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The Project Management Section of this Construction Manual is to be used for informational purposes only. It is not an official Department of Transportation Policy, nor is the information legally binding upon our construction contracts.

CONTRACTS

A contract is a written mutual agreement between two or more parties and as such governs the relationship between the contracting parties. Each party to the contract has certain rights and corresponding obligations to fulfill and neither party has the right to deviate from the scope of the terms or requirements of the contract without the written consent of the other party.

A contract executed between the State and the contractor for an improvement of a highway provides that the performance of the work, including furnishing of labor and materials and fulfillment of other obligations, must be in accordance with the requirements of the plans, specifications, and other terms and requirements set forth in the contract.

The process of developing plans and a contract is relatively long and involves many stages along the way. Technology, standards, rules and statutes are seemingly in a constant state of change and necessitate corresponding changes to the plan, contract provisions, and specifications. Also, inadvertent discrepancies will occur in a plan or proposal. Due to these factors, it has been necessary to develop a hierarchy of the various contract documents as to which will govern, in the context of contract terms, in case of a discrepancy. This hierarchy is set forth in Section 5.4 of the Specifications and in Chapter 2 of this manual.

The Contractor must not begin work until the contract has been fully executed by all necessary parties. In some circumstances, the Contractor may ask to begin work prior to execution, this should not be allowed. The Bid Letting Office will send out a Notice to Proceed once the contract has been fully executed by all parties, and all necessary paperwork has been received.

PLAN REVIEW

The success of a project is largely dependent on the preparation of the project team. To ensure that you are familiar with the project, the plans and all of the contract provisions must be thoroughly reviewed prior to the Bid Letting. By reviewing the contract before award, you can catch any errors or omissions in the contract, and reduce construction problems before they occur. If any member of the project team has questions regarding the work, consult with your supervisor, the Operations Support Office, or the design Engineer to clarify the intent of the contract.

PROJECT RECORDS FILE

Many documents are generated during the course of a typical construction project. To ensure that the documents are filed properly, construction files should be developed in accordance with the *Construction Project Filing* Policy. Utilization of a standard filing system ensures that project documents can be easily located, if necessary. Project documentation that does not require signatures from outside entities may be stored electronically in the CMS system.

RECORDS RETENTION

Project documentation must be retained in accordance with the records retention laws, and as outlined in the *Construction Project Filing* Policy.

Project documentation on Federal-aid projects must be retained for 3 years beyond the date that the project is finaled with FHWA. This date should not be confused with the date that the project is finaled by the DOT. When a project is finaled by FHWA, the Finance Office will send out a notification to the Area Offices. This information can also be found in the checker files on the DOT Intranet. The three-year period starts on this date.

PRECONSTRUCTION MEETING

Following the award and execution of the contract, a preconstruction meeting should be scheduled by the Contractor in conjunction with the Area Office. Its purpose will be to encourage a general and open discussion between Department personnel, the Contractor, subcontractors, utility companies, railroads, and other invited parties. Guidelines for handling preconstruction meetings can be found in Chapter 12 of this manual.

ROLES AND AUTHORITIES

The *Delegation of Authority* Policy outlines many of the authorities granted to the Region and Area Engineers. This policy, however, does not indicate the specific roles and authorities of everyone involved in project management. The roles outlined below are not all-encompassing, and may vary depending on experience. All employees should discuss their role and authority on a construction project with their supervisor. The supervisor will be able to provide more specific information for each employee's particular situation.

Region Engineer

The term "Region Engineer" as defined in the Specifications refers to the representative of the Director of Operations in charge of assigned operations within one of the four Regions of South Dakota.

Area Engineer

The term "Area Engineer" as defined in the Specifications refers to a representative of the Director of Operations acting under the supervision of the Region Engineer and in charge of assigned operations within a designated area.

The Area Engineer has immediate and responsible charge of engineering details and administration of the construction project. The Area Engineer has the authority to reject defective work. The Area Engineer also has the authority to suspend work for work being improperly performed, for the Contractor's failure to correct conditions unsafe for the project personnel or general public, for the Contractor's failure to carry out provisions of the contract or for the Contractor's failure to carry out orders of the Engineer. In some cases, some of these duties, such as the authority to reject defective work are delegated to the Project Engineer.

Project Engineer

The term “Engineer” as defined in the Specifications refers to the Engineer acting through the Director of Operations or through authorized representatives responsible for engineering supervision of the contract work. Most commonly, this refers to the Project Engineer, although it can also mean Area Engineer or Region Engineer, depending on the situation.

