this pamphlet released under the title "Bridge Gross Weight Formula", dated April 1984, remain valid. Neither the Formula nor any resulting maximum gross weight values (table entries) have been changed.

17.8. Bridge (Temporary) Submittal Checklist (Form 25D-080)

State of Alaska
Alaska Department of Transportation & Public Facilities

Temporary Bridge Submittal Checklist (Form 25D-080)

Each temporary crossing location is slightly different, and each site requires a unique design. The Contractor is required to submit a design that provides for the safe passage of public traffic, DOT/PF project staff and the Contractor's operations. An Alaska registered professional engineer employed by (or under contract to) the contractor must design, seal and sign the temporary crossing working drawings. The Engineer with support from the DOT/PF Bridge Section will check the working drawings for structural adequacy, contract compliance and overall completeness.

Before the Bridge Section can perform the check, a complete submittal package must be received from the Contractor. While each temporary crossing site is unique, a complete submittal must include all of the items listed below. Additional information and details may be required for unusual situations.

1. Bridge Layout
    a. Plan view
        1. Layout / profile grade line
        2. Traveled way width
        3. Top, toe and slopes of cuts and fills
        4. Horizontal clearance under structure (if over traffic)
        5. Direction of stream flow (if over water)
        6. North arrow
        7. Alignment data
        8. Skew angle
        9. Bank protection
        10. Centerlines of piers
    b. Elevation View
        1. Abutment and pier numbers
        2. Datum line and elevation
        3. Approximate original ground line at bridge centerline
        4. Total bridge length
        5. Span lengths
        6. Bank protection
        7. Vertical clearance or freeboard
    c. Typical Section Including Typical Piers
        1. Roadway width on the bridge
        2. Bridge width
        3. Typical pier
        4. Girders, deck and railings/barriers
        5. Deck surfacing
        6. Location of profile grade
        7. Identify girder and deck type

Form 25D-080 (6/09) 1

Temporary Bridge Submittal Checklist (Form 25D-080)

8. Pedestrian accommodations
9. Utilities

2. Details
    a. Lateral bracing
    b. Blocking
    c. Deck
    d. Railings and barriers
    e. Approach railings and transitions
    f. Erection and removal details
3. Foundation Information
    a. Allowable and applied soil bearing pressure values for spread footings
    b. Pile types, loads, capacities, factors of safety and minimum tip elevation
4. Traffic Openings (if over public or private roads)
5. Pedestrian Accommodations (if specified)
6. Lighting Plan (if specified)
7. Number and name each plan sheet
8. Design Notes
    a. Design specifications
    b. Live load
    c. Dead load
    d. Seismic values
        1. Acceleration coefficient
        2. Site coefficient
    e. Material properties (f'c, Fy, ASTM Designations)
9. Supporting Design Computations
10. Professional Engineer Signature

The Contractor must schedule their operations to allow a minimum of forty five (45) working days for review and checking of the submittal prior to constructing or ordering materials for temporary crossings.

Form 25D-080 (6/09) 2

17.9. Building Facilities Form

DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
BUILDING FACILITIES FORM

☐ ADD ☐ CHANGE ☐ DELETE*

LOCATION/TOWN PROPERTY DESCRIPTION SQ FT BOUGHT/BUILT YEAR / MONTH ORIGINAL VALUE

DOT&PF PROPERTY INFORMATION		RISK MANAGEMENT PROPERTY INFORMATION	
Depatment Property Number Assigned		Risk Management Property Number Assigned	
AKSAS Project # and Name		Department	25
Contractor		Division #	3
Construction Dates: Begin	End	Subdivision #	
Administration & Inspection Costs		Town #	
Site Costs	Included in LS	Class	
Building Costs		Sprinkler	☐ Yes ☐ No
Construction Contract Costs		Fire Protection	☐ Yes ☐ No
Type of Construction		Replacement Value	
Foundation Type		% Occupancy	
Dimensions and Number of Stories			
Is building heated?	☐ Yes ☐ No		
Room Shape	Rectangular	Insure	☐ Yes Value
Condition			☐ No
For Generators: make/model/serial number			

AKSAS CODING

AR COLLOCODE PROGRAM CODE LEDGER CODE ZIP CODE

*If building is to be deleted, provide a brief explanation of building status:

Facility Manager: _____ Date _____

S:\Operbudg\Excel\Building Facilities Form

17.10. Certification of Final Estimate (Form 25D-116)

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

CERTIFICATION OF FINAL ESTIMATE

Project No(s).: _____ Total Amount of Project: _____

Project Name: _____

DEPARTMENT CERTIFICATION

The undersigned certifies that (s)he was in charge of the construction engineering for the State of Alaska for this project and that the foregoing final estimate was prepared under her/his direction and supervision, that to the best of her/his knowledge and belief the work set forth in said estimate has been performed in accordance with the plans and specifications and that the quantities and amounts set forth are correct.

_____, Project Engineer Date _____

The undersigned certifies that (s)he has reviewed the foregoing final estimate and that payment for the quantities shown therein conforms with the contract and is true and correct to the best of her/his knowledge and belief.

_____, Review Engineer Date _____

The undersigned certifies that the construction engineering for this project was under the supervision of authorized representatives of her/his office, that the foregoing final estimate has been prepared and reviewed by such authorized representatives, that (s)he has reviewed the work and the estimate, that the work has been performed in substantial conformance with the specifications and that the quantities and amounts shown in the estimate are true and correct to the best of her/his knowledge and belief.

_____, Construction Engineer Date _____

CONTRACTOR CERTIFICATION

The undersigned certifies that (s)he was the contractor on the above named project; that the work and materials for which payment is being included in this final estimate have been performed or furnished; that payment is just and due, and has not been made in full; and that her/his signature hereon authorizes final payment therefor.

The undersigned further certifies that all commitments or obligations made to property owners and others covering materials, royalties, access rights, waste areas, and other such rights of any nature, have been fully paid and satisfied; that all Federal, State and Local taxes incurred by the contractor, subcontractor, or other person or persons, in the performance of this contract have been fully paid and discharged; and that the contractor has not extended any loan, gratuity, or gift of money in any form whatsoever to any employee of the Department, nor has (s)he rented or purchased any equipment or materials from any such employee.

Contractor:

_____

By: _____, Authorized Agent Date _____

25D-116
(R 1/98)

17.11. Change Order (Form 25D-068)

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
Select REGION

Change Order

Project No.: _____ Change Order No. _____

Project Name: _____

Contractor:		**Change Order Summary:**	
Address:		Calendar Days (+ / -):	
		New Completion Date:	
		Amount of Change Order:	

Recommended By: _____ Date: _____

Title: _____

Approved By: _____ Date: _____

Title: _____

This change order constitutes agreement to terms, conditions and prices stated below.

Accepted By: _____ Date: _____
Contractor's Representative

Acknowledgement indicates only receipt of Change Order and not mutual agreement for basis of payment or time allowance. If a the matter cannot be resolved within 7 days from signature date, an Intent to Claim form must be submitted to the engineer within 14 days.

Acknowledged By: _____ Date: _____
Contractor's Representative

Permission for previously submitted subcontractor(s) to perform all or portions of the work described herein is as checked: ☐ Yes ☐ No ☐ N/A

Seal of Alaskan Professional Engineer *(if required)*

The following change(s) in the above Contract are hereby made in accordance with the terms of the Contract and under the terms and conditions stated below. Price adjustments resulting from inaccurate cost and pricing data are subject to the provisions of AS 36.30.400(c). This document shall become an amendment to the Contract and all provisions of the Contract will be applicable.

DESCRIPTION OF CHANGE (Use Continuation Sheet 25D-065 as Required)

Form 25D-068 (Revised 04/12) C.O. No. Page 1 of 1

17.12. Continuation Sheet (Form 25D-065)

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

Project No.:

Continuation Sheet

Form 25D-065 (Revised 4/12) Page __ of __

17.13. Contractor Self Certification for Subs. and Lower Tier Subs

Alaska Department of Transportation & Public Facilities

Contractor Self Certification for Subcontractors and Lower Tier Subcontractors (Form 25D-042)

Project Name:	
Project Number:	**Federal-Aid Number:**
Submission Number:	
Subcontractor or Lower Tier Subcontractor:	

Contractor Certification

Agreement as included herein refers to the legally binding written contract between the Contractor and Subcontractor or between the Subcontractor and Lower Tier Subcontractor and identified in items 1 or 2 below.

1. ☐ A written agreement ("Agreement") has been executed between Contractor and the above listed subcontractor.
2. ☐ A written agreement ("Agreement") has been executed between (Subcontractor) and the above listed Lower Tier Subcontractor

- The Subcontractor is qualified to perform the work.
- The Subcontractor has adequate insurance as required by the Contract, or the Contractor has adequate insurance for the Subcontractor(s) as required by the contract.
- The subcontractor is on the DOT&PFs current Bidder's Registration List.
- The "Prompt Payment" clauses (AS 36.90.210) are included in the Agreement language.
- All requirements and pertinent provisions of the Contract, including but not limited to; DBE provisions, and minimum wage rates, are included in the agreement.
- Form 25D-55(A, H, or T as applicable) Required Contract Provisions for Federal Aid Construction Contracts, is inserted (shall not be incorporated by reference) in the Agreement
- All Agreements with Subcontractors and with Lower Tier Subcontractors will be in continued compliance with all provisions of the Contract
- The Contractor remains responsible for all quality control and proper performance of all requirements of the Contract.
- The Contractor will continue to perform at least thirty percent (30%) of the Contract work with his own organization.
- This Contractor Self Certification does not relieve the Contractor and his surety, or either the Contractor or surety from any liability or responsibility under the Contract.
- The Contractor certifies firms or individuals debarred or suspended by the Department, FAA, FHWA, or FTA are not employed or subcontracted under this construction project.

Total Agreement Amount:

Total Agreement Amount is _____% of the Total Contract Award Amount.

Total cumulative subcontracts (including this Agreement) are _____% of the Total Contract Award Amount.

Form 25D-042 (03/2017)

Subcontractor or Lower Tier Subcontractor

Federal I.D. No. (if no Federal I.D. No., use owner SSN):
Business License Number:
Contractor's License Number:
Electrical/Mechanical Administrator's License Number (if applicable):
Surveyor's License Number (if applicable):
Phone Number:
Address:
City: State:
Estimated Starting Date:

Department's Request for Information – If the Department at any time makes written request for the Agreement, licenses, proof of insurance, or any other information relating to the certifications contained herein, the Contractor will deliver an executed copy of the Agreement and /or other requested information to the Department within five calendar days. If the Contractor fails to provide the requested information within five calendar days, or if the Contractor fails to include required language and conditions in the Agreement, the Department may suspend all work relating to the Agreement. The Contractor shall not be due any additional compensation or contract time if the Department suspends work due to the Contractor's failure to provide requested information or failure to include required language and conditions in the Agreement.

