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100.100 NDOR RESPONSIBILITIES

This section on construction and construction engineering guidelines will be limited to activity occurring between the execution of the contract and completion of construction by the contractor. LPA's may use their own approved policies and procedures for contract administration and inspection of construction projects. The NDOR also has a Construction Manual that is available for reference through their website at www.dor.state.ne.us/ref-man/cman-toc.htm. This manual is intended for projects let through the state system and is provided only for reference.

100.10 CONSTRUCTION

FHWA defines construction as “the supervising, inspecting, actual building, and all expenses incidental to the construction or reconstruction of a federal-aid route”. The NDOR is responsible for the proper expenditure of FHWA funds on LPA projects. NDOR will work with LPA's during construction to ensure that proper procedures are followed.

100.20 CONSTRUCTION ENGINEERING

Construction supervision, inspection, staking and materials testing are collectively referred to as “construction engineering”. Construction engineering is the responsibility of the LPA who must ensure that the work is completed in accordance with the approved plans and specifications.

The costs for construction engineering are eligible for federal reimbursement providing federal requirements have been followed. A construction engineering consultant may be selected if the LPA staff lacks appropriate expertise or is too busy with other duties (this decision should be made two months before letting). However, the LPA should still assign a Project Manager to coordinate with the engineering consultant during construction. How the consultant is selected depends upon the size (cost) of the project. The consultant agreement must be approved prior to the start of construction. Ask the NDOR Urban Off-System Coordinator for assistance on consultant selection and refer to Section 50 for more information.

100.30 PRE-CONSTRUCTION CONFERENCE

As soon as practical after a contract is awarded, the LPA or their engineering consultant should arrange a “pre-construction conference” with the contractor. The number of people attending the conference will depend upon the complexity of the job. At a minimum, the conference should be attended by the LPA Project Manager,

LPA Construction Engineer, LPA Design Engineer, NDOR State Representative, prime contractor, subcontractors, and utility and railroad (if involved) companies. The NDOR Urban Engineer and Urban Off-System Coordinator must also be invited to the pre-construction conference.

The purpose of the conference is to address the following project issues:

- Safety of employees and public
- Plans and specifications of the project
- Unusual conditions and constructability
- Utility requirements
- Erosion control plans
- Methods and schedule of operation
- Mobilization of equipment
- Labor requirements
- Traffic control
- Federal requirements
- Material sampling and testing requirements

On large complex projects, it may be necessary to hold additional conferences for specialized construction items such as paving, roadside landscaping or electrical work. A sample agenda is available from the NDOR Construction Manual at www.dor.state.ne.us/ref-man/cman-toc.htm.

100.40 NOTICE TO PROCEED

The LPA must issue the contractor a Notice to Proceed before any work can begin. Normally, the Notice to Proceed date will coincide with the tentative beginning date shown in the Bid Proposal. The notice can be issued to the contractor at the pre-construction conference. Do not issue the notice unless the state has concurred in the contract award.

100.50 CONSTRUCTION SCHEDULE

The contractor is responsible for preparing a schedule that details their proposed work sequence to complete all contract work items within the allotted time. The contract time can be established using either number of working days, calendar days or a specified completion date. This schedule should be submitted to the LPA and/or their construction engineering consultant no later than the pre-construction conference.

100.60 LPA CONSTRUCTION ENGINEERING RESPONSIBILITIES

Construction engineering duties (project management, construction staking, inspection and field testing) are the responsibility of the LPA. The quality of materials and workmanship on the project must conform to the contract specifications so that the public funds expended will have purchased a safe, economical, and fully functional transportation facility. Construction engineering tasks include, but are not limited to, the following items:



- All survey and staking related to the project, etc.
- Inspection of construction workmanship
- Preparing progress reports and maintaining all project records, log books, etc.
- Materials testing and certification in accordance with the NDOR Materials Sampling Guide, and Quality Assurance Program for Construction
- Certifying contractor progress payments
- Compliance with required federal-aid contract provisions (FHWA Form 1273). The LPA must ensure the contractor is complying with required contract provisions covering Equal Employment Opportunity (EEO), Disadvantaged Business Enterprise (DBE), Occupational Health and Safety Act (OSHA), and minimum wage rates. The LPA or their consulting engineers are responsible for obtaining payrolls and forms related to EEO and for ensuring that informational posters are displayed at the project site for the duration of the contract.
- Meeting the current Manual on Uniform Traffic Control Devices (MUTCD) standards for traffic control during construction and at project completion.
- Preparing a set of as-built plans to be submitted to the NDOR Urban Design Section

The Construction Engineering Agreement between the LPA and consultant must include a description of the scope of services. The LPA's Engineer should refer to this agreement during construction and at project closeout.

LPA projects using federal-aid are subject to independent assurance reviews. Anytime during construction, NDOR's quality assurance personnel may arrive to do random sampling and testing of materials or to do random checks of the test method procedures being performed by the LPA's inspectors.

100.70 CHANGE ORDERS

Changes to the contracted work are different than normal overruns and underruns. Whenever a change in the contract work is required, the LPA and contractor must execute a change order. Prior to beginning work, the LPA should have a policy for the approval of change orders to ensure that approval for changes are given and documented. To be eligible for FHWA cost participation, all change orders must be approved by the NDOR State representative. Change orders for work to be done twice will not be eligible for reimbursement.

Change orders must include an explanation of the work so that everyone involved will understand the need for the change. The LPA and contractor shall agree on the price or prices to be paid for the work or the method used to determine them before any changes or extra work begins. All change orders must be numbered in sequence. The LPA's Project Manager shall provide proper documentation to the NDOR's State Representative for review if the LPA approves of the Change Order.

100.80 CONTRACTOR'S SCOPE AND CONTROL OF WORK

The contractor shall perform all work and furnish all required materials, equipment, tools, labor and incidentals to complete the project in compliance with the contract. The contractor shall give the project constant attention to facilitate progress to completion of the contract. A superintendent shall be on the project at all times to direct the work. Prior to delivery, the contractor shall notify the LPA's engineer of their proposed sources of materials to allow inspection, testing and approval prior to incorporation into the work. If products or materials from any source prove unacceptable, the contractor shall furnish acceptable materials from other sources.

100.90 SUBCONTRACT WORK

FHWA requires that all subcontracts at any tier be in writing. This includes contracts between the prime contractor and their subcontractors, and contracts between subcontractors and their agents. The prime contractor is responsible for EEO and minimum wage compliance by all subcontractors.

100.100 NDOR RESPONSIBILITIES

With the award of a construction contract, the LPA's contact at NDOR shifts from the NDOR Urban Off-System Coordinator to the NDOR State Representative assigned

by the District Office. The NDOR Project Representative has oversight on the project; however, their duties are minimal.

Primarily, the NDOR State Representative will attend the pre-construction conference, advise NDOR quality assurance personnel of the project, approve all reimbursement requests seeking federal funds, review and approve all change orders requested and approved by the LPA's Construction Engineer, and conduct the final inspection of the project. The NDOR State Representative may also assist the LPA with regulations interpretations, etc., but it is the LPA's responsibility to handle all construction engineering.

At project close-out, any discrepancy in accounts due to cost over or underruns will be reconciled between NDOR and the LPA and a final check issued. The LPA is liable for all costs that exceed the maximum amount approved, or for any costs deemed ineligible for federal participation. The LPA must pay all payments to utilities for relocation cost which will be a reimbursable project cost. The LPA will then bill NDOR for the federal share of the utilities cost.