While the specific duties and responsibilities of the Project Engineer may vary somewhat depending on the type of contract and the Area/Region in which the Project Engineer is located, the following general statements outline the Engineer’s role.

In general, the authority of the Project Engineer in relation to the contract extends to the field administration of the contract, enforcement of the terms of the contract, and determination of the amount of work performed and materials furnished. Within the limits of the Department’s policies and control procedures and the limits assigned by the Engineering Supervisor, Area Engineer, and Region Engineer, the Project Engineer is responsible for and has the delegated authority for obtaining work that fulfills requirements of the contract.

The Engineering Supervisor is responsible for the assignment of Project Inspector’s overall work schedule. Once an Inspector has been assigned to a project by their supervisor, it is the Project Engineer’s responsibility to ensure that the inspector is fulfilling the required daily tasks on that project. Prior to the start of an inspector’s work assignment, the Project Engineer should brief the inspector on his or her duties, responsibilities, job relationship with other DOT employees, job relationship with the Contractor, status of the project construction, and any other project-related items that may be of importance.

Section 5.11 of the Specifications requires the Contractor to notify the Engineer 24 hours in advance of any change in construction activities that will require inspection staff changes. These changes should be immediately brought to the attention of the Engineering Supervisor so that inspection staff can be reassigned to the project, if necessary.

Decisions regarding rejection of materials or work may be made by the Project Engineer or in some cases referred by the Project Engineer to a higher authority. To avoid complications in final settlement of a project and possible claim for extra compensation, differences arising between the Project Engineer and the Contractor over interpretation of the Specifications or other requirements of the contract are to be promptly referred to the Engineering Supervisor or Area Engineer for an understanding and agreement with the Contractor of the work requirements. It is recommended when there are differences the conflict resolution process described in Chapter 10 of this manual be followed.

Project Inspector

The work and materials are inspected to obtain acceptable work in accordance with the requirements of the contract. It is the duty of the inspection team to determine that the work is performed in accordance with the specified requirements. The inspection team is represented by the Project Engineer and Project Inspectors.

To provide good inspection, an inspector must have a ready knowledge of the work required by the contract. Prior to construction, all members of the inspection team should thoroughly study

the plans, specifications, and contract provisions to familiarize themselves with the requirements and be prepared to readily and correctly answer questions concerning the work that may arise during the construction operations. The inspectors should consult with the Project Engineer before the work is started for clarification of provisions or requirements not thoroughly understood.

Project Inspectors are authorized and responsible for inspection of all work done and materials furnished. The inspection may extend to any part of the work, preparation, fabrication, or manufacture of the materials to be used. The Contractor's work should be closely observed, tested, measured and documented. It is the inspector's responsibility to be in the right place at the right time.

The Inspector has the authority to:

- Inspect all work to ensure contract compliance.
- Require the Contractor to uncover work so that it may be inspected.
- Reject work or materials until any issues can be referred to the Project Engineer.

The Inspector does not have the authority to:

- Alter or waive the provisions of the contract.
- Issue any instructions contrary to the contract.
- Act as foremen or superintendent for the Contractor.

Unacceptable work and proposed material rejections must be brought to the Contractor's attention immediately. If not promptly corrected, the situation should be brought before the Project Engineer for resolution.

Most inspection requires the inspector to be present during the operations so the inspector can observe the details of the work. Instructions to the Contractor about the work should be in the form of the results rather than the method of doing it, except when specifications require a specific method be followed. Suggestions may be made when asked for by the Contractor. A daily record should be kept for future reference of all pertinent instructions and suggestions given to the Contractor including the date, name of party to whom given, whether written or oral, and all pertinent information. These records and information should be documented in the employee's daily diary.

Orders given for correction of errors found in the work are to be based on judgment that reflects fairness, impartiality, and a thorough knowledge of the work in question. Should the Contractor take exception to such orders, arguments are to be avoided and the matter immediately referred to the Project Engineer for interpretation and settlement before the work progresses.

When checking equipment, the inspector will tell the Contractor of any correction or adjustment necessary, but will not specify any method of correction. The inspector will recheck upon completion of the adjustment. When a particular type of equipment is required by the specifications, an inspection of the equipment furnished will be made to determine compliance.