False Statement or Omission – If a false statement or omission is made in connection with this Contractor Self Certification the Contractor will be excluded from participating in the self-certification process for the remainder of this Contract and for the following construction season. Contractors excluded from the self-certification process will be required to submit all necessary information for the Department's approval of proposed Subcontractors or Lower Tier Subcontractors.

Any false statement or omission made in connection with this Contractor Self Certification may be cause for suspension, a determination of non-responsibility on future bids, and may be cause for revocation of award, default, or debarment. The person or entity making the false statement or omission is subject to any and all civil and criminal penalties available pursuant to applicable state and federal law.

I certify the above information and statements are true, correct, and complete.

Contractor:

By: _____ Date:

Title:

Form 25D-042 (03/2017)

17.14. Contractor Intent to Claim (Form 25D-18)

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

CONTRACTOR INTENT TO CLAIM

1. Project Number	2. Project Name
3. Contractor	4. Address

5. State the act, failure to act, event, item, occurrence, plan error, specification ambiguity, condition, cause of delay, or suspension of work that caused the alleged change this intent to claim is based on:

6. State the beginning date (and ending date, if applicable) of the alleged change described in Item 5:

7. Check which of the following items are applicable. When stating the basis provide specific reference to relevant contract provisions and documents. Attach additional pages as necessary.

☐ A. In the instance of significant changes in the character of the work, state the basis of changed work:

☐ B. In the instance of extra work, state the basis that the work is extra:

☐ C. In the instance of differing site conditions, state the basis that the site conditions are different:

☐ D. In the instance of acceleration or delay of schedule performance or delivery, state the basis for the claim of acceleration or delay:

☐ E. In the instance of increased or decreased quantities, state the basis for adjusting the unit price or fixed expenses not recovered:

☐ F. In the instance of eliminated pay items or termination of contract, state the basis for the claim for additional payment:

☐ G. Other circumstances not described above:

Form 25D-18 (2-15) **Page 1 of 2**

8. Check the particular elements of contract performance for which the contractor is seeking additional compensation. Attached additional pages as necessary.

☐ A. What pay items(s) have been or may be affected by the alleged change?

☐ B. What labor or materials or both, have been or may be added, deleted, or wasted by the alleged change? What equipment has been idled, added or required for additional time?

☐ C. Describe the disruption in the manner and sequence or performance of the work that has occurred or may be caused by the alleged change:

☐ D. What is your estimate of adjustments in contract prices, contract time, delivery schedule or other provisions, affected by the alleged change? List current cost, daily costs, and estimated final amounts as applicable:

9. Amount of the intent to claim (choose one):

☐ A. The final amount of this intent to claim is $ _____ dollars and _____ additional time.

☐ B. The alleged change described in Item 5 is ongoing and data is still being collected. Estimated costs and additional time are as detailed in 8(d).

10. Certification Statement:
Per AS 36.30.400, I hereby certify that to the best of my knowledge and belief, the data submitted is accurate, complete, and current and is the actual costs to the contractor or additional time for performing the additional work or supplying the additional materials.

_____ X _____
Printed name of Contractor's Representative — Signature of Contractor's Representative

_____ _____
Title — Date

Form 25D-18 (2-15) **Page 2 of 2**

17.15. Contractor's Release (Form 25D-117)

STATE OF ALASKA

Department of:
Transportation and Public Facilities

Contractor's Release

Issue Date: _____
Project No.: _____
_____
Contract No.: _____

Project Name: _____
_____
_____

Located at; _____
_____
_____

Contract Compensation Summary	
Final Amount:	_____
Less Liquidated Damages:	_____
Total Final Sum:	_____
Less previous payments **OR** Estimate(s), 1 through _____ Totaling:	_____
Final Payment Due:	_____

Pursuant to the terms of the written contract dated _____, _____, for the construction of _____,
Project Number(s) _____, and in consideration of the total final sum of _____
Dollars (_____) which has been or is to be paid under the said contract to (Contractor's Name) _____
located at _____
(hereinafter called the Contractor) or its assignees, if any, the Contractor, upon payment of the said sum by the STATE OF ALASKA, does remise, release and discharge the STATE OF ALASKA, its officers, agents and employees, of and from all liabilities, obligations, claims, and demands whatsoever under or arising from said contract, whether known or unknown and whether or not ascertainable at the time of the execution of this instrument except specified claims in stated amounts or in estimated amounts where the amounts are not susceptible of exact statement by the Contractor, as follows:

_____
_____
_____

The Contractor agrees, in connection with the claims which are not released as set forth above, that (s)he will comply with all of the provisions of the said contract, including without limitation those provisions relating to notification of the Contracting Officer and relating to the prosecution of claims.

IN WITNESS WHEREOF, this release has been executed this _____ day of _____, _____.

_____ Witness

_____ Witness

_____ Contractor:

By: _____

Title: _____

(NOTE: In the case of a corporation, witnesses are not required, but certificate on reverse side must be completed by a corporate officer other than the one who signs above.)

25D-117 Contractor's Release, Page ___ of ___ Revised 4/97

17.16. Daily Concrete Placement Report (Form 25D-207)

DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

ITEM NO _____

DAILY CONCRETE PLACEMENT REPORT

PROJECT NO._____ PROJECT NAME_____ DATE PLACED_____
TYPE STRUCTURE OR BRIDGE NO_____ POUR NO._____
PART STRUCTURE_____ DISTRICT_____
COMPLETED PAY VOLUME_____ WEATHER_____
AIR TEMPERATURE_____ WATER TEMPERATURE_____
POUR TIME: START:_____ FINISH:_____ COMPLETED FINISHING_____
DESIGN LAB. NO._____ CLASS_____ CONCRETE AT_____ SACKS PER CUBIC YARD
AGGREGATE QUALITY LAB NO.(S)_____ MAXIMUM SIZE AGGREGATE_____ TYPE/BRAND CEMENT_____
MIX RATIO _____ _____ AGGREGATE SOURCE _____

FIELD DATA AND CONTROL FOR A 1 YARD BATCH

	1	2	3	4	5	6	
DESIGN CEMENT WEIGHT							
DESIGN GRAVEL WEIGHT							
GRAVEL WEIGHT ADJUSTED							
DESIGN SAND WEIGHT							
SAND WEIGHT ADJUSTED							
WATER WEIGHT ADJUSTED							
TOTAL BATCH WEIGHT							
AMOUNT AEA							
BRAND AEA							
% SAND							SPECS
% AIR ENTRAINED							
SLUMP							
UNIT WEIGHT (FT^3)							NA
YIELD							NA
CEMENT FACTOR							
WATER/CEMENT GAL/SK							
TEST CYLINDER NOISE							NA
TEMPERATURE CONCRETE							

CONCRETE WASTED _____ CU.YD. EXPLAIN _____
CONCRETE REJECTED _____ CU.YD. EXPLAIN _____
CEMENT REJECTED _____ SACKS EXPLAIN _____
REMARKS: _____

SIGNATURE_____
PROJECT ENGINEER

25D-207

17.17. Daily Force Account Summary Sheet (Form 25D-196)

ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CONSTRUCTION SECTION
DAILY FORCE ACCOUNT SUMMARY SHEET

Sheet _1_ of _1_

Date of Work: ____________

Project No.: ____________ Project Name: ____________

Description: ____________

Contractor ____________

Subcontractor ____________

Directive/Change Document No. ____________

LABOR COSTS

Name	**Class**	**% of W.C.** (1)	**H ours**		**Rate**	**Fr.**	**Travel**	**Labor Amounts**			**W.C.**
			Total (2)	**O.T.** (3)	**Reg.** (4)	**Ben.** (5)	**/Subs.**	2x4	2x5	3x4x.5	**Amt.** 2x4x1
								0.00	0.00	0.00	0.00
								0.00	0.00	0.00	0.00
								0.00	0.00	0.00	0.00
								0.00	0.00	0.00	0.00
								0.00	0.00	0.00	0.00
								0.00	0.00	0.00	0.00
								0.00	0.00	0.00	0.00
								0.00	0.00	0.00	0.00
								0.00	0.00	0.00	0.00
								0.00	0.00	0.00	0.00
								0.00	0.00	0.00	0.00
								0.00	0.00	0.00	0.00
								0.00	0.00	0.00	0.00
								0.00	0.00	0.00	0.00
W.C. = Workmen's Compensation						***Sub-Total***	0.00	0.00	0.00	0.00	0.00
							(6)	(7)	(8)	(9)	(10)

MATERIAL COSTS

Kind	***Qty.***	***Price***	***Amount***
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
Sub-Total			0.00
Plus 15%			0.00
Total Material Cost			0.00

EQUIPMENT RENTAL COSTS

Type	***Model***	***Hrs.***	***Rate***	***Amt.***
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
Total Equipment Rental Costs				0.00

COMPUTATIONS

6+7+8+9+10 = 0.00 *(11)*

[11-9] x 35% = 0.00 *(12)*

Total Labor
(Including Travel or Subsistence)
11+12 = 0.00

SUMMARY OF COSTS

Costs	**Amount**
Costs Brought Forward	0.00
Labor (Incl. Trav. or Subs.)	0.00
Equipment	0.00
Materials	0.00
Amount per Specifications	0.00
(for work by subcontractors)	0.00
Total cost of Today's Work	0.00
Total Cost to be Forwarded	0.00

____________ Prepared By ____________ *Date*

____________ Checked By ____________ *Date*

Distribution: Original .... Project Engineer
Copy .... Contractor

25D196
(6/06)

17.18. Daily Report for Time & Materials Work (Form 25D-195)

STATE OF ALASKA

Department of:
Transportation and Public Facilities

Daily Report – Labor, Equipment, and Materials for Time and Materials Work

Change Order No.: _____
Project No.: _____
_____
Contract No.: _____

Project Name: _____ Date of Work: _____
Location and Description of Work: _____
_____

LABOR

Employee Name	Job Classification	Actual Work Performed	Hours Regular	Hours Overtime

EQUIPMENT

Description: Make, Model, Year Capacity/Size, Required Attachments	Hours Reg.	Hours O.T.	Hours Stdby

MATERIALS

Description	Quantity

NARRATIVE OF OPERATIONS:

Notes: 1. Invoices must accompany original report. 2. Indicate work done by subcontractors.

The undersigned hereby agree that the above is a true and correct statement of labor, equipment, and materials used this date in executing the work described.

_____ _____ _____ _____
Date Date

25D-195 Daily Report T & M Work; Page ___ of ___ Revised 4/97

17.19. Delegation of Authority Letter

MEMORANDUM

State of Alaska

Department of Transportation & Public Facilities

TO: N.T. Merrill
Project Engineer
Northern Region

DATE: May 21, 1991

FILE NO:

TELEPHONE NO: 451-2268

FAX NUMBER:

TEXT TELEPHONE:

FROM: David L. McCaleb, P.E.
Chief Construction Engineer
Northern Region

SUBJECT: RS-0644(15)/65342
Farmers Loop
Reconstruction – Summit
Drive to Steese Expressway

DELEGATION OF
AUTHORITY

This is notification of your assignment as Project Engineer on the subject project. You are delegated the authority and given full responsibility for the administration of the contract, together with all construction engineering, in accordance with the Plans, Specifications and the Special Provisions. Please note that this authority is delegated through James R. Weed, Construction Group Chief.

