

PROFESSIONAL SERVICES – CONSTRUCTION ENGINEERING & INSPECTION

Construction engineering and inspection (CEI) describes the engineering field inspection and on-site field testing of materials and contractor work to provide the necessary documentation to satisfy the requirements of FHWA and NCDOT project specifications.

POLICY: CEI must be performed in accordance with NCDOT Specifications in order for the Department and FHWA to participate in the costs of a project.

CEI may be performed by the LGA's in-house staff or by a qualified consultant that is obtained through the appropriate procurement process. See the [Professional Services](#) section for procurement requirements for professional service firms.

Note: LGAs may hire testing firms to provide acceptance testing for certain project related materials and contractor work. Firms specially hired to perform these tests are not considered professional service firms and may be hired to perform this testing under the LGAs normal procurement procedures. All technicians performing sampling and testing must have appropriate certifications as required by NCDOT.

Failure on the part of the LGA or the Department to perform CEI services adequately can result in not being reimbursed for the engineering and inspection services performed as well as project work performed by the Contractor.

The Municipal Agreement limits the reimbursement of any CEI work to fifteen percent (15%) of the construction contract; however, exceptions may be made to exceed that amount if justified by the LGA and approved by the Division AND if sufficient funding is available through the Agreement.

Private Engineering Firms Hiring Contractor/Supplier Employees (NEW!)
In conformance with the NCDOT Standard Specifications (108-5) and NCDOT Ethics Policy, private engineering employees who were previously employed by a contractor may not perform any function on a project with which they have been involved during employment with the contractor. Further, any Quality Control Technician who was previously employed by a contractor or material supplier and hired as a Quality Assurance Technician shall not sample or test material from their former employer for a period of six months.

Requests to Utilize the Same Firm (PEF) for both Design and Contract Administration Services

The Department's practice is to prohibit firms that have provided design services for a specific project from participating in the contract administration for that project. The purpose of this practice is to avoid conflicts of interest that may result in additional costs to the Department or create potential long term maintenance or safety related issues. Requests for an exception to this practice may be submitted to the Department and will be reviewed on a case by case basis. Some examples where an exception may be approved are:

- Projects that do not directly impact the motoring public and present low risk of future safety or maintenance related issues. This could include projects that primarily involve construction of such facilities as sidewalks, greenways, wetland mitigation sites, or bus stops.
- Projects with a total construction contract value of less than \$1.2 Million.
- The requested contract administration is limited only to the items of work that the firm did not directly design or if the firm performed preliminary engineering work of a minor nature.
- The LGA demonstrates control of the work, maintaining approval of payments and any change orders.

It is noted that if the above exception is approved, the PEF utilized to perform contract administration must be prequalified to perform CEI. Separate prequalifications exist for Roadway and Structures CEI. In addition, procurement of the PEF services must follow all Federal and State policies and be obtained through an equitable selection process.

PROCEDURE

- Submit Letter requesting an exemption to policy to LPMO. Letter should address how the LGA will eliminate potential conflicts of interest; also include information on the scale of the project, impact, risks, and quantity of work.
- Exemption Approval will come directly from the Construction Unit to the LGA.

IMPORTANT: Exemption does not allow the LGA to extend the design contract to include the construction contract administration; Federal requirements dictate that the LGA will have to undertake a new solicitation to ensure competition. By obtaining an exemption, the LGA can allow the design firm to compete for the CCA contract. See [Professional Services](#) section for procurement requirements.

Materials and Testing

All technicians performing sampling and testing for the PEF must have appropriate certifications as required by NCDOT. The Materials & Tests Unit is responsible for providing training for technicians.

RESOURCES:

- NCDOT's Prequalification Process - <http://www.ncdot.gov/business/howtogetstarted/privateconsult/>
- Available training courses to obtain required certifications: <http://www.ncdot.gov/doh/operations/materials/>