The importance of each inspector keeping a neat, up-to-date and accurate diary and submitting reports and tests in a timely manner cannot be overemphasized. If there are disputes, the daily records are the legal documents with which the matter may be resolved.

SUBCONTRACTOR APPROVAL

In accordance with Section 8.1 of the Specifications, the Contractor is required to perform at least 30% of the work with the Contractor's own organization. In some special circumstances, this percentage may be lowered. Generally, this is not done unless there are only a small number of contractors who can bid the work and perform 30% of the work on their own. In this case, the percentage of work required to be performed by the Contractor's own organization is specified in a special provision for subletting.

The subcontracting requirement is in place to protect the industry and the Department from companies who would subcontract 100% of the work, while just adding prime contractor markup for themselves. These types of companies have shown up in other states and have taken work away from legitimate construction companies. In many cases, these companies consist of nothing more than a handful of people and a PO Box number.

To become an approved subcontractor, a DOT-202 form must be submitted by the Prime Contractor to the Operations Support Office. Operations Support will calculate the percentage of work that is being requested to sublet, verify with the Department of Revenue that the subcontractors are in good standing with their taxes and required licenses, and verify that they have not been debarred from working on State or Federal projects.

Once the subcontractors have been approved to work, a letter is sent out indicating who has been approved. In addition, the subcontractors' names are then added to the CM&P system. No subcontractor should be allowed to work if their name is not in CM&P, without written or verbal approval from the Operations Support Office.

Specialty Items

Section 8.1 of the Specifications allows "Specialty Items" to be excluded from the subcontracting requirements. According to the 23 CFR 635.102, the definition of a specialty item is: "…work items identified in the contract which are not normally associated with highway construction and require highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid on the contract; in general…".

It is important to note that only work items that are identified as a specialty item in the contract can be considered specialty items.

Suppliers vs. Subcontractors

There are common misconceptions about who needs to submit DOT-202's. Suppliers are not considered subcontractors, and thus do not need to submit a DOT-202. Section 8.1 of the Specifications states that the following will not be considered as subcontractors:

1) the production of any material outside the project limits, including but not limited to, the production of sand, gravel, crushed stone, batched concrete aggregates, ready mix concrete, off-site fabricated structural steel, other off-site fabricated items, and any materials delivered by established and recognized commercial plants; or

2) delivery of these materials to the work site from an off-site location in vehicles owned or operated by such plants or by recognized independent or commercial hauling companies. Project limits are defined as being within ½ mile of the project proper.

Example 1: Fisher Sand and Gravel is producing base course for an asphalt paving project in which Border States Paving is the Prime Contractor. Fisher's pit is located 15 miles from the project. Fisher Sand and Gravel hired Roth Trucking to haul the base course to the stockpile, which is directly adjacent to the roadway being constructed. Roth also has a loader and operator at the stockpile site and is stockpiling the material.

Question: Which firms, if any, need to have approved DOT-202's?

Answer: Fisher Sand and Gravel is considered a supplier and does not need to have an approved DOT-202, since the material is being produced outside the project limits. Roth trucking would be considered a subcontractor, since they are doing more than simply delivering materials to the project. Since Roth is stockpiling the material within the project limits, they will need to have an approved DOT-202.

Question: If Fisher's pit was located within one-half mile of the project site, would they need to have an approved DOT-202?

Answer: Yes. A firm is only considered a supplier if the material is produced outside the ½ mile radius of the project.

Example 2: Sioux Falls Construction is the Prime Contractor on a bridge project. Their crane breaks down just before the girders need to be set, so they rent a crane from Jim's Crane Service.

Question: Does Jim's Crane Service need to have an approved DOT-202? Would they need to have an approved DOT-202 if Jim's supplied a crane operator as well?

Answer: Jim's does not need to have an approved DOT-202 if they simply supply equipment for use on the project. If they supply an operator with the crane, then they would need to have an approved DOT-202.

If an individual that owns a crane is hired (crane owner/operator) for this situation, that person is considered an employee, and is required to be reported on the company's payroll that hired him to operate the crane instead of being a subcontractor. This is a Davis-Bacon Labor Law requirement.

Example 3: Heavy Constructors is planning a bridge deck pour. The concrete is being supplied by Birdsall Sand and Gravel. Birdsall is also supplying a pump truck to place the concrete.

Question: Does Birdsall S&G need to have an approved DOT-202?