/pjs

cc: Construction Group Chief
Project Control
Personnel File

17.20. Delegation of Authority to Assistant

MEMORANDUM

State of Alaska
Department of Transportation & Public Facilities

TO: Dawn Marie Evans
Engineer I
Northern Region

DATE: May 24, 1991

FILE NO:

TELEPHONE NO: 451-5325

FAX NUMBER:

TEXT TELEPHONE:

FROM: N.T. Merrill
Project Engineer
Northern Region

SUBJECT: RS-0644(15)/65342
Farmers Loop
Reconstruction – Summit
Drive to Steese Expressway

DELEGATION OF
AUTHORITY

This notification of your assignment as Assistant Project Engineer on the subject project. In my absence you are delegated the authority and given full responsibility for the administration of the contract, together with all construction engineering, in accordance with the Plans, Specifications and the Special Provisions.

\pjs

cc: Construction Group Chief
Project Control
Personnel File

17.21. Directive (Form 25D-069)

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
Select REGION

Directive

Project No.:

Directive No.: _____

Project Name: _____

Contractor:

Address: _____

_____

_____

Scope of this Directive

- ☐ **Commencement of Work**
- ☐ **Suspension of Work**
- ☐ **Contract Non-Conformance**
- ☐ **Contract Clarification**

Directive issued By: _____ Date: _____
Project Engineer:

Receipt Acknowledged By: _____ Date: _____
Contractor's Representative:

This Directive complements, and is used in accordance with the terms and provisions of the above referenced Contract, and shall not serve to authorize a change in Contractual responsibility. If the CONTRACTOR believes that any condition in this document may affect Contract Time, Price, or Requirement the CONTRACTOR shall immediately notify the DEPARTMENT of such condition. Contract Performance is required as follows:

DESCRIPTION (Use Continuation Sheet 25D-065 as Required)

Form 25D-069 (Revised 04/12) Directive No. Page 1 of 1

17.22. DBE CUF Monitoring Report (Form 25A-298)

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CIVIL RIGHTS OFFICE

COMMERCIALLY USEFUL FUNCTION (CUF) MONITORING REPORT

Per 49 CFR 26.55, "A 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… A DBE does not perform a CUF if its role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of DBE participation..." This form is for the purposes of reviewing DBEs for compliance with the CUF requirements for credit.

This form is to be used by DOT field staff to perform CUF reviews on DBE primes, subcontractors and DBE joint ventures. Perform a minimum of one review for each DBE on a federally-assisted project per construction season. The review should be conducted when the DBE first begins work. Monitor compliance through the course of the project.

1. PROJECT NAME

2. AKSAS NUMBER	**3. FEDERAL PROJECT NO.**

4. PRIME CONTRACTOR NAME

5. DBE CONTRACTOR NAME

6. DBE START DATE	**7. NAME/TITLE OF DBE ON-SITE REPRESENTATIVE**

8. ON-SITE REPRESENTATIVE REPORTS TO:

9. DBE IS PERFORMING AS

☐ **prime** ☐ **subcontractor** ☐ **joint-venture**

ON-SITE REPRESENTATIVE'S BRIEF DESCRIPTION OF THE DBE'S SCOPE OF WORK (Obtain copy of Subcontract and/or Purchase Order if needed):

WHO PREPARES THE DBE'S CERTIFIED PAYROLL (NAME & LOCATION)

PART I *(based on interviewer's observation)*	**YES**	**NO**
The DBE is responsible for the following:		
1 Responsible for execution of all work?		
2 Is the DBE subcontracting any work?		
3 Actually peforms, manages, and supervises work?		
4 Performs the work using own employees and own equipment		
5 Is DBE using leased or rented equipment (if yes, obtain a copy of the lease or rental agreement)		
6 Responsible for purchase & installation of materials and supplies		
PART II - DBE Trucking Firm	**YES**	**NO**
Does the DBE own and operate at least **one** fully licensed, insured, and operational truck; using drivers employed by the DBE on the contract?		
If leasing trucks, Does the DBE lease trucks from another DBE?		
Does the DBE lease trucks from a non-DBE firm?		
Does the truck(s) leased display name and certification number of the DBE firm?		

SUBMIT COMPLETED FORM IMMEDIATELY TO THE REGIONAL CONTRACT COMPLIANCE LIAISON

AKDOT&PF PROJECT STAFF/REVIEWER (signature) **DATE**

AKDOT&PF PROJECT STAFF/REVIEWER (print)

Form 25A-298 (3/2012) Page 1 of 1

17.23. DBE Contact Report (Form 25A-321A)

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

CONTACT REPORT

Federal-Aid Contracts

_____
Project Name and Number

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**

Form 25A-321A (1/02) Page 1 of 2

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).

MONTLY SUMMARY OF DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION

Federal-Aid Contracts

State of Alaska DOT & PF Civil Rights Office ● 2200 E 42nd Ave. ● Anchorage, AK 99519-6900

FOR PAYMENTS MADE IN:	
MONTH	YEAR

Please read instructions before completing this form.

Submit this form to the CRO by the 15th of he month following the reporting month. (i.e.: *Work performed in January will be paid in February; the summary report for January must be submitted to the CRO by March 15).*

1. PROJECT NAME	Project Number	
4. PRIME CONTRACTOR NAME		

The undersigned affirms that the information that they are providing to the Alaska Department of Transportation and Public Facilities, Civil Rights Office is accurate and complete to the best of their knowledge. Further, the undersigned authorizes the Alaska Department of Transportation and Public Facilities, Civil Rights Office to verify the accuracy of the information provided. Please note that the Alaska Department of Transportation and Public Facilities, Civil Rights Office, is required to report to the Department of Transportation any false, fraudulent, or dishonest conduct in connection with the program, so that DOT can take steps (e.g. referral to the Department of Justice for criminal prosecution, referral to the DOT Inspector General, action under suspension and debarment or Program Fraud and Civil Penalties rules) provided in §26.109. The Alaska Department of Transportation and Public Facilities, Civil Rights Office, will consider similar action under our own legal authorities, including responsibility determinations in future contracts.

10. NAME OF PERSON PREPARING REPORT	11. TITLE	12. SIGNATURE	13. DATE

SUBCONTRACTORS

	14. FIRM (DBE) NAME	15. BID ITEMS PAID (LIST SEPARATELY)	16. AGREED PRICE	17. AMOUNT PAID THIS PERIOD	18. AMOUNT PAID TO DATE	19. % OF WORK COMPLETED TO DATE	20. FINAL PAYMENT YES	20. FINAL PAYMENT NO
1							☐	☐
2							☐	☐
3							☐	☐
4							☐	☐
5							☐	☐

If more spaces are required, use as many copies of the second page of this form as necessary. The contractor must sign each sheet to certify its content and completion.

Are additional pages attached? ☐ YES ☐ NO

10. NAME OF PERSON PREPARING REPORT	11. TITLE	12. SIGNATURE	13. DATE (mm/dd/yyyy)

Form 25A-336 (3/2012)

Page __ of __

MANUFACTURERS (100 % DBE Credit)

	21. FIRM (DBE MANUFACTURER) NAME	22. PRODUCT MANUFACTURED	23. AMOUNT PAID THIS PERIOD	24. AMOUNT PAID TO DATE	20. FINAL PAYMENT YES	20. FINAL PAYMENT NO
1					☐	☐
2					☐	☐
3					☐	☐
4					☐	☐
5					☐	☐
6					☐	☐
7					☐	☐

BROKERS (5% DBE Credit for brokerage fee)

	25. FIRM (DBE BROKER) NAME	26. PRODUCT/ SERVICE	27. DBE BROKERAGE FEE	28. AMOUNT PAID THIS PERIOD	29. AMOUNT PAID TO DATE	20. FINAL PAYMENT YES	20. FINAL PAYMENT NO
1				$ -		☐	☐
2				$ -		☐	☐
3				$ -		☐	☐
4				$ -		☐	☐
5				$ -		☐	☐
6				$ -		☐	☐

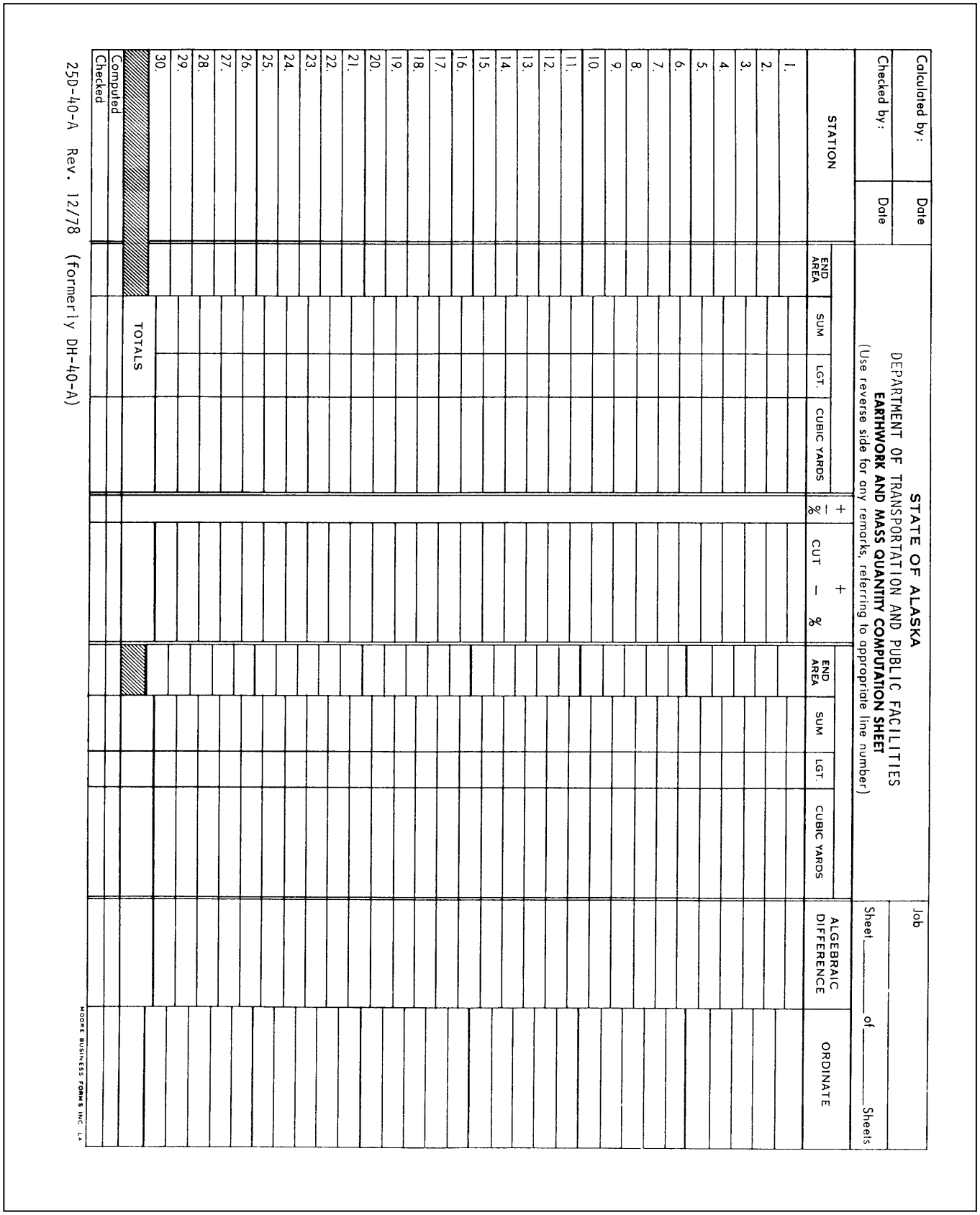
REGULAR DEALERS (60% DBE Credit)

