Final Estimate Creation Process (March 2021)

The following steps are a guide for the estimate creation process. The steps listed below should be adapted to fit your own estimating style. Creating an estimate requires critical thinking and engineering judgment that must be applied when determining estimated quantities and costs. For additional information on topics below, see <u>FDM 19-5-5</u>, <u>19-5-6</u>, & <u>19-5-7</u>.

- 1. Review plan set and check for accuracy.
 - a. Do specs match the plans?
 - b. Are the correct bid items included in the plan?
 - c. Are the quantities accurate?
- 2. Use Estimator to determine initial prices for items Do NOT Use AASHTOWare Project Preconstruction (AWP).
 - a. Use Estimator regression equations to determine initial prices (Check that they are within the 25% to 75% quartiles. If outside, use an alternate method, see 3d below).
 - b. Do not use Estimator for LS items (mobilization and traffic control) or SPV items or items with () in description such as removing old storm sewer (size). Use Similar Projects Tool & past projects to estimate mobilization and traffic control.
 - c. If projects will be combined, estimate projects items individually for each project, create a blended price for the proposal. Similarly, when a single project contains multiple bridges (Region Bridge Projects), or intersection work that is not at the same location (Region Signals Projects), estimate the work at each location separately, and create a blended price for the proposal.
- 3. Determine prices for items not determined by Estimator using an alternative method such as Bid Express, past projects, or cost based estimating. Items include:
 - a. SPVs
 - b. Items without cost information in Estimator
 - c. Bid items with (size, location, etc) examples : EXPANSION DEVICE (STRUCTURE), Trees (species), Shrubs (species)
 - d. Bid items that are in the outer quartiles of the Estimator regression curves
- 4. Sort bid items to determine significant items for the contract. This can be done by exporting estimate to excel and sorting the bid items by the extended bid price, or sorting the items in Estimator by the extended bid amount. Significant items make up 80% of the project costs; or the top 20% of items whichever comes first.
- 5. Determine prices for significant items by using multiple data sources such as Estimator, Bid Express, past projects, or cost based estimating. Note : Average unit prices do not provide the best cost estimate.
- 6. Consider the cost effect of constraints (traffic staging, traffic control, time constraints) on the proposal. A more complete list of factors to be considered are included in the Estimate Documentation Template on the WisDOT Estimating Webpage.
- 7. Determine estimated prices for non-significant items (item prices not selected in step #5).
 - a. Spend minimal time on these items.
 - b. Round Estimator prices.
- 8. Provide documentation for estimated costs in the Estimate Documentation Template. Provide an explanation of the project characteristics that influenced estimate prices, how those characteristics were factored in, and ultimately why each price was selected for significant items. Spreadsheets can be attached if used to compare prices from different tools and document why estimate prices were selected.
- 9. Have the estimate reviewed by a project manager, supervisor, construction inspectors, and/or another design engineer. Document the review comments and actions taken, include this as part of the estimate documentation process.