Answer: No. In this case, Birdsall is the concrete supplier and providing the pump truck, therefore Birdsall is considered a supplier and not a subcontractor. Had a different company provided the pump truck and operator, that company would be considered a subcontractor and would require approval.

CONTRACT SUPERVISION

The Project Engineer or Inspector should not act as a foreperson, superintendent, or coordinator for the Contractor. Instructions and suggestions concerning the work are to be given to the Contractor, superintendent, or work supervisor, but not to the workers. The only exception to this is in an emergency situation where the safety of the workers or other project staff is involved. Any suggested changes are to be given solely for the benefit of the work and are to be clearly differentiated from directions.

Section 5.5 of the Specifications requires the Contractor to provide a competent superintendent who is capable of reading and understanding the plans and specifications, and is experienced in and capable of accomplishing the type of work being performed. The superintendent or designated representative of the Contractor must be accessible to the Engineer during all hours of each workday. This person should have sufficient authority to execute directions or instructions of the Project Engineer, without delay and to promptly supply all things needed to properly perform the work.

Section 8.5 of the Specifications requires that the Contractor must also have sufficient machinery and equipment available to perform all of the requirements of the project.

DEPARTMENT STAFF AND CONTRACTOR RELATIONS

The Contractor's goal is to satisfactorily perform and complete, at a profit, the work under contract with SDDOT. The goal of the Department is to make certain that acceptable work is completed in accordance with contract terms.

To accomplish these goals there must be cooperation and understanding between the two parties. The Contractor should expect to do what the contract requires, and the state should expect to pay for contract work done. The Contractor should not expect to be paid for work that is done, but not required by the contract nor ordered by the Engineer. The state should not require the Contractor to provide more than the contract requires, unless the Contractor is adequately compensated.

The conduct of relations with the Contractor should be fair, courteous and based on sound, reasoned judgment in compliance with specifications and policy. Department decisions should be firmly conveyed to the Contractor with clearly defined justification.

Good relations with the Contractor should be promoted by advising, whenever possible, of unacceptable work while the operation is in progress rather than waiting until the work is completed and then requiring its removal or a pay reduction.

Department staff are not to make derogatory remarks about the organization, personnel, equipment or methods of the Contractor or subcontractors.

Department staff are not to place themselves under obligation to the Contractor by accepting gifts or services. Excessive fraternization with the Contractor and Contractor's personnel should be avoided.

Department staff should fulfill any reasonable request of the Contractor that will allow accomplishment of work in accordance with the contract provisions and without delay, but they are not to perform tasks that are the responsibility of the Contractor or subcontractors.

FHWA AND OTHER FEDERAL AND STATE AGENCY RELATIONS

Federal-aid highway improvement projects are administered by the Department on the basis of a State-Federal agreement, even though there may be no State funds in the projects, only local and Federal monies.

The Federal Highway Administration (FHWA) has the responsibility to monitor projects constructed with Federal-aid highway funds for compliance with Federal-aid requirements. Consequently, FHWA representatives may be in the Area or Region Office and on the project site at various times to determine if the project is being administered by the Department in compliance with plans, specifications and estimates and in compliance with Federal laws and regulations and state adopted policies and procedures.

Department personnel are expected to be courteous and to cooperate fully with FHWA representatives, answering all questions about the construction operations, staff responsibilities and provide full access to all records and reports.

It should be understood the FHWA will not interfere with, direct or supervise the Contractor's operations and personnel. Representatives of the FHWA are primarily on the project to review and assess the Department's procedures and controls for assuring that the work is being completed in reasonably close conformity with the plans and specifications, and to evaluate the overall quality of construction.

During their review, FHWA representatives may also be reviewing and reporting on conditions that are pertinent to pending contract change orders. Other anticipated changes from the construction plan and contract should be brought to their attention by the Engineer so the change orders may be expedited should it be necessary to submit them to the FHWA for approval. Following completion of the project review, FHWA will send a copy of their written findings to the Department for information and for follow-up action when warranted.

Other Federal and State agency representatives may also be on the project at various times because of an interest in the construction. SDDOT personnel should answer questions to the best of their ability and knowledge and to treat the visitors with courtesy. Personnel should be aware these persons do not have the authority to issue instructions and orders to either the Contractors, SDDOT employees or employees of private consulting firms retained by SDDOT. Such instructions are issued by the Engineer or supervisor.