	30. FIRM (DBE REGULAR DEALER) NAME	31. MATERIALS SUPPLIED	32. AMOUNT PAID THIS PERIOD	33. AMOUNT PAID THIS PERIOD (60%)	34. AMOUNT PAID TO DATE	20. FINAL PAYMENT YES	20. FINAL PAYMENT NO
1				$ -		☐	☐
2				$ -		☐	☐
3				$ -		☐	☐
4				$ -		☐	☐
5				$ -		☐	☐
6				$ -		☐	☐

If more spaces are required, use as many copies of the second page of this form as necessary. The contractor must sign each sheet to certify its content and completion.

Are additional pages attached? ☐ YES ☐ NO

17.25. Earthwork & Mass Quantity Computation Sheets (Form 25D-40A)



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
EARTHWORK AND MASS QUANTITY COMPUTATION SHEET
(Use reverse side for any remarks, referring to appropriate line number)

Calculated by: Date
Checked by: Date
Job
Sheet ____ of ____ Sheets

STATION	END AREA	SUM	LGT.	CUBIC YARDS	+ / − %	+ CUT − %	END AREA	SUM	LGT.	CUBIC YARDS	ALGEBRAIC DIFFERENCE	ORDINATE
1.												
2.												
3.												
4.												
5.												
6.												
7.												
8.												
9.												
10.												
11.												
12.												
13.												
14.												
15.												
16.												
17.												
18.												
19.												
20.												
21.												
22.												
23.												
24.												
25.												
26.												
27.												
28.												
29.												
30.												
TOTALS												
Computed												
Checked												

25D-40-A Rev. 12/78 (formerly DH-40-A)

MOORE BUSINESS FORMS INC. LA

17.26. Encumbrance Memo

STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

ENCUMBRANCE MEMO

TO: FINANCE **DATE:**

FROM:

RE: PROJECT NAME:
PROJECT/AGREEMENT NO.:
CONTRACTOR/CONSULTANT:
CHANGE ORDER/AMEND. NO.: DATED:

Encumber the attached:
****

☐ Contract ☐ Agreement ☐ Letter of Authority
☐ Change Order ☐ Amendment ☐ Final Payment
☐ Extra Work Order ☐ Quantity Adjustment

Comments:

ENCUMBRANCE TRANSACTIONS REQUIRED				
Amount	Collocode	Program	Ledger Code	Account
	TOTAL (Must agree with amount of document attached.)			

Appoved by: _____ Date: _____

3/98

EEO Monthly Employment Utilization Report

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
CIVIL RIGHTS OFFICE

DOT&PF

Name and Location of Contractor	State/Federal #	Reporting Period:
	Project Name	

Construction Trade	Classification	Total Work Hours of Employment												% Minority	% Female	Total Number of Employees		Total Number of Minority Employees	
		All M	All F	CM	CF	BM	BF	HM	HF	AM	AF	IM	IF			M	F	M	F
	Journey Worker																		
	Apprentice																		
	Trainee																		
Machinist	**Sub-Total**																		
	Journey Worker																		
	Apprentice																		
	Trainee																		
Welder	**Sub-Total**																		
	Journey Worker																		
	Apprentice																		
	Trainee																		
Painter	**Sub-Total**																		
	Journey Worker																		
	Apprentice																		
	Trainee																		
Mechanic	**Sub-Total**																		
	Journey Worker																		
	Apprentice																		
	Trainee																		
	Sub-Total																		
	Journey Worker																		
	Apprentice																		
	Trainee																		
	Sub-Total																		
Total hours worked																			
Total %																#DIV/0!	######	######	######

Company Official's Signature and Title	Date

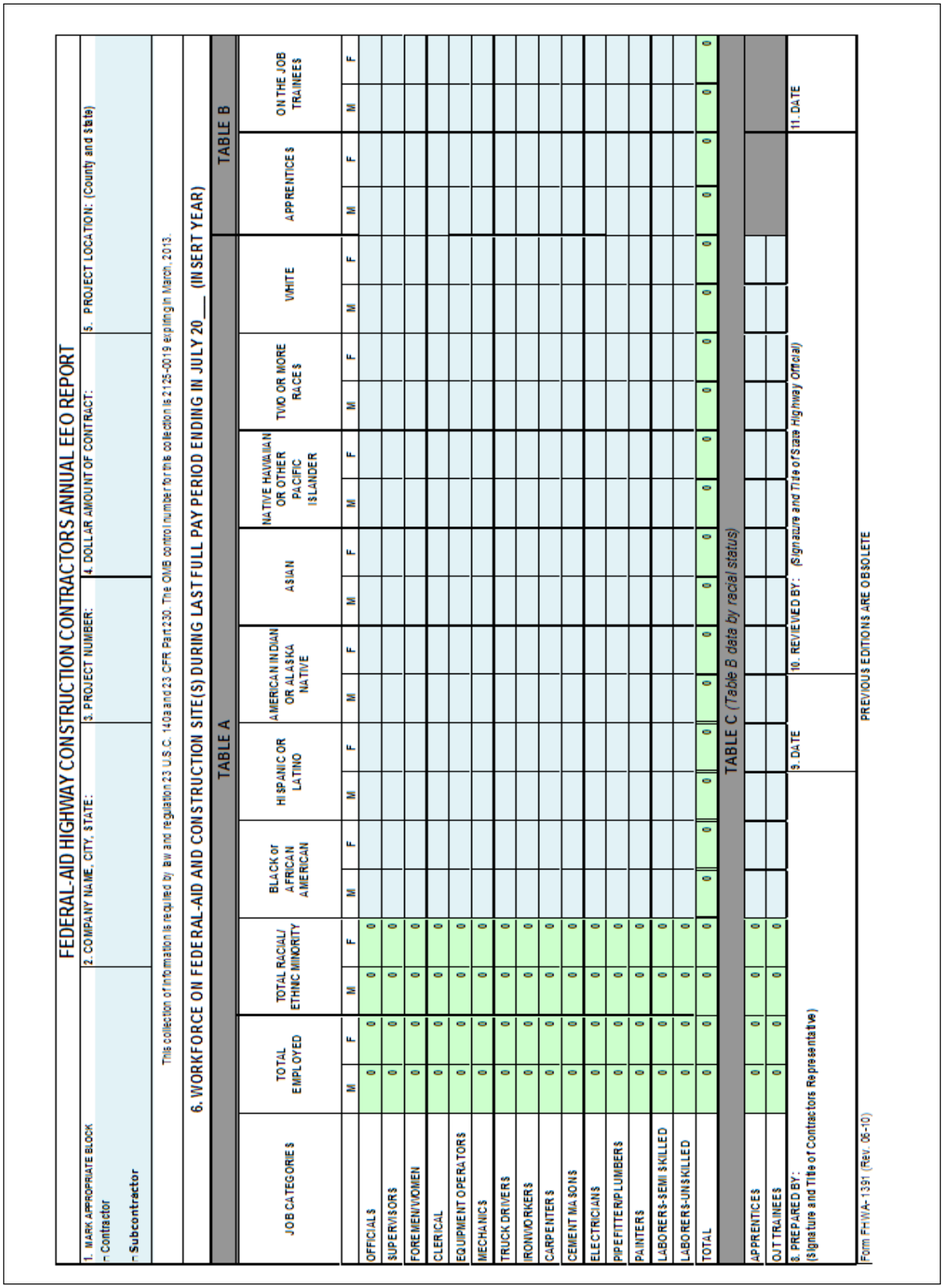
Legend:

		A	Asian or Pacific Islander	H	Hispanic
M	Male	B	Black	I	American Indian / Alaskan Native
F	Female	C	Caucasian		

Form 25A-303 (10-2010)

Page 1

17.28. FHWA Contractors Annual EEO Report (Form PR-1391)



FEDERAL-AID HIGHWAY CONSTRUCTION CONTRACTORS ANNUAL EEO REPORT

1. MARK APPROPRIATE BLOCK
– Contractor
– Subcontractor

2. COMPANY NAME, CITY, STATE:

3. PROJECT NUMBER:

4. DOLLAR AMOUNT OF CONTRACT:

5. PROJECT LOCATION: (County and State)

This collection of information is required by law and regulation 23 U.S.C. 140a and 23 CFR Part 230. The OMB control number for this collection is 2125–0019 expiring in March, 2013.

