Estimate Documentation Report

[See](#_ScreenTip_9) [FDM 19-5-6](http://apwmad0p7106:37108/rdwy/fdm/fd-19-05.pdf#fd19-5-6) for full details.

Download the latest template of this report form from [here](http://apwmad0p7106:37108/Documents/doing-bus/eng-consultants/cnslt-rsrces/tools/estimating/esd-template.docx).

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| |  |  | | --- | --- | | **Date:** | 5/12/2020 | |  |  | | **Project:** | |  | | --- | | 9999-00-70 | | IH 39 | | Stevens Point - Wausau | | N 2nd St. to CTH X | | Portage County | | |  |  | | **PS&E Date:** | 8/1/2020 | | **LET Date:** | 11/10/2020 | | |  |  | | --- | --- | | **Est. Doc. Prepared for:** | Draft PS&E Plans | | **Est. Doc. Prepared By:** | Daniel Jackson | | **Preparer’s Email:** | Daniel.jackson@myemail.com | | **Report finished on:** | 5/19/2020 | |  |  | | **Independent Reviewer:** | Jack Ryan | |  |  | | **Tied Project(s):** | 1234-01-72  Stevens Point – Wausau  Casimir Rd Bridge, B-xx-yyyy  Portage County  Note: project information may be omitted if it’s the same as the main project. Only project ID’s is required. | |

# Executive Summary

## Description of Proposed Work

Describe the proposed work and include factors that may impact the estimate.

Example:

The project consists of replacing the 3.2 miles of asphalt pavement on IH 39 in each direction from

North 2nd Street to CTH X, base patching the rubblized concrete, replacing culvert apron endwalls,

permanent signing, and pavement marking.

## Improvement Strategy -See [FDM 3-5-1.1](http://apwmad0p7106:37108/rdwy/fdm/fd-03-05.pdf#fd3-5-1.1) for definitions.

Select the project improvement type from the Improvement Concepts of the FDM. In this case, we select “**Perpetuation”** as the improvement type.

# Estimating Tool Parameters

Complete item level documentation as the estimate is being developed. It documents what factors were considered when selecting the price and answering the question “why” a price was chosen.

Examples of the Item Level Documentation are provided on the Estimate Development Site.

## Estimator Parameters

Source Catalog

Work type

Highway Type

Urban/Rural type

Season

County

RegionENG 2019

Asphalt

DP - Divided, Principal Arterial

Rural

Winter

Portage

NC

## Bid Express and Other Tool Parameters

Tool(s) Used: Bid Express

County(s): Portage

Date Range: 1/1/2020 – 9/11/2020

Other Parameters: Click here to enter text.

# Similar Projects or Proposals

## List similar project/proposal IDs and how they were referenced

When choosing similar proposals/projects, it’s generally not for a single item, but for a category of items or a construction method or type of work that is similar to your project, i.e., unique construction staging, temporary structure, retaining wall, nightwork, etc.

If a proposal is used as reference for a single item, it will be helpful to include that information and the reasoning why in the Significant Items List section as well.

The “[***Similar Projects Tool***](http://apwmad0p7106:37108/Documents/doing-bus/eng-consultants/cnslt-rsrces/tools/estimating/similar-projects.xlsm)” Excel file can be used to find projects based on various filters such as: Improvement Type/Concept, Work Type/Rating, Region, County, etc.

It is also helpful to list the similar projects in a table format as shown below.

Sample table listing of similar projects:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Proposal #** | **Project ID** | **County** | **Title and Limits** | **Route** | **Type of Work Referenced** |
| 20170314032 | 7550‐01‐72 | Jackson | Melrose ‐ Black River Falls  Trout Run Creek Bridge B‐27‐0067 | STH 54 | Asbestos Abatement |
| 20160510055 | 1007‐10‐87 | Dane | Illinois State Line ‐ Madison  Williams Dr Bridge B‐13‐0721 | IH 39 | Excavation for Structures Bridges |
| 20170509047 | 8590‐01‐76 | Sawyer | Bruce ‐ Radisson  Couderay River Bridge B‐57‐0089 | STH 40 | Retaining Wall R‐57‐1 |

# Project Characteristics

Project Characteristics are things that influence the cost of items, such as traffic control, haul distance or other risks that can affect production rates.