The Engineer or designated representative should accompany FHWA and other agency representatives during their visit to explain the work operations and work schedule, answer questions, and assure the safety of the visitors from injury by construction machinery and activity. Suggestions that may be offered by visitors should be accepted with the explanation that action cannot be taken until a decision based on facts is made by the Engineer.

BI-WEEKLY PROGRESS REPORTS

Beginning on the date work started, a bi-weekly progress report must be prepared and approved every two weeks. The work shown on the progress report may coincide with a progress pay estimate. When both a progress pay estimate and bi-weekly progress report are prepared, the two period ending dates must coincide.

It is important to ensure that the information on the progress report is accurate, as this is the Department's and the Contractor's method for tracking the work done on a project. It also is the method used to show the Contractor how much contract time is being assessed on the project. According to Section 8.6 of the Standard Specifications, if the Contractor disagrees with the day count shown on the progress report, he has one week to file a written protest. If the Contractor fails to file a protest, the progress report is deemed to be accepted as accurate.

The CM&P system will automatically generate a cover letter that is to be sent to the Contractor with the Bi-weekly Progress Reports whenever contract time is assessed. Ensure the liquidated damages and/or disincentives on the final pay estimate correlate with the applicable number of overrun days on the final bi-weekly progress report.

In the CM&P system, indicate if the Contractor was working and each of the subcontractors that were working. If a subcontractor is not listed in the CM&P system for a specific project, the Engineer should not allow them to work without approval from the Operations Support Office.

In the "Work in Progress This Period" field, list all contractors working and the work they performed separately for each of the two weeks in the period. Include enough information that an overall picture of project status is presented.

PROGRESS PAY ESTIMATES

The Project Engineer will compute the quantities of material and work that the Contractor has performed, and prepare a progress pay estimate, in accordance with Section 9.7 of the Standard Specifications. Pay estimates may be prepared and approved every two weeks during construction with period ending dates that coincide with the bi-weekly progress reports.

The Engineer is responsible for assuring that the quantities for the various items reported on the progress pay estimate are reasonable for the work accomplished. Substantiation of the quantities may be in the form of entries in CM&P, diaries, entries on the plans, ticket books, field notes, daily progress reports or any other appropriate supportive document pertaining to the project.

Work that is acceptable but not within conformity with the plans and specifications (work that must be submitted for price adjustment) can be included on progress pay estimates. The Project Engineer should make an approximation of the anticipated price adjustment and assess it on the pay estimate that includes the sub-standard work. The Region Engineer or the Region Engineer's representative may modify this price adjustment, as appropriate.

The Project Engineer should utilize the *Price Adjustment Guidelines* to aid in the price adjustment. If you cannot make a determination of what a reasonable price adjustment should

be, contact your supervisor, the Region Materials Engineer or Region Operations Engineer for assistance.

More information regarding documenting contract item quantities and payments can be found in Chapter 7.

WRITTEN ORDER FORMS

When the Engineer wishes to document orders given to the Contractor, a written order (DOT-205) should be issued.

In many instances the specifications require written permission or approval from the Engineer prior to the Contractor using certain methods, materials, or equipment. In these cases, authorization or consent should be given by letter, not by written order.

A written order is not intended to eliminate the Construction Change Order. CCO's will be submitted as required.

Written orders should be issued when additional work is ordered and payment may or may not be made, or in cases where damaged work is ordered repaired. The cause of damage should be specified in the written order.

The following are specific instances where written orders should be issued:

1. The Engineer orders the Contractor to remove or uncover portions of the finished work. (Section 5.11)

2. The Engineer orders the Contractor to repair public or private property. (Section 7.12)

3. The Engineer orders the Contractor to finish sections in progress before work is started on additional sections. (Section 8.4)

4. The Engineer wishes to document an order given to the Contractor.

NON-SPECIFICATION WORK

When work done on a project is not in conformance with the Specifications, the Project Engineer will be responsible for making the determination if the material is adequate to stay in place, or if the Contractor will be required to remove the work. If the Engineer or Inspector is aware that the material does not meet specifications before it is placed, it should not be incorporated into the work.

It is critical for the Engineer or Inspector to immediately notify the Contractor that material or work does not conform to the specifications. At the preconstruction meeting, discuss who should be made aware of specification deviations.

When non-specification material is allowed to remain, the Project Engineer will create a Report of Specification Deviation (DOT-18). This form is then sent to the Region Office so that they can make a final determination on the issue.