6. WORKFORCE ON FEDERAL-AID AND CONSTRUCTION SITE(S) DURING LAST FULL PAY PERIOD ENDING IN JULY 20___ (INSERT YEAR)

JOB CATEGORIES	TABLE A: TOTAL EMPLOYED		TABLE A: TOTAL RACIAL/ ETHNIC MINORITY		TABLE A: BLACK or AFRICAN AMERICAN		TABLE A: HISPANIC OR LATINO		TABLE A: AMERICAN INDIAN OR ALASKA NATIVE		TABLE A: ASIAN		TABLE A: NATIVE HAWAIIAN OR OTHER PACIFIC ISLANDER		TABLE A: TWO OR MORE RACES		TABLE A: WHITE		TABLE B: APPRENTICES		TABLE B: ON THE JOB TRAINEES	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
OFFICIALS	0	0	0	0																		
SUPERVISORS	0	0	0	0																		
FOREMEN/WOMEN	0	0	0	0																		
CLERICAL	0	0	0	0																		
EQUIPMENT OPERATORS	0	0	0	0																		
MECHANICS	0	0	0	0																		
TRUCK DRIVERS	0	0	0	0																		
IRONWORKERS	0	0	0	0																		
CARPENTERS	0	0	0	0																		
CEMENT MASONS	0	0	0	0																		
ELECTRICIANS	0	0	0	0																		
PIPEFITTER/PLUMBERS	0	0	0	0																		
PAINTERS	0	0	0	0																		
LABORERS-SEMI SKILLED	0	0	0	0																		
LABORERS-UNSKILLED	0	0	0	0																		
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TABLE C (Table B data by racial status)

APPRENTICES	0	0	0																			
OJT TRAINEES	0	0	0																			

7. PREPARED BY: (Signature and Title of Contractors Representative)

9. DATE

10. REVIEWED BY: (Signature and Title of State Highway Official)

11. DATE

Form FHWA-1391 (Rev. 06-10) PREVIOUS EDITIONS ARE OBSOLETE

17.29. Estimate of Cost (Form 25D-049)

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
Select REGION

Estimate of Cost

Project Number: _____ Estimate Number: _____

Project Name: _____

Item No.	Item	Unit	Unit Price	Quantity	Amount

Prepared by: _____ Date: _____

Checked by: _____ Date: _____

Form 25D-049 (04/12) Est. No. _ Page 1

17.30. "Estimate.xls" Instructions

INSTRUCTIONS FOR USING "ESTIMATE.XLS"

1. Estimate.xls is an Excel spreadsheet for reporting the bi-monthly estimate. It consists of four sheets in an Excel workbook: "Original" which is the list of original bid items of your project; "New Items" which is the list of new items you add by Change Order, etc.; "Stockpile" which is the list of any stockpiled items you have and "Recap" which is the Recapitulation sheet.

    a) There is room for about 70 bid items, including engineering items in "Original". If your project has fewer than 70 original bid items, delete the unnecessary rows. If more than 70, you will have to insert rows and copy down the cells that contain zeros (there are formulas in some of these cells).

        i) Note that the Engineering items are already in place at the end of the Original sheet. This allows automatic calculation of Engineering costs for the recap sheet. These items will be out of numeric order if you have electrical items or striping or any bid item with a number greater than 644. However, I checked with QA and there is no problem with this.

    b) "New Items" and "Stockpile" sheets are essentially identical in form to "Original". Delete unnecessary rows as appropriate.

    c) "Recap" sheet calculates automatically.

    d) Small projects usually can fit on 4 pages. Larger projects require more pages, depending on number of bid items, number of new items, etc.

2. If you have a large project, e.g., one that takes 6 or more pages, you will probably need a printer with 3 or more megs of memory. Small projects that fit on 4 pages will print out on printers with only 1 meg of memory..

3. Primarily for ease of setting up the spreadsheet, there are no page totals for Original bid items, New Items, and Stockpiled items. Amounts are totaled at the end of each of these sections.

4. When you retrieve Estimate, you will see grey shaded areas and blue shaded areas in the Original, New Items and Stockpile sheets. There are also grey shaded areas in the Recap sheet.

    a) Customize Estimate for your project by filling in the grey shaded areas. Obviously, at the start of the project, you won't have any

New Items or Stockpiled items, so the grey shaded area on those sheets can't be filled out.

b) At this time, you will need to format the "quantity" cells for each bid item using the appropriate decimal precision required by the Construction Manual. All "amount" cells are formated for 2 decimal places.

5. Once you have customized your Estimate, save it in another directory.

6. When you wish to generate a bi-monthly estimate, retrieve the customized Estimate.

   a) Begin with the Original sheet. You will notice two buttons at the top left corner on Original. Select the Enter button. This activates a macro which copies the values from the Total columns to the Previous columns and clears out the current column (This Estimate).

   b) **You must use the "Enter" button before entering data in all three sheets; Original, New Items, and Stockpile. *Also*, use the "Enter" button only once for each sheet for each time you generate an estimate.**

   c) Next, enter the estimate number and "from and to" dates in the blue shaded cells. Go down to row 9 and begin entering only the quantities for the current estimate period in the blue shaded cells. ***Hint***: you might want to freeze panes from the Windows menu selection. If you place the cursor in cell E9, the bid items, units and unit prices will always be visible.

   d) Go through the same procedure, as appropriate, for the New Items and Stockpiled items sheets..

7. Once you have entered all the current quantities, you are ready to print the report. All calculations are automatic and you shouldn't have to do anything else. For your peace of mind, you can click on the recap sheet to view the totals.

8. Select the "Print" button located in the upper left corner of the Original sheet. This activates a macro that prints out all pages of the estimate using pagination in the form of "Page 1 of x", etc. The print macro will print out all four sheets regardless if there is anything in them or not. If you want to print out individual sections, you will have to do so manually, highlighting the printrange for each sheet. By doing this, you will probably destroy the pagination continuity. If this becomes a problem, go to the

Page Setup selection and under the Header/Footer menu, select the type of pagination (or none) you desire.

9. In many respects, Excel treats each sheet as a separate file. That is, just because you do something to one sheet, doesn't mean it will translate to the other sheets.

10. After you print the Estimate, save the updated file. You can either save it as Estimate.xls, using the same file and continually update it throughout the life of the project, or you can save it, for example, as Est1.xls; Est2.xls, etc. and have a series of files, one for each estimate.

Juneau-Glacier Hwy Overlay & Egan Drive Accel/Decel Lane Resurfacing
Project No. NH-0005(314), AKSAS No. 67819, 67827

EXPLANATION OF OVERRUNS, UNDERRUNS AND CHANGE DOCUMENTS

Project No. 67819

Item 202(2) Pavement Removal Square Yard

Plan: 7600 $30,400.00 **Final:** 133.5 $534.00 **Underrun:** 98.2% -$29,866.00

Scope of the project changed half way through completion so that the emphasis was placed on repairing failed areas on Egan Drive. When this change occurred, the contractor had just begun his work on the accel/decel lanes, so there wasn't much pavement removed (pavement was to be removed only on outside edge of shoulders).

Item 301(1) Aggregate Base Course Ton

Plan: 100 $2500.00 **Final:** 0.00 $0.00 **Underrun:** 100% -$2,500

This item was to be used for replacement of D-1 under the pavement removal areas. The contractor did not need to replace the existing D-1

Item 401(1A) Asphalt Concrete Pavement, Type II Class A Ton

Plan: 4500 $220,500.00 **Final:** 3324.26 $162,888.74 **Underrun:** 26.1% -$57,611.26

When the scope of the project changed, the contractor requested and received new unit prices for this item. Therefore we underran this original bid item.

Item 401(1B) Asphalt Concrete Pavement, Type III, Class A Ton

Plan: 625 $30,625.00 **Final:** 0.0 $0.00 **Underrun:** 100% -$30,625.00

This item was for pre-leveling the overlay of Glacier Hwy. The pre-level was eliminated by grinding the asphalt.

Item 401(9) Pavement Patching Square Yard

Plan: 300 $7,500.00 **Final:** 138.46 $3,461.50 **Underrun:** 53.6% -$4,038.50

Needed less patching than design had estimated.

Explanation of Overruns, Underruns and Change Documents

Item 402(1) CSS-1 Asphalt for Tack Coat Ton

Plan: 17.00 $8,500.00 **Final:** 10.35 $5,175.00 **Underrun:** 39.1% -$3,325.00

There was less paving done under this contract after the scope of the project changed, hence less tack was needed.

Item 408(1) Pavement Cold Planing Square Yard

Plan: 19000 $76,000.00 **Final:** 10068.45 $40,273.80 **Underrun:** 47% -$35,726.20

The change in the scope of the project meant fewer accel/decel lanes were cold planed and repaved.

Item 408(2) Pavement Grinding Square Yard

Plan: 250 $2,500.00 **Final:** 0.00 $0.00 **Underrun:** 100% -$2,500.00

This item was for grinding existing driveways and approaches for matching with the overlays. The contractor did not have to utilize this item because the overlays matched in well without additional grinding.

Item 639(2) Commercial Driveway Each

Plan: 15 $7,500.00 **Final:** 2 $1,000.00 **Underrun:** 86.7% -$6,500.00

Only two driveways needed reconstructing.

Item 643(4) Construction Signs Per Day

Plan: 1,000 $4,000 **Final:** 613 $2,452.00 **Underrun:** 38.7% -$1,548.00

Design staff could only estimate a quantity for this item. The contractor ended up using fewer signs than estimated.

Item 643(5) Type II Barricades Each/Day

Plan: 250 $500.00 **Final:** 0 $0.00 **Underrun:** 100% -$500.00

Contractor did not use Type II barricades.

Item 643(6) Type III Barricades Each/Day

Plan: 500 $1,000.00 **Final:** 12 $36.00 **Underrun:** 97.6% -$964.00

Contractor used fewer Type III barricades than Design estimated.

Explanation of Overruns, Underruns and Change Documents

Item 643(7) Cones Each/Day

Plan: 4000 $2,000.00 **Final:** 2648 $1,324.00 **Underrun:** 33.8% -$676.00

Contractor used fewer cones than Design estimated.

Item 643(9) Drum Each/Day

Plan: 500 $1,000.00 **Final:** 126 $252.00 **Underrun:** 74.8% -$748.00

Contractor used fewer drums than Design estimated.

Item 643(10) Sequential Arrow Board Day

Plan: 60 $6,000.00 **Final:** 13 $1,300.00 **Underrun:** 78.3% -$4,700.00

Contractor did not need an arrow board as often as Design had estimated.

Item 643(15) Flagging Hour

Plan: 500 $20,000.00 **Final:** 247 $9,880.00 **Underrun:** 50.6% -$10,120.00

Contractor need less flagging than Design estimated.

Item 670(8) Recessed Pavement Markers Each

Plan: 200 $7,000.00 **Final:** 96 $3,360.00 **Underrun:** 52% -$3,640.00

The majority of the Recessed Markers were installed under the Egan Drive Paving project.

Project #67827

Item 203(6) Borrow, Type A Ton

Plan: 450 $4,500.00 **Final:** 294 $2,940.00 **Underrun:** 34.7% -$1,560.00

Less Borrow was needed than was estimated by Design.

Item 309(1) Recycled Pavement Square Yard

Plan: 708 $3,540.00 **Final:** 1901.5 $9,507.50 **Overrun:** 168.6% +$5,967.50

Design quantity in error.

Explanation of Overruns, Underruns and Change Documents

Item 643(4) Construction Sign Each/Day

Plan: 150 $600.00 **Final:** 42 $168.00 **Underrun:** 72% -$432.00

Contractor used fewer signs than Design estimated.

Item 643(5) Type II Barricades Each/Day

Plan: 150 $300.00 **Final:** 0 $0.00 **Underrun:** 100% -$300.00

Contractor did not use Type II barricades.

Item 643(6) Type III Barricades Each/Day

Plan: 200 $600.00 **Final:** 14 $42.00 **Underrun:** 93% -$558.00

Contractor used fewer Type III barricades than Design estimated.

Item 643(7) Traffic Cone Each/Day

Plan: 1000 $500.00 **Final:** 49 $24.50 **Underrun:** 95.1% -$475.50

Contractor used fewer cones than Design estimated.

Item 543(15) Flagging Hour

Plan: 75 $3,000.00 **Final:** 0 $0.00 **Underrun:** 100% -$3,000.00

Contractor did not need flagging for this project.