When a Project Characteristic is identified, this should be correlated to how it could influence the bid prices and how the designer incorporated this into the estimate.

If any of the below items are checked, provide a narrative description to why they may (negatively/positively) impact the project estimate in the item level documentation.

See [FDM 19-5-5](http://apwmad0p7106:37108/rdwy/fdm/fd-19-05.pdf#fd19-5-5) for more information.

## Schedule and Road User Costs

Let Date

Anticipated Start Date

Completion Date or

Working or Calendar Days

Interim completion Requirements

Multiple Construction Seasons 11/10/2020

4/12/2021

Choose either a Completion Date, Working Days or Calendar Days

Enter the number of days if Working Days or Calendar Days is the contract type.

Lane rental

Enhanced liquidated damages

Interim liquidated damages

Accelerated schedule

Extraordinary forces expected

Other (Please explain)

## Traffic Control

**Traffic Control Characteristics: (check all that apply)**

Mainline Closure

Shoulder or No Closure

Continuous Lane Closure

Daily/Nightly Lane Closure

Moving Lane Closure

Flagging Operation Complex/Unusual staging

Detour required

Night work expected

Peak hour restrictions

Limited work zone access

Maintain bike/pedestrian access

Temp concrete barrier used

Temp/Crossover roadways

Temp structures

Temp traffic control signals

Other (Please Explain)

Number of stages: Click here to enter number.

## Construction Conflicts

Aboveground utilities (existing to remain)

Underground utilities (existing to remain)

Utility work concurrent with construction

Environmentally sensitive areas Hazardous materials

Railroad coordination

Archeological Monitor

Other (Please explain)

## Competition of Contractors

Expected CompetitionChoose an item.

## Other Considerations

Multiple mobilizations

Multiple, dispersed work locations

Urban or  Rural

Constrained work environment

Adjacent projects

Remote location

Haul distance

Current bid item trends

Material shortages

Other (Please explain)

# Item Level Documentation

## Significant Items List – Items that make up 80% of project costs, or the top 20% of items whichever comes first.

The amount of documentation required for any one individual item will vary on the importance of that item to the overall total project cost. It documents what factors were considered when selecting the price and answering the question “why” a price was chosen.

Significant items require the most documentation. Significant items have the greatest influence on estimate accuracy; therefore, it is recommended that more time and effort be focused on determining the unit cost for these items using multiple sources. For all other items, the level of effort and documentation required should be relative to their importance to the overall project cost. Include a discussion for any Project Characteristics identified.

**Significant items make up 80% of the project costs; or the top 20% of items whichever comes first.**

Below is the table format used for listing the significant items:

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Bid** Item | **Description** | **Quantity** | **Unit** | **Estimator**  **Unit**  **Price** | **BidX**  **Unit**  **Price** | **Similar Proj. 1**  **1166-12-80** | **Similar Proj. 2** | **Final Price Used** | **Significant Item Cost** | **% of Project Cost** | **Comments** |
| 460.7424 | HMA Pavement 4 HT 58-28 H | 19,121.0 | Ton | $64.44 | $65.47 | $62.94 $56.44 | NA | $75.00 | $1,434,075 | 18.34% | Sorted to any mix that ends in an "H" the average is $76.82. Sorted to 4 HT 58-28 H over 5,000 tons, the average is $71.03. Sorted to all projects with American Asphalt as the low bidder with any mix type over 5,000 tons from December 2017 to March 2019, the average price is $60.14/ton. Similar project 1166-12-80 used 4 MT 58-28 H on mainline $62.94 (50,941 tons) and 4 LT 58-28 S $56.44 (7,968 tons) on the outside shoulder. Rechecked pricing on 9/17/2019 and found bids in May and July 2019 were trending up. Use $75 instead of $70. |

# Attachments

Select the attachments that have been included in the Estimate Documentation. Other attachments may include Bid Express printouts of significant items or cost-based estimate worksheets.

Unit Price Documentation printout with notes (Estimator, Q2P, Excel spreadsheets)

Other Attachment(s)

Click here to enter text.