HAUL ROADS

If it is apparent that a specific road needs to be used for a haul road for a project, an agreement with the local governmental agency charged with the control and maintenance of that road may be completed and executed. This agreement is documented on an Agreement for Use and Restoration of Haul Road Form (DOT-45). This agreement should be included in the contract documents.

As close as possible to hauling but prior to hauling, a joint inspection of all approved haul roads will be made by the Contractor, the governmental agency or political subdivision charged with the maintenance of the road, and the Engineer. Following this inspection, an agreement must be prepared on a Haul Route Inspection Report Agreement (Form DOT-45A), signed by the Contractor and the governmental agency or political subdivision stating existing conditions and setting forth any special conditions of restoration of the haul road. This agreement must be approved by the Engineer prior to hauling over the route.

The related costs for the maintenance and restoration of bridges, box culverts, pipe culverts, and roads that are not approved haul roads will be the responsibility of the Contractor. When haul roads are designated in the contract, an agreement on DOT-45 with the governmental agency or political subdivision charged with the control and maintenance of the designated roads, will be included in the contract.

When hauling operations are completed, the Contractor will restore the haul road to a condition which satisfies the conditions stipulated in the agreement DOT 45A. The Engineer will determine the kind and amount of restoration work required. On all state routes, the Department will reimburse the Contractor for 100% of the actual quantities of the materials required to perform the necessary maintenance repairs. For all other approved routes, the Department will reimburse the Contractor 50% of the actual quantities for furnishing and placing the materials required to perform the necessary maintenance and repairs. Upon completion of the restoration work on a haul road, a joint inspection of the haul route will be made by the Contractor, the governmental agency or political subdivision charged with the control and maintenance of such route, and the Engineer. The Agreement for Use and Restoration of Haul Road Release (part of Form DOT-45 or DOT-45A) will be submitted to the Engineer.

If the government agency or political subdivision is refusing to sign off on the release form and seem to be making demands that go beyond normal restoration and turn into an improvement into the roadway, the Engineer should work with their Area and/or Region Engineer to determine how to proceed.

Should the Contractor elect to use different haul roads than those designated in the contract, or if no haul road is designated in the contract, the Contractor must secure written approval from the Engineer before the maintenance and repair of the haul road will be eligible for reimbursement. Approval will only be given if the road is a practical route for hauling materials.

PUBLIC CONVENIENCE AND SAFETY

The Contractor will conduct the work on the project to minimize obstruction to traffic. The Contractor will provide for the safety and convenience of the general public and the residents along the highway and the protection of the persons and property as specified under Section 4.5 of the Specifications.

The Contractor will eliminate dust which causes a hazard or nuisance, by the application of water or other acceptable measure in the amounts and at a frequency directed by the Engineer. When the item does not appear in the estimate of quantities in the bidding package, the item will be paid for at the rate specified in the Special Provision for Price Schedule for Miscellaneous Items. When the item appears in the estimate of quantities in the bidding package, the item so used will be paid for at the contract unit price.

In accordance with Section 7.7 of the Specifications, the Department will reimburse the Contractor for 100% of the actual quantities for furnishing and installing dust control on approved haul routes under Section 601 of the Specifications.

DETOURS

When a detour route is established in the plans, or a wet weather detour is necessary during construction, an Agreement for Use and Restoration of Detour and/or Wet Weather Detour (Form DOT-47) will be signed by the Department and the local entity to document the existing condition of the road. The Department is responsible for the maintenance of the detour and is also responsible for any repairs to the detour route to bring the roadway back to its original condition.

MATERIAL SOURCES

When material sources are obtained by the Department, an Agreement to Sell Materials (Form DOT-44) will be included in the contract. This agreement outlines the amount of material that can be removed and the price that the Department will pay the landowner for this material. Prior to completion of the project, the Contractor will restore the borrow areas to the satisfaction of the owner. Restoration of these areas should be documented on the Material Pit Release (Form DOT-44R).

For more information regarding royalty payments to Landowners, see Chapter 7.

FIELD LABS

Field labs are generally specified on projects when the work is of a longer duration or the project is located a distance from one of the Region or Area testing facilities, such that it would be inefficient to travel back and forth to perform the required testing. Section 600 of the Specifications states that the location of the field lab must be satisfactory to the Engineer.

A Field Lab Inspection Report (Form DOT-50) must be completed prior to acceptance and payment for the lab.