Explanation of Overruns, Underruns and Change Documents

Juneau-Glacier Hwy Overlay & Egan Drive Accel/Decel Lane Resurfacing

Project No. NH-0005(314), AKSAS No. 67819, 67827

EXPLANATION OF CHANGE DOCUMENTS

Document	Date	Description/Purpose
Directives		
A	8/11/99	This directive was issued to initiate the installation of new driveway culverts.
B	5/10/00	This directive was issued to initiate the repair of failed asphalt areas on Egan Dr.
C	5/16/00	This directive was issued to direct the contractor to furnish "Double Traffic Fines" signs.

Change Orders	Date	Description/Purpose	Time Days	Change Amount
1	11/15/99	This change order established new items 603(21) 18" Corrugated Polyethylene Pipe, and 408(1A) Pavement Cold Planing. It also deleted Asphalt Concrete Pavement Type III.	0	+$7,717.63
2	3/28/01	This change order established new items 401(c) Asphalt Concrete Pavement Type II, 401(2A) Pavement Removal, 401(9A) Pavement Patching, and 643(2A) Traffic Maintenance.	286	+$63,294.65
		Total of all changes:	**286**	**$71,012.28**

17.32. FAA Construction Project Closeout Checklist

PROJECT FINAL CLOSEOUT CHECKLIST

Aviation Projects

PROJECT NO.:

PROJECT NAME:

FINAL ESTIMATE ASSEMBLY

- ☐ Certification of Final Estimate (Form 25D-116).
- ☐ Contractor's Release (Form 25D-117).
- ☐ Final Estimate (Form 25D-25)
- ☐ Project Materials Certificate from Materials Section.* DATE: _____
- ☐ Contractor required "As-Built" plans (i.e., electrical, etc.)
- ☐ Department of Labor Tax Clearance. DATE: _____
- ☐ Department or Revenue Tax Clearance. DATE: _____
- ☐ Department of Labor Notice of Completion (NOC) DATE: _____

FINAL CONSTRUCTION REPORT

- ☐ **Final Estimate Assembly (see above).**
- ☐ Final Construction Report Summary.*
- ☐ Final Acceptance Letter.*
- ☐ FAA Sponsor Certification.*
- ☐ Airport Master Record (FAA Form 5010).*
- ☐ As-Built Plans.
- ☐ Project History.*
- ☐ Reports (as required): Report on Design Recommendations (required)
  Report on Claims (if a claim was submitted)
- ☐ Explanation of Overruns, Underruns and Change Documents. List only contract major bid items whose final quantity varied more than 25% from the estimated quantity and an explanation of all change document items.
- ☐ Proof of Construction for Right-of-Way (Form 25D-173) -- Completed only if the right-of-way involves public land.
- ☐ Proof of Use for Material Sources (Form 25D-174) with Material Site Record -- Completed only if sites are State furnished or controlled.

***Needed for Final Grant Closeout only.**

REV 4/14/17

17.33. FAA Project Closeout Requirements

1. Summary of Project Closeout Requirements

The following is a summary of the general requirements for construction or equipment AIP project closeout packages, a checklist can be found in Section 17.34:

a) Final payment request SF-271, except for letter of credit grants.
b) Final payment summary worksheet for all projects. Summarize administration, planning, engineering, force account, construction, force account construction, land, and equipment costs, as applicable (see Appendix 5-C of the FAA Alaskan Region Airports Division's Airport Sponsors Guide)
c) Summary of DBE utilization including names of DBE firms used, contract amounts, and percent attained.
d) List of all Grant Special Conditions and actions taken to comply with each special condition.
e) Amendment letter justifying a request for grant increase if allowable costs exceed the grant amount. (planning grants may not be amended).
f) Final project report for planning, construction, land, or equipment (see items 2., 3., 4., and 5. below).
g) Required Sponsor Certifications, unless previously submitted (see Appendix 2-A of the Alaska Airport Sponsor Guide).
h) Although not submitted as part of the Project Closeout Report an annual audit is required under the Single Audit Act. Accounts and records must be kept in accordance with an accounting system that will facilitate an effective audit in accordance with the Single Audit Act. See Grant Assurances 13 and 25 for record keeping and audit requirements.

2. Final Construction Report

The following documentation, in addition to the applicable items in Section 1 above, must be submitted to closeout an AIP grant including construction.

a) Project History, including:
   1) Work items constructed.
   2) Work bid, but not constructed with reasons for deletion.
   3) Table showing as a minimum the following dates: contract award, notice to proceed, scheduled and actual completion for each contract, final inspection and final acceptance. Approved time extensions should also be listed and explained if applicable.
   4) A brief narrative on construction activities, problem areas, unusual conditions, unique features, and actions taken to address any environmental mitigation measures.
   5) List of prime contractor and all subcontractors.
   6) Explanation of any labor problems if applicable.
   7) Explanation of any liquidated damages assessed.
   8) Copy of bid tabulation including engineering estimate, unless previously submitted.

b) Administrative. See AC 150/5100-10B for definition of administrative items.

c) Engineering Design and Construction Management

   1) Contract date, amount, and FAA approval date for consultant engineering design and construction management contracts and any amendments.
   2) Approved amount and FAA approval date for the use of force account design and construction management force account services.

d) Construction
   1) Summary of all change orders and supplemental agreements. Include costs, change order dates, and FAA approval dates (if applicable).

2) Summary of final quantities. Include design quantities and justification if final quantities significantly vary from design.
3) Final inspection report. Include a list of any punch list items and schedule of corrective actions giving method, responsible party, and date of correction.
4) Copy of contractor's statement that no further payment is due and that all subcontractors and material suppliers have been paid in full.
5) One copy of the as-constructed plans on cd-rom.
6) Materials Certification and if required, a Memorandum of Exceptions
7) FAA approval date for the use of construction force account construction (if applicable for equipment and operators).
8) Summary of the force account construction work performed, if applicable. Include the type of work, and hours and costs for labor and equipment.

e) One signed copy of the revised Exhibit "A" Property Map, if applicable.

f) FAA approval date for revised ALP resulting from the as constructed project.

g) Date that the Airport Master Record (FAA from 5010) and sketch were updated.

h) FAA approval date for the updated Sign Plan (for Part 139 certificated airports) resulting from the as-constructed project, if applicable.

3. Final Equipment Closeout Report

The following documentation, in addition to the applicable items in paragraph I. above, must be submitted to closeout an AIP grant including equipment:

a) Summary of amounts and FAA approval date for all contracts and change orders.

b) Table showing as a minimum the following dates: contract award, notice to proceed, scheduled and actual delivery, final inspection and final acceptance.

c) Summary of the acceptance test results.

d) Inventory of Non-Expendable Personal Property (see Appendix 5-F of the FAA Alaskan Region Airports Division's Airport Sponsors Guide).

17.34. FAA Sponsor Certification for Construction Project Final Acceptance

Construction Project Final Acceptance
Airport Improvement Program Sponsor Certification

Sponsor:

Airport:

Project Number:

Description of Work:

Application
49 USC § 47105(d), authorizes the Secretary to require certification from the sponsor that it will comply with the statutory and administrative requirements in carrying out a project under the Airport Improvement Program. General standards for final acceptance and close out of federally funded construction projects are in 2 CFR § 200.343 - Closeout. The sponsor shall determine that project costs are accurate and proper in accordance with specific requirements of the grant agreement and contract documents.

Certification Statements
Except for the certification statement below marked as not applicable (N/A), this list includes major requirements for this aspect of project implementation. This list is not comprehensive nor does it relieve the sponsor from fully complying with all applicable statutory and administrative standards.

1. The personnel engaged in project administration, engineering supervision, construction inspection and testing were or will be determined to be qualified as well as competent to perform the work.
   ☐ Yes ☐ No ☐ N/A

2. Daily construction records were or will be kept by the resident engineer/construction inspector as follows:
   a. Work in progress
   b. Quality and quantity of materials delivered
   c. Test locations and results
   d. Instructions provided the contractor
   e. Weather conditions
   f. Equipment use
   g. Labor requirements
   h. Safety problems
   i. Changes required
   ☐ Yes ☐ No ☐ N/A

Construction Project Final Acceptance – April 2015

3. Weekly payroll records and statements of compliance were or will be submitted by the prime contractor and reviewed by the sponsor for conformance with federal labor and civil rights requirements as required by FAA and U.S. Department of Labor.

   ☐ Yes ☐ No ☐ N/A

4. Complaints regarding the mandated federal provisions set forth in the contract documents have been or will be submitted to the Federal Aviation Administration (FAA).

   ☐ Yes ☐ No ☐ N/A

5. All tests specified in the plans and specifications were or will be performed and the test results documented as well as made available to the FAA.

   ☐ Yes ☐ No ☐ N/A

6. For any test results outside of allowable tolerances, appropriate corrective actions were or will be taken.

   ☐ Yes ☐ No ☐ N/A

7. Payments to the contractor were or will be made in compliance with contract provisions as follows:

   a. Payments are verified by the sponsor's internal audit of contract records kept by the resident engineer, and
   b. If appropriate, pay reduction factors required by the specifications are applied in computing final payments and a summary of pay reductions made available to the FAA.

   ☐ Yes ☐ No ☐ N/A

8. The project was or will be accomplished without significant deviations, changes, or modifications from the approved plans and specifications, except where approval is obtained from the FAA.

   ☐ Yes ☐ No ☐ N/A

9. A final project inspection was or will be conducted with representatives of the sponsor and the contractor, and project files contain documentation of the final inspection.

   ☐ Yes ☐ No ☐ N/A

10. Work in the grant agreement was or will be physically completed and corrective actions required as a result of the final inspection are completed to the satisfaction of the sponsor.

    ☐ Yes ☐ No ☐ N/A

11. If applicable, the as-built plans, an equipment inventory, and a revised airport layout plan have been or will be submitted to the FAA.

    ☐ Yes ☐ No ☐ N/A

12. Applicable close out financial reports have been or will be submitted to the FAA.

    ☐ Yes ☐ No ☐ N/A

13. The construction of all buildings have complied or will comply with the seismic construction requirements of 49 CFR § 41.120.

☐ Yes ☐ No ☐ N/A

Additional documentation for any above item marked "no":

Sponsor's Certification

I certify, for the project identified herein, responses to the forgoing items are accurate as marked and additional documentation for any item marked "no" is correct and complete.

I declare under penalty of perjury that the foregoing is true and correct. I understand that knowingly and willfully providing false information to the federal government is a violation of 18 USC § 1001 (False Statements) and could subject me to fines, imprisonment, or both.

Executed on this _____day of _____, _____.

