

Lump Sum Project Guidelines

These guidelines are issued in accordance with [Directive 625-010-030](#), **Lump Sum Project Guidelines**.

1.0 General

1. The purpose of Lump Sum projects is to reduce the costs of design and contract administration associated with quantity calculation, verification and measurement. This contracting technique requires the Contractor to submit a lump sum price to complete a project as opposed to bidding on individual pay items with quantities provided. The Contractor will be provided a set of bid documents (plans, specifications, etc) and will develop a Lump Sum bid for all work specified in the contract drawings.
2. Lump Sum Projects should be identified during the scope development process, rather than during or after the design process. It is recommended that the decision to use the Lump Sum Contracting Technique on a project be made by the District Design Engineer in consultation with the District Construction Engineer.
3. The contingency pay item is required on a Lump Sum project. This tool is used to compensate the Contractor for any additional work requested, which is not covered in the plans. District Construction should be consulted for the contingency amount.
4. A 60-day advertisement is required to allow Contractors enough time to develop quantities.
5. The decision to have a pre-bid conference will be determined through consultation with District Construction.

2.0 Project Selection

Lump Sum contracting should be used on simple projects. "Simple" is defined by the work activity, not by the project cost. "Simple" projects are:

- Projects with a well-defined scope for all parties (Design and Construction)
- Projects with low risk of unforeseen conditions (i.e. underground utilities, earthwork variations, underground drainage pipes, bricks under pavement in urban areas, etc.)
- Projects with low possibility for change during all phases of work – Design and Construction (i.e. limited possibilities for added driveways, median modifications due to developments, changes due to political involvement, etc.)

Examples of projects that are good Lump Sum contracting candidates:

- Bridge painting
- Bridge projects
- Fencing
- Guardrail
- Intersection improvements (with known utilities)
- Landscaping
- Lighting
- Mill/Resurface (without complex overbuild requirements)
- Rural road widening
- Sidewalks
- Signing
- Signalization

Examples of projects that are not good Lump Sum contracting candidates:

- Urban construction/reconstruction
- Rehabilitation of movable bridges
- Projects with subsoil earthwork
- Major bridge rehabilitation/repair projects where there are many unknown quantities.

3.0 Design

1. Designers should detail plans, either by detailed drawings or plan notes, to clearly describe the work (example: items typically covered in computation book) to be performed by the contractor. Following are some of the desired elements in a set a of Lump Sum plans:
 - Typical Sections to provide roadway template.
 - Milling details and Resurfacing details to show any cross slope corrections.
 - Plan sheets should accurately depict existing conditions and detail all work to be performed by contractor. (i.e. show all limits of milling and resurfacing, pipe installations, limits of sod when different from typical section, all concrete work, guardrail removal/installation, etc.)
 - Details of work not covered by typical section or Standard Index (i.e. curb and gutter installation, traffic separator limits, special curb ramps, modifications to storm inlets, etc.)
 - Summary Boxes to define work when work is not shown on the plan sheets. (i.e. Summary of Side Drain and Mitered Ends, Summary of Guardrail/Removal, Summary of Mailbox replacement, etc.) Note -- Summary boxes should not have totals shown at the bottom of each box. Pipe lengths should be shown to clearly convey the designer's requirements.
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- Cross-sections should be provided only when shoulder point is moved.
2. No computation book is prepared.
 3. Signing, pavement marking, lighting and signalization plan sheets shall continue to contain pay item numbers to be used for reference purposes only. A note should be placed on each sheet that states, "Pay item numbers are provided only for the purpose of describing the work to be performed. Pay item descriptions are found in the Department's Basis of Estimates Manual and the Project Specifications package." Signing, Pavement Marking, and Signalization plans should NOT have any Tabulation of Quantities sheets included in the contract plans.

4.0 Survey Recommendations

1. In order to properly define existing conditions, additional survey may be necessary to provide the level of detail to accurately determine cross-slope correction (milling, over-building), limits of milling and resurfacing, side street and driveway connections, etc.
2. Refer to RRR guidelines in the PPM, Chapter 25, Volume I, for additional information.

5.0 Preliminary Estimate

1. If there is only one project in the contract, the designer will code in the pay item for Lump Sum (Alternative Bidding) (Metric 2999-2/English 999-2/DCP 999-2) and the Initial Contingency Amount (Do Not Bid) Pay item (Metric 2999-25/English 999-25/DCP 999-25). If there is more than one project in a single contract (strung projects), the designer will code both pay items on each project.
2. Preliminary estimates for Lump Sum projects may be determined in a number of ways: data from the designer, historic data, long-range estimate (LRE), and by reviewing data from similar, current projects. The intent of Lump Sum Contracting is not to shift the responsibilities or work involved in estimating quantities from the designer to the District CES Coordinator. The cooperative effort of the designer in providing data in an electronic spreadsheet or other means acceptable to the District CES Coordinator will be helpful in improving the Lump Sum Preliminary Estimate Process.
3. The designer shall provide data to the District CES Coordinator to be used in the estimate process. The data necessary for preparing the preliminary estimate may differ with project type and complexity. This data is to be used for the Department's purposes only and is not to be disclosed to contractor industry personnel. This protection is provided by 337.168, F.S. As a minimum the following data should be provided:
 - Bridge Painting: Quantities of steel to be painted (tonnage)
 - Structural Steel Repair: Quantities of steel to be used (tonnage)