CONTRACT TIME

The Project Engineer is responsible for monitoring the work of the Contractor so that the work is completed in a timely manner. If it becomes apparent that the Contractor is falling behind schedule and the project is at risk of not being completed in accordance with the contract time requirements, the following procedure gives direction on notifying the Contractor of the situation using a Work Progress Letter (Form DOT-229). The Contractor will be required to respond as to the corrective action that will be taken to ensure completion within the contract time.

The Area Engineer, or designee, will assess the Contractor's progress to determine the Contractor's ability to complete the project within the specified contract time, considering the following:

- Current updated Contractor's schedule and the schedule discussed at the preconstruction meeting
- Actual project progress
- Contract completion requirements

When completion within the contract time is unlikely, the Area Engineer will issue a letter (Form DOT-229) to the Contractor advising of the situation that includes the following information:

- Advising that the Contractor's progress appears inadequate and SDDOT expects corrective action by the Contractor.
- That the Contractor's response is required within 10 calendar days.
- That the Contractor's response must describe the measures to be taken to complete the work within contract time.

An exception would be when unexpected adverse weather or other factors beyond the Contractor's control cause the lack of timely progress. If in the opinions of the Area Engineer and Region Engineer, the Contractor would be granted a time extension, the letter is unnecessary.

If the Contractor does not provide a response reasonably addressing the concerns, or the Contractor does not follow through with the response, the Area Engineer will notify the Region Engineer and Operations Division Director of the issue.

The Region Engineer and Operations Division Director will consider the following courses of action:

- Termination of the contract pursuant to Section 8.10 of the Specifications.
- A change to the Contractor's prequalification status.
- Any other measures considered necessary to expedite progress.

The Region Engineer will provide direction to the Area Engineer regarding any Department action required.

It is very important that contract time is assessed uniformly across the state. Chapter 7 gives guidance on how to assess contract time in different situations.

If additional work is added to the contract, the Contractor may be entitled to an increase in contract time. The procedures for increasing the contract time based on a monetary value are included in Chapter 11.

If for reasons beyond the Contractor's control the work cannot be completed within the specified contract time, the Contractor may make a written request for an extension. The procedures for evaluating these requests are outlined in Chapter 11.

SUSPENSION AND RESUMPTION OF WORK ORDERS

If unfavorable weather conditions or other conditions not the fault of the Contractor make suspension of the work advisable, the project may be suspended for a period of time until conditions improve. The following procedure gives direction on the conditions that must be met for different types of projects to be suspended and resumed. The Suspension of Work Letter (Form DOT-216) and Resume Work Letter (Form DOT-217) are used to suspend and resume work. Do not use a DOT-216 to shut down the Contractor for failure to comply with contract provisions.

For working day count contracts, the Area Engineer or designee will issue a DOT-216 only when all these conditions are met:

- The Contractor has completed some work on the project.
- The period of no time count has been reached (Dec. 1-March 31) or weather or other seasonal limitations have stopped all work for a considerable period of time.
- The Contractor should be relieved of responsibility for maintenance of traffic until such time as the work may be resumed.

For calendar day count contracts and fixed calendar date contracts, the Area Engineer or designee will issue a DOT-216 only when all these conditions are met:

- The Contractor has completed some work on the project.
- When weather or other seasonal limitations have stopped all work for a considerable period of time.
- The Contractor should be relieved of responsibility for maintenance of traffic until such time as the work may be resumed.

The Area Engineer or designee will use the first paragraph of the DOT-217 letter together with the DOT-216 when notifying the Contractor that work may resume. The DOT-217 will need to be sent at least 10 calendar days in advance of the resume work date. Use the second paragraph of the DOT-217 together with the DOT-216 when reiterating that the Contractor has started the work and contract time count (if applicable) has resumed.

TEMPORARY TRAFFIC CONTROL

Temporary traffic control is one of the most important aspects of any project. A good traffic control plan ensures that the traveling public can navigate through the project with a minimal amount of disruption. Another benefit to having a good traffic control plan is that it increases the safety of the workers and project staff.

To ensure that traffic control devices are maintained sufficiently even when the Contractor is not working, Section 634 of the Specifications requires that the Contractor must designate an

employee whose responsibility is the maintenance of traffic and traffic control devices, 24 hours a day, 7 days a week. This person must have training and experience in the field of construction traffic control and be knowledgeable about the MUTCD.