Name of Sponsor:

Name of Sponsor's Designated Official Representative:

Title of Sponsor's Designated Official Representative:

Signature of Sponsor's Designated Official Representative: _____

Construction Project Final Acceptance – April 2015

17.35. FAA Sponsor Certification for Equipment/Construction Contracts

Equipment and Construction Contracts
Airport Improvement Sponsor Certification

Sponsor:

Airport:

Project Number:

Description of Work:

Application

49 USC § 47105(d) authorizes the Secretary to require certification from the sponsor that it will comply with the statutory and administrative requirements in carrying out a project under the Airport Improvement Program (AIP). General procurement standards for equipment and construction contracts within Federal grant programs are described in 2 CFR §§ 200.317-200.326. Labor and Civil Rights Standards applicable to the AIP are established by the Department of Labor (www.dol.gov) AIP Grant Assurance C.1—General Federal Requirements identifies all applicable Federal Laws, regulations, executive orders, policies, guidelines and requirements for assistance under the AIP. Sponsors may use state and local procedures provided procurements conform to these federal standards.

This certification applies to all equipment projects. Equipment projects may or may not employ laborers and mechanics that qualify the project as a "covered contract" under requirements established by the Department of Labor requirements. Sponsor shall provide appropriate responses to the certification statements that reflect the character of the project.

Certification Statements

Except for the certification statement below marked as not applicable (N/A), this list includes major requirements for this aspect of project implementation. This list is not comprehensive nor does it relieve the sponsor from fully complying with all applicable statutory and administrative standards.

1. A written code or standard of conduct conforming to 2 CFR § 200.319 is or will be in effect governing the performance of the sponsor's officers, employees, or agents in soliciting, awarding and administering procurement contracts.

   ☐ Yes ☐ No ☐ N/A

2. For all contacts, qualified and competent personnel are or will be engaged to perform contract administration, engineering supervision, construction inspection, and testing in accordance with grant assurance C.17.

   ☐ Yes ☐ No ☐ N/A

3. Sponsors that have or are required to have a Disadvantage Business Enterprise (DBE) program on file with the FAA have included or will include clauses required from Title VI of the Civil Rights Act and 49 CFR 23 and 49 CFR 26 for Disadvantaged Business Enterprises in all contracts and subcontracts

   ☐ Yes ☐ No ☐ N/A

Equipment and Construction Contracts – April 2015

9. All construction and equipment installation contracts exceeding $3,000 contain or will contain a contract provision that discourages distracted driving

☐ Yes ☐ No ☐ N/A

10. All contracts exceeding $10,000 contain or will contain the following provisions as applicable:

    a. Construction and equipment installation projects - Applicable clauses from 41 CFR Part 60 for compliance with Executive Orders 11246 and 11375 on Equal Employment Opportunity.

    b. Construction and equipment installation - Contract Clause prohibiting segregated facilities in accordance with 41 CFR part 60-1.8

    c. All Contracts - Requirement to maximize use of products containing recovered materials in accordance with 2 CFR § 200.322 and 40 CFR part 247.

    d. All Contracts - Provisions that address termination for cause and termination for convenience

☐ Yes ☐ No ☐ N/A

11. All contracts exceeding $25,000, an appropriate check of the System for Award Management has been or will be made to assure that contracts or subcontracts are not awarded to those individuals or firms suspended, debarred, or excluded from participating in this federally assisted project

☐ Yes ☐ No ☐ N/A

12. Contracts exceeding the simplified acquisition threshold (currently $150,000) include or will include provisions, as applicable, that address the following:

    a. Construction and equipment installation contracts - a bid guarantee of 5%, a performance bond of 100%, and a payment bond of 100%

    b. Construction and equipment installation contracts - requirements of the Contract Work Hours and Safety Standards Act 40 USC 3701-3708), Sections 103 and 107

    c. All contracts, Restrictions on Lobbying and Influencing (2 CFR part 200, Appendix II(J)

    d. All contracts - Conditions specifying administrative, contractual and legal remedies for instances where contractor of vendor violate or breach the terms and conditions of the contract

    e. All Contracts - Applicable standards and requirements issued under Section 306 of the Clean Air Act (42 USC 7401-7671q), Section 508 of the Clean Water Act (33 USC 1251-1387, and Executive Order 11738

☐ Yes ☐ No ☐ N/A

9. All construction and equipment installation contracts exceeding $3,000 contain or will contain a contract provision that discourages distracted driving

☐ Yes ☐ No ☐ N/A

10. All contracts exceeding $10,000 contain or will contain the following provisions as applicable:

    a. Construction and equipment installation projects - Applicable clauses from 41 CFR Part 60 for compliance with Executive Orders 11246 and 11375 on Equal Employment Opportunity.

    b. Construction and equipment installation - Contract Clause prohibiting segregated facilities in accordance with 41 CFR part 60-1.8

    c. All Contracts - Requirement to maximize use of products containing recovered materials in accordance with 2 CFR § 200.322 and 40 CFR part 247.

    d. All Contracts - Provisions that address termination for cause and termination for convenience

☐ Yes ☐ No ☐ N/A

11. All contracts exceeding $25,000, an appropriate check of the System for Award Management has been or will be made to assure that contracts or subcontracts are not awarded to those individuals or firms suspended, debarred, or excluded from participating in this federally assisted project

☐ Yes ☐ No ☐ N/A

12. Contracts exceeding the simplified acquisition threshold (currently $150,000) include or will include provisions, as applicable, that address the following:

    a. Construction and equipment installation contracts - a bid guarantee of 5%, a performance bond of 100%, and a payment bond of 100%

    b. Construction and equipment installation contracts - requirements of the Contract Work Hours and Safety Standards Act 40 USC 3701-3708), Sections 103 and 107

    c. All contracts, Restrictions on Lobbying and Influencing (2 CFR part 200, Appendix II(J)

    d. All contracts - Conditions specifying administrative, contractual and legal remedies for instances where contractor of vendor violate or breach the terms and conditions of the contract

    e. All Contracts - Applicable standards and requirements issued under Section 306 of the Clean Air Act (42 USC 7401-7671q), Section 508 of the Clean Water Act (33 USC 1251-1387, and Executive Order 11738

☐ Yes ☐ No ☐ N/A

13. Concurrence was or will be obtained from the Federal Aviation Administration (FAA) prior to contract award under any of the following circumstances:

    a. Only one qualified person/firm submits a responsive bid

    b. The contract is to be awarded to other than the lowest responsible bidder

    c. Life cycle costing is a factor in selecting the lowest responsive bidder

    d. Proposed contract prices are more than 10% over the sponsor's cost estimate

    ☐ Yes ☐ No ☐ N/A

Additional documentation for any above item marked "no":

Sponsor's Certification

I certify, for the project identified herein, responses to the forgoing items are accurate as marked and additional documentation for any item marked "no" is correct and complete.

I declare under penalty of perjury that the foregoing is true and correct. I understand that knowingly and willfully providing false information to the federal government is a violation of 18 USC § 1001 (False Statements) and could subject me to fines, imprisonment, or both.

Executed on this _____ day of _____ , _____.

Name of Sponsor:

Name of Sponsor's Designated Official Representative:

Title of Sponsor's Designated Official Representative:

Signature of Sponsor's Designated Official Representative: _____

17.36. FHWA Form 1446C-AKDO, Final Inspection

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

FINAL INSPECTION OF FEDERAL-AID PROJECT
CONSTRUCTED UNDER 23 U.S.C. 117

1. PROJECT NAME AND NUMBER	**2. BOROUGH/CITY**	**3. STATE** Alaska
4. DESCRIPTION OF IMPROVEMENT AS PROGRAMMED		
5. CONTRACTOR'S NAME		**6. CONTRACT AMOUNT**

7. NOTICE OF COMPLETION: The above listed project has been completed. A final inspection by ADOT&PF has found this project to be in reasonable conformance with the PS&E.

SIGNATURE (SHA OFFICIAL)_____

TITLE_____

8. ADOT&PF INSPECTION MADE BY	**9. DATE OF INSPECTION**
10. IN COMPANY WITH	

cc: ADOT&PF Regional Construction Engineer
ADOT&PF Headquarters Director, Statewide Design & Engineering Services Division
ADOT&PF Headquarters Director, Administrative Services Division
FHWA Engineer

Form FHWA-1446C-AKDO (5/99ge)

17.37. FHWA Project Closeout Checklist

PROJECT FINAL CLOSEOUT CHECKLIST

Highways Projects

PROJECT NO.: _____

PROJECT NAME: _____

FINAL ESTIMATE ASSEMBLY

- ☐ Certification of Final Estimate (Form 25D-116).
- ☐ Contractor's Release (Form 25D-117).
- ☐ Summary of Quantities (Form 25D-25).
- ☐ Project Materials Certificate from Materials Section. DATE: _____
- ☐ "As-Built" Plans DATE: _____
- ☐ Department of Labor Tax Clearance. DATE: _____
- ☐ Department or Revenue Tax Clearance. DATE: _____
- ☐ Department of Labor Notice of Completion (NOC) DATE: _____
- ☐ Alaska Railroad Release, if applicable

FINAL CONSTRUCTION REPORT

- ☐ **Final Estimate Assembly (see above).**
- ☐ Final Construction Report Summary.
- ☐ Reports (as required): Report on Design Recommendations (required)
  Report on Claims (if a claim was submitted)
  Report on ARRA Documentation
- ☐ Explanation of Overruns, Underruns and Change Documents. List only contract major bid items (>5% of award amount) whose final quantity varied more than 25% from the estimated quantity and an explanation of all change document items.
- ☐ Proof of Construction for Right-of-Way (Form 25D-173) -- Completed only if the right-of-way involves public land.
- ☐ Proof of Use for Material Sources (Form 25D-174) with Material Site Record -- Completed only if sites are State furnished or controlled.

Rev 7/7/14

17.38. Final Construction Report Summary Sheet

STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES

Final Construction Report Summary Sheet

PROJECT NO.:
PROJECT NAME:
PROJECT DESCRIPTION:
PROJECT ENGINEER(s):
CONTRACTOR:
NOTICE TO PROCEED DATE:
START OF WORK DATE:
CONTRACT COMPLETION DATE:
TIME EXTENSION BY CHANGE DOCUMENTS:
PROJECT ACCEPTANCE DATE:
OVERRUN TIME:
ENGINEER'S ESTIMATE:
ORIGINAL CONTRACT:
- **$ ADDED BY CHANGE DOCUMENTS:**
- **TOTAL AUTHORIZED AMOUNT:**
- **TOTAL CONTRACT AMOUNT:**
- **LESS LIQUIDATED DAMAGES:**
- **FINAL CONTRACT AMOUNT:**

17.39. Final Estimate Review Report, (Form 25D-031)

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
FINAL ESTIMATE REVIEW REPORT

Central **REGION**

Project Numbers _____ Contractor _____

Project Name: _____

Description of Work _____

_____

_____

Required Project Completion Date _____ / _____ Calendar Days

Actual Project Completion Date _____ / _____ Calendar Days

Project Manager _____ Project Engineer _____

Final Acceptance Date _____

Days Overrun _____ Liquidated Damages Assessed _____

Final Amount _____ Bid Amount _____

Materials Certification Date _____ Federal Document Date _____

Dept. of Labor Title 36 Clearance Date _____ Right of Way Clearance Date _____

Dept. of Labor Tax Clearance Date _____ Dept. of Revenue Clearance Date _____

* *

CLASSIFICATION OF COSTS --FINAL PROJECT AMOUNTS

Participating

Non-Participating

Liquidated Damages

Reimbursable

Total

Remarks _____

_____

I certify that my review of this project, in accordance with State policy, indicates that all work has been completed within the terms of the contract and authorized change documents; and it also indicates that State and Federal Aid funds have been properly classified unless other wise noted above.

