CEI Contracts

A construction project has three entities working together to achieve the project objectives of timely completion, within budget, and a quality product: the FDOT, the CEI, and the contractor.

The PM should concentrate on the performance of the CEI firm by being involved in the selection process, defining the type and number of personnel needed, qualifications required, and other important selection criteria. The PM should see that the selected CEI team is brought on board at the appropriate time and is fully familiar with the requirements of the contract and the scope of services. The PM is responsible to review invoices and the schedule and costs of the CEI. The PM should coordinate with other FDOT resources and make decisions outside the CEI scope as necessary. The CEI does not have the authority over R/W or Utility conflict issues.

The Construction Project Administration Manual (CPAM) and scope of services describes CEI responsibilities in detail. The CEI must report any actions on the part of the contractor that raise suspicion of illegal or inappropriate activities. The CEI is responsible for ensuring the necessary staff and resources are available to complete the contract.

The Senior Project Engineer is ultimately responsible for the CEI contract and will report the contract progress to the PM. The Senior Project Engineer manages situations when things do not go as planned. For example, schedules are delayed, costs tend to overrun, the contractor files notices of claims and unexpected site conditions are found on the job. The Senior Project Engineer must overcome these obstacles while protecting the interests of the Department. Problems can be avoided or minimized by looking ahead on a project to anticipate possible problems and identifying potential solutions.

The Project Administrator (PA) must be involved with the construction contractor on a day-to-day basis from pre-construction activities through project completion and final acceptance.

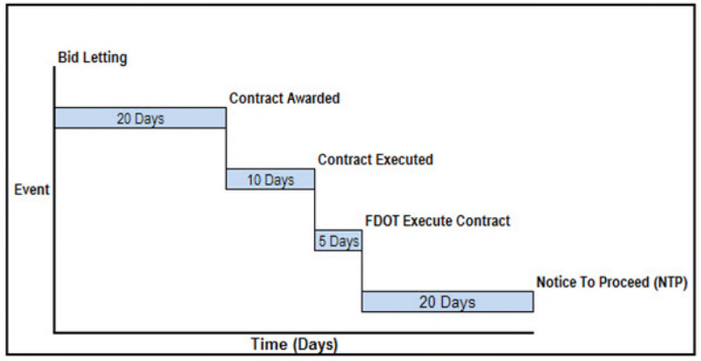
Scheduling the CEI Contract

The time to bring the CEI on board will vary according to the type of construction contract, i.e., design-build, conventional (unit price), lump sum, etc. The PM should decide the appropriate level of involvement in any pre-letting activities such as plans review and comments, determining contract duration and recommending appropriate alternative contracting techniques. The CEI firm's input in the early stages of a project can result in a more constructible project and lower construction cost.

The Work Program establishes the bid-letting date well in advance. Following this date, the contract is generally awarded within 20 days. The contractor executes the contract documents within 10 days following award of the contract. Once the contractor returns the contract documents, the FDOT has 5 days to execute them. The construction contractor's Notice to Proceed (NTP) is generally issued within 20 days following contract execution by both parties.

Figure 2, **Construction Contract Award Time Frame**, illustrates a typical construction contract award schedule.

Figure 2
Construction Contract Award Time Frame



The CEI firm should be on board well before the NTP. The NTP may be issued at the pre-construction/services meeting, which is generally chaired by the CEI firm. Notices must be sent to all who will attend the pre-construction conference well in advance of the established date (refer to ***CPAM 3.1***). The CEI team must have time to mobilize, assign personnel, establish office space (with telephones, computers, and other necessary supplies) and obtain necessary vehicles for project staff. The CEI will need time beyond the construction project completion to consider final measurements and estimates, final inspections, warranties and guarantees, claims, as-builts, and other documentation and demobilizing efforts.

CEI Contract Types:

CEI contracting uses a cost-plus fixed fee type contract, where the CEI is paid for the actual hours worked in each employee classification and all expenses are defined and documented. Lump Sum Contracts are also used by CEI services.

The CEI needs to track costs carefully with cost-plus fixed fee contracts. If the contracts limits are exceeded, a request for fee increase must be submitted in time to negotiate a new fee and execute the modifications before the cost exceed the current contract. The CEI is not reimbursed for exceeded contract limits. The Senior Project Engineer is responsible for these actions

The PM should consider the risks/rewards for the CEI firm under a lump Sum contract such as additional costs with time overruns Once a Lump Sum Fee is determined, it can be renegotiated under pre-determined conditions. .

It is important to select projects carefully for this contracting method to minimize risk to both the CEI and the FDOT. The following types of construction projects are most appropriate for a lump sum CEI contract:

- Design-Build or Lump Sum Construction Contracts
- Contracts that include incentives for early completion
- Corridor Projects with sufficient history regarding time and cost changes
- A construction project with a clearly defined scope and minimum variables

When a lump sum CEI contract is used, the selected CEI firm should be provided with the contractor and the project schedule, prior to negotiating the lump sum fee and any other necessary information