Construction signing and traffic control items should be regularly monitored throughout the course of the project and their compliance documented. Important items to be reviewed are included in the inspection checklists in Chapter 18.

In addition, the SD DOT Work Zone Safety and Mobility Plan includes evaluation techniques during construction that include regular inspection of the temporary traffic control by project personnel, reviewing and responding to unanticipated traffic impacts, and adjustments of temporary traffic control as necessary.

For the safety of everyone working on the project, flaggers need to be certified, and must be 18 years old. Before allowing flaggers to work on a project, it is important to check their qualifications.

SEQUENCE OF WORK

Plans typically contain specific sequences of work to be followed. These sequences are also typically coordinated with contract time special provisions. It is important to review the sequence of work routinely throughout the project to ensure that you are familiar with the project and can anticipate what items of work the Contractor will be working on next. This will give the Engineer and Inspectors a better idea of where they will need to be now and in the future, so that inspections and testing can be performed as necessary.

PROJECT ACCEPTANCE

Chapter 18 contains construction inspection guidelines for many different types of work. These lists have been generated for use by the project staff to aid in their construction inspection. Every project is different, so the lists may not cover every task required to inspect a project. These lists do contain the major items of work that can be expected on a typical construction project.

Following satisfactory completion of the field work, the Area Engineer will send the DOT-246A to the Contractor. The Project Engineer will request that the Certification Program Administrator and Region Materials Engineer update the DOT-14. The Certification Program Administrator and Region Materials Engineer will each update the DOT-14 and reply back to the Project Engineer.

When all requirements of the contract have been met, the Area Engineer will submit the DOT 246B to the Region Engineer. By copy of this letter, the Certification Program Administrator will update and execute the Project Materials Summary (DOT-20) to the Area Engineer.

The Region Engineer will submit the DOT-246C to the Contractor upon final acceptance of the project. Acceptance may be made even if there are pending price adjustments, time extensions, or claims.

The Certification Program Administrator will send the Final Materials Certification Letter (DOT-21) to the Director of Operations after he has received the Region Materials certification letter, the DOT-246C, and the Final CCO. The Final Materials Certification Letter signifies acceptance of materials incorporated into the project and must be signed by the Certification Program Administrator and the Chief Materials & Testing Engineer. More information regarding the project acceptance process can be found in Chapter 3.

For State-funded projects that were let through the Region Office, use these same procedures, except do not ask the Certification Program Administrator to update the DOT-14. The Certification Program Administrator is not involved in materials certification for informal projects and does not get a copy of the DOT-246B. The Region Materials Engineer, not the Certification Program Administrator, executes a letter of certification.

DIARIES

Field diaries are one of the most important aspects of any construction project. The diary should be full documentation of that day's activities. When completing a diary, the "Five C's" should be remembered. Be Clear, Concise, Correct, Complete, and Current. If a project has a claim or lawsuit filed on it, the project diary is generally the best evidence the Department has defend the Department. Information written in a diary carries much more weight than verbal testimony.

Diaries must be filled out in ink, and errors should be corrected by drawing one line through the text instead of erasing or scratching out the words.

At a minimum, the following items should be filled out every day.

Date
Project information – Project Number, PCN, County
Weather
If Prime Contractor working and which subcontractors working
Contractor's equipment working
Work in Progress
Time arrived and left project
Time work started and stopped – include any delays, and the reason for the delay
Instructions received and given – include whom the instructions were given to and from
Details of discussions with the Contractor or landowners
Accidents – include the persons involved, time, and details of the accident
Visitors to the project

The diary should be signed immediately following the last entry for the day, not at the bottom of the page.

BUY AMERICA

Permanently incorporated domestic structural steel and other iron and steel products as well as construction materials are required on Department projects.

Minor quantities of foreign iron or steel, and coatings, may be incorporated provided their cost does not exceed 0.1% of the total contract amount or $2500, whichever is greater.

The Office of Materials and Surfacing will provide notice to the Engineer on whether steel products and their certifications meet the requirements to be deemed domestic (from the United States). If the letter states the origin of the steel cannot be determined or that it is foreign steel, the Engineer must verify that the cost of foreign steel does not exceed the 0.1% of the contract amount or $2500, whichever is greater requirement.

A letter verifying that amount of foreign steel does not exceed the allowable maximum should be sent by the Engineer to the Materials and Surfacing Office (Certification Program Administrator). A copy of the letter along with computations must be filed in the project file at the Area Office.