_____ _____

Signature of Reviewer Date Submitted

25D-031 (Rev. 11/16)

17.40. Final Estimate, Summary of Quantities (Form 25D-025)

25D-025
3/98

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

FINAL ESTIMATE

SUMMARY OF QUANTITIES

Sheet _____of Sheet _____

Project No.: _____

_____

Project Name & Location: _____

_____

ITEM NO.	FA CODE	ACT. CODE	ITEM	UNIT	UNIT PRICE	QUANTITY	AMOUNT

Prepared by:_____ Date: _____Checked by: _____ Date: _____

17.41. Inspector's Daily Report (Form 25D-186)

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES

INSPECTOR'S DAILY REPORT

Project No. _____ Project Name _____

Weather _____ Shift: _____ Contractor's Rep/Title _____

CONTRACTOR'S EQUIPMENT							CONTRACTOR'S WORK FORCE	
No.	Description or Type	Size or Capacity	Hours Worked	Hours Stdby	Hours Down	Remarks	No.	Classification/Duties

LIMITS OF WORK AND MATERIAL PALACMENT							
Item No.	Description	Source (Limits) From	Source (Limits) To	Placement (Limits) From	Placement (Limits) To	Approximate Quantity	Work Completed & Accepted

NARRATIVE (Include report of day's operations, contractor's production rates and efficiency, unusual conditions or problems encountered, orders given and received, discussions with contractor, etc.)

Date _____ Inspector's Signature _____ Page _____ of _____

Form 25D-186 (4/98)

17.42. Interim Work Authorization (Form 25D-070)

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
Select REGION

Interim Work Authorization

Project No.: _____ IWA No. _____

Project Name: _____

Contractor: _____

Address: _____

Estimated amount of IWA: $ _____

Recommended By: _____ Date: _____
Project Engineer

Approved By: _____ Date: _____
Department *(can be verbal)*

Acknowledged By: _____ Date: _____
Contractor's Representative

Permission for previously submitted subcontractor(s) to perform all or portions of the work described herein is as checked: ☐ Yes ☐ No ☐ N/A.

The following change(s) in the above Contract are hereby made in accordance with the terms of the Contract and under the terms and conditions stated below. Price adjustments resulting from inaccurate cost and pricing data are subject to the provisions of AS 36.30.400(c). This document shall become an interim amendment to the Contract and all provisions of the Contract will be applicable. Items not mentioned shall not be affected by this document. This document shall be superseded by a subsequent Change Order, which will address any adjustments to contract time.

Basis of Payment (Check One)

☐ Payment for the following work will be paid per Section 109-1.05 of the Standard Specifications.
☐ Payment for the following work will be paid per the unit prices and method of measurement stated.
☐ Payment for the following work will be paid as a lump sum item.

DESCRIPTION OF CHANGE (Use Continuation Sheet 25D-065 as Required)

Form 25D-070 (Revised 4/12) I.W.A No. Page 1 of 1

17.43. Labor Compliance Interview (Form 25D-040)

LABOR COMPLIANCE INTERVIEW

PROJECT NO. (Federal/AKSAS) _____

PROJECT NAME: _____

NAME OF EMPLOYEE INTERVIEWED: _____

PRESENT ADDRESS: _____

PERMANENT ADDRESS: _____

EMPLOYED BY: _____

If a subcontractor, check files for an approved subcontract. If there is no subcontract, notify Project Engineer.

WORK PERFORMED BY EMPLOYEE: _____

Be specific as to type and size of equipment used or duties perfomed so work can be correctly classified.

HOW MUCH DO YOU MAKE AN HOUR? _____

PAID FOR ALL HOURS WORKED? Yes _____ No _____

ARE STRAIGHT TIME AND OVERTIME HOURS CORRECT? Yes _____ No _____
(Paid time & 1/2 over 8 hours per day or 40 hours per week?)

ARE YOU PAID WEEKLY & PAYROLL DEDUCTIONS PROPER? Yes _____ No _____

COMMENTS: _____

INTERVIEWED BY: _____ Date: _____

Information from contract and wage bulletins:

State Minimum Wage		Federal Minimum	
Basic Hourly Rate:		Basic Hourly Rate:	
Fringe Benefit Rate:		Fringe Benefit Rate:	
Total State Rate:		Total Federal Rate:	

Information from payrolls:

Payroll # or date: _____

Job Class (stated on payroll): _____ (ex., laborer II, operator IV, truck driver I, etc.)

Is Job Classification from Interview Correct? _____

Basic Hourly Rate: _____

Overtime Rate: _____

Fringe Benefit Rate: _____

Total Rate Paid: _____

Checked by: _____ Date: _____

Note: If Contract is over 24 months old, new State wage rates apply.

(Form 25D-040 Rev. 10/19/05)

Page 1 of 1

17.44. Letter for ESD Tax Clearance

MEMORANDUM

State of Alaska

Department of Transportation & Public Facilities

TO:	Marty Messick, Sr. Field Auditor Juneau Field Tax Office Division of Employment Security Department of Labor	**DATE:** **FILE NO:** **TELEPHONE NO:** **FAX NUMBER:** **TEXT TELEPHONE:**	September 2, 1992 (907) 465-2707
FROM:	John R. Edwards Construction Chief Marine Engineering AMHS	**SUBJECT:**	Project No. 75221/MT-671 Auke Bay F.T. East Bridge Recoat, Phase I Clearance

Please advise whether or not clearance is granted for the below listed contractor.

Dunkin and Bush, Inc.
P.O. Box 807
Redmond, Washington 98073

Time Worked: July 15, 1992 to August 15, 1992

Chapter 85, SLA 1982 requires that the State now pay interest on contractor's final pay requests if payment is not made within 30 days.

If within 14 calendar days, we do not receive written notice from your office of an outstanding deficiency or failure to file required reports, we will process this contractor's final pay estimate for payment.

( ) Clearance granted for final payment.

( ) Clearance not granted for final payment.

Remarks:_____

_____
Signature

_____
Title

_____
Date

17.45. Letter of CENG Budget Requests

MEMORANDUM

State of Alaska

Department of Transportation and Public Facilities

TO: Distribution

DATE:

FILE NO:

TELEPHONE NO:
FAX NUMBER:

FROM: (Name)
Project Engineer

SUBJECT: (Project No.)
(Project Name)

In order for Construction to arrive at a workable budget for the referenced project, we request the following information from your section. Please fill in the blank and return to the above address.

Total amount required by this Section to monitor the above project:

$_____.

Give a short summarization below of how your total budget was arrived at:

_____
_____
_____

Signed: _____ Date: _____

It is suggested that as the project progresses, you closely monitor your charges. If for any reason you feel you cannot meet your budget, a request for additional funds will be necessary. Any such request needs to address the status of your work, the reason your initial estimate is not sufficient, and an estimate of the additional funds required to complete your involvement with the project.

(Initials)/

DISTRIBUTION:

Construction Group Chief (General Admin.)
Contracts
Design
EEO Officer
Highway Data Group
Anchorage
Internal Review Auditor, HQ
Project Control
Quality Assurance Engineer
Regional Environmental Coordinator
State Materials Engineer
Statewide Civil Rights Office,

17.46. Letter of Department of Revenue Tax Clearance

MEMORANDUM

State of Alaska
Department of Transportation & Public Facilities

TO: Joan Roomsburg
Tax Examiner
Compliance Unit
Department of Revenue

DATE: September 2, 1992

FILE NO:

TELEPHONE NO: (907) 465-2707

FAX NUMBER:

TEXT TELEPHONE:

FROM: John R. Edwards
Construction Chief
Marine Engineering
AMHS

SUBJECT: Project No. 75221/MT-671
Auke Bay F.T. East Bridge
Recoat, Phase I Clearance

Please advise whether or not clearance is granted for the below listed contractor.

Dunkin and Bush, Inc
P.O. Box 807
Redmond, Washington 98073

Time Worked: July 15, 1992 to August 15, 1992

Chapter 85, SLA 1982 requires that the State now pay interest on contractor's final pay requests if payment is not made within 30 days.

If within 14 calendar days, we do not receive written notice from your office of an outstanding deficiency or failure to file required reports, we will process this contractor's final pay estimate for payment.

(X) Clearance granted for final payment.

( ) Clearance not granted for final payment.

Remarks: _____

Joan Roomsburg
Signature

Tax Examiner
Title

9/9/92
Date

17.47. Letter of Final Acceptance

December 6, 1992

RE: Turner Regional Airport
Runway Reconstruction
AIP No. 8-40-1746-01/48702

Final Acceptance GCP 50-16

Mr. Bruce Temple
Hadden Contractors
7465 Modock Road
Eagle River, Alaska 99577

Dear Mr. Temple:

All work on the above named project has been inspected and found to be in substantial conformance with the contract. With this final acceptance you are released from further obligations under the contract, with the exception of any warranties or guaranties that you provided under individual pay items.

Warm regards,

Contracting Officer

cc: Contracts
Department of Labor
D&ES Division
FAA/FHWA
Federal Aid/Statewide Aviation
Group Chief/PM
Project Control
Quality Assurance/Review
Regional Finance
Statewide Civil Rights Office

17.48. Letter of Final Inspection

STATE OF ALASKA

FRANK H. MURKOWSKI, GOVERNOR

DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

2301 PEGER ROAD
FAIRBANKS, ALASKA 99709-5399

PHONE: (907) 451-5466
FAX: (907) 451-5411

Northern Region Construction

March 15, 2003
Re: Southcentral Leveling, Phase III
Tok Cutoff MP 55-100
Project No. IM-OOOS(252)/67385

Project Completion 105-1.15

Mr. Quinn Vaterlaus
Wilder Construction Company
11301 Lang Street
Fairbanks, Alaska 99515-3006

Dear Mr. Vaterlaus:

A final inspection was held on March 4, 2003 with the following people in attendance:

Quinn Vaterlaus, Wilder Construction Representative
Billy Collins, Project Engineer, Alaska DOT/PF
Anne Jones, Design and Environmental Services, Alaska DOT/PF
Sam Lewis, Assistant Project Engineer, Alaska DOT/PF

All work was found to have been completed in substantial conformance with the contract and is accepted by the Department as of 2:00 p.m., March 4, 2003. Contract time stopped as of that date.

This acceptance does not relieve you of your remaining obligations under the contract.

Sincerely,

Billy Collins, P.E.
Project Engineer

/vjz

25A-T34LH