- Bridge Quantities (Cubic yards of concrete, Pounds of reinforcing steel)
- Signing: Pay items and quantities of signs.
- Mill and Resurfacing: Quantities of earthwork; area for full depth widening (excluding paved shoulders); pay items and quantities for specialized work such as sidewalks, highway lighting, cantilever signs, etc.; and the number of signalized intersection upgrades.
- Turn Lanes: Quantities of earthwork; area for full depth widening (excluding paved shoulders).
- Intersection Improvements: Quantities for asphalt, milling, base, and earthwork.
- Drainage: Pay items and quantities for drainage and earthwork.
- Guardrail: Types and quantities of guardrail and anchorage assemblies and the number of special posts.
- Interconnect: Major pay items and quantities of work to be accomplished.
- Fencing: Types and quantities of fence, posts, and gates.
- Sidewalk: Quantities of sidewalk and earthwork.

6.0 Specifications

1. The Design Project Manager will provide a “Work Mix Description” checklist to the District Specifications Office. The Specifications Office will include the work items identified on the checklist in the “Intent and Scope” in the Specifications Package. The checklist shall include, as a minimum, the major work items shown in the sample included with these guidelines.
2. Lump Sum Projects require modification to the first nine articles of the Standard Specifications. Modified files are in the Specifications Workbook (effective January, 2001). The modified first nine articles must be included as part of the package.
3. On projects with asphalt materials, Section 9-2 of the Modified Specifications shall be completed with predetermined unit prices that will be used as a basis for calculating pay reduction when a deficiency in spread rate is identified. These predetermined prices will be based on historical prices.
4. As of this writing, a change to Section 9-2 is under development that will provide for the predetermined unit price for asphalt to be used to compensate the Contractor for asphalt quantities approved by the Engineer that are in excess of the spread rate called for in the plans. Contact the District Specifications Engineer for availability.
5. Bridge project specifications will include a predetermined unit price for foundation work item overruns and under runs. This will be determined from historical prices, and will provide for compensation of Contractors for quantity variations that occur during foundation construction. As of this writing, this specification is still under development. Contact the District Specifications Engineer for availability.

7.0 Contracts Administration

Contracts Administration shall include the information provided in the Specifications Package “Intent and Scope” in the job advertisement. This information can be used by the contractors/subcontractors to determine what type of work is contained in the project, in lieu of a list of pay items.

8.0 Construction Contract Administration

1. Monthly payments will be made based on a mutually agreed upon payout schedule and a percentage of work completed. The payout schedule will include only major tasks similar to what has been used on design-build projects.
2. The specification for Lump Sum has changed the payment of asphalt from a per ton basis to a spread rate as shown in the plans. A daily spread rate for the lay down operation should be agreed upon at the beginning of asphalt operations assuming multiple layers will be required. The sum of actual daily spread rates of all layers for each mix in a vertical direction should match the typical section design. If not, then the penalties section of the specifications will need to be followed essentially deducting asphalt tonnage not supplied at a preset price. This eliminates the need to core the roadway to verify the required asphalt was constructed.
3. Construction inspection personnel should not be required to document quantities except the asphalt daily spread rate. Measurement and completion of “Final” quantity for summary boxes on plan sheets is not required. Focus should be on inspection and achieving a quality final product. For example, the project engineer will not be concerned with how many square yards of sod it takes or the number of miles of final striping. The project engineer will be charged with ensuring that the sod, striping, embankment, pipe, etc., meets the lines and grades of the plans and specifications.

9.0 Materials Sampling and Testing

The Construction Quality Reporting (CQR) System relies on the pay items identified in the CES to generate a Job Guide Schedule based on the Sampling, Testing and Reporting Guide (STRG). On Lump Sum projects, since there is no detailed pay item list to identify the various types of work, the CQR system will output a generic Job Guide Schedule that will address the 5 material areas common to most projects. These include Earthwork and Related Operations, Base Courses, Hot Bituminous Mixtures, Portland Cement Concrete, and Reinforcing Steel. Some of these materials will not actually be used depending on the project scope. Inspection personnel should use the Job Guide Schedule entries applicable to their project and input sample data and field test results into the (CQR) system in accordance with standard procedures. Materials not included on the Job Guide Schedule will be accepted in accordance with Section 6 of the Contract Specifications and/or other pertinent contract documents.

DATE:

TO: _____, District Specifications

FROM: _____, Project Manager

COPIES TO:

SAMPLE

SUBJECT: WORK MIX DESCRIPTION

FPN: _____ (GOES WITH _____)

DESCRIPTION: _____

Other work to be performed by Contractor via J.P.A.:

Job # _____ Description: _____

The plans package for the above referenced project has the following items of work to be performed:

- | | | | |
|-------|-----------------------------|-------|------------------------|
| _____ | Milling & Resurfacing | _____ | Highway Signing |
| _____ | Base Work | _____ | Guardrail |
| _____ | Rework Shoulders | _____ | Landscaping |
| _____ | Drainage Improvements | _____ | Box Culverts |
| _____ | Curb & Gutters | _____ | Bridges |
| _____ | Traffic Signals | _____ | MSE Walls |
| _____ | Lighting | _____ | Sidewalks/Bicycle Path |
| _____ | Other(Please Specify) _____ | | |

Please include these items of work in the *Intent and Scope* so they may be added to the advertisement description.