



Adding Bid Items to an Engineer's Estimate

A TxDOTCONNECT Job Aid

Roles Impacted

Professional Engineer
Professional Engineer – Consultant
Engineer's Estimate Coordinator
Engineer's Estimate Coordinator – Consultant
Landscape Architect
Design Coordinator

Last Revised

August 2021



The Estimate Grid

The Estimate grid is found on the **Engineer's Estimate** page of the project in TxDOTCONNECT.

It consists of four tabs and twelve columns. This job aid focuses on the process to add bid items to the Estimate grid.



Remember: to add or update the Estimate grid, the **Project Stage** must be one of the following:

- Preliminary Engineering (PE)
- Plans, Specifications, & Estimates (PS&E)
- Ready to Let (RTL)

Project ID:	A00006354	Project Name:	IH 35 from SLAUGHTER LANE <SL 275> to 0.				
Project Type:	Construction	Project Subtype:	Roadway				
Project Stage:	PE	*Project Status:	Active ▼				
District / Division:	Austin - 14	County:	Travis	Highway:	IH 35	Control Section:	0015-13
Construction Estimate	\$1,913,349.45	Estimated Let Date:	11/2015	Controlling Project ID:	0015-13-379	Control Section Job:	0015-13-384



Adding a Bid Item

To add bid items to the Engineer's Estimate, follow the steps below.

The screenshot shows the 'Estimate' interface with a grid of bid items. The grid has columns for 'Category of Work', 'NBI/Utility ID', 'Bid Code/ Force Account', 'Description', 'Plan Set Location', 'Alt Bid Group', 'Federally Non-Participating', and 'Excl Bid'. A '+ New Item' button is highlighted in orange above the grid. Another '+ New Item' button is highlighted in orange below the grid. The interface also includes 'Export' buttons and a 'Remove' button.

1. Click **+ New Item** above or below the Estimate grid.

A new row will appear in the Estimate grid.

The screenshot shows the 'Estimate' interface with a new row added to the grid. The new row is highlighted in orange. The grid has columns for 'Category of Work', 'NBI/Utility ID', 'Bid Code/ Force Account', 'Description', 'Measurement', 'Quantity', 'Unit Price', 'Total', 'Plan Set Location', 'Alt Bid Group', 'Federally Non-Participating', and 'Excl Bid'. The 'Total' column for the new row shows '\$0.00'. A dropdown menu is open for the 'Category of Work' column, showing options: 'Drainage', 'Erosion', 'Illumination', 'Landscape', and 'Other/Miscellaneous'. The interface also includes 'Export' buttons and a 'Remove' button.



2. Select a **Category of Work**.



- A Category of Work is required before other values may be entered.
- Some Categories of Work have special rules, including **Bridge, Utilities, Barricades,** and **Mobilization**. These are discussed later in this job aid.



The **Category** tab groups bid items by Category of Work.

The screenshot shows the 'Estimate' software interface. The 'Category' tab is selected, and the 'Roadway' category is chosen. The 'Bid Code/ Force Account' field contains '31', and a dropdown menu is open showing a list of bid codes and their descriptions. The dropdown menu has a search bar that says 'Enter 2 characters to refine your search'. The list includes:

Bid Code	Measurement	Description
6314-6001	Day	TEMP CONSTRUCTION EQUIPMENT ALERT SYS
8031-6001	Ton	CM TRT(PT MX)(CL M)(TY A)(GR1-2)(DEL)
7231-6001	Ton	CAST IRON FITTINGS
3031-6001	Square Yards	GEOGRID BASE REINFORCEMENT (TY II)
531-6001	Square Yards	CONC SIDEWALKS (4")
431-6001	Square Feet	PNEUMATICALLY PLACED CONC (ENCASEMENT)
6313-6001	Lump Sum	HIGH WATER WARNING SYSTEM



The **NBI/Utility ID** is required only for Category of Work **Bridge** and **Utilities**, described later in this job aid.

3. Enter a **Bid Code** or (if Force Account was selected as the Category of Work) **Force Account** number.



- After two digits, a list of codes that match your entry appears. Select your code from the list.
- "XXXX-XXXX" can be entered as a placeholder for bid codes not yet approved.
- The **Description** and **Measurement** fields populate automatically based on the bid code.



Estimate

Default Plan Set Category Bid Code Alt Bid Group

Averages >

Measurement	Quantity	Unit Price	Total	Plan Set Location	Alt Bid Group	Federally Non-Participating	Exc Bid
Ton	2000	3.5	\$7,000.00			<input type="checkbox"/>	

4. Enter the bid item's **Quantity**.
5. Enter the bid item's **Unit Price**.

- ✔ **Unit Price** entries allow 3 numbers after the decimal in order to achieve a greater level of accuracy
- ✔ The **Total** field populates automatically by multiplying the **Quantity** by the **Unit Price**.

- ✔ When a bid code is used that exists previously either in the current project or one of the associated projects, the system will auto-populate the unit price field to match the established unit price.
- ⚠ If the user changes the auto-populated unit price, the system will update all instances of the unit price associated to the project or associated projects.
- ⚠ Unit Pricing requirements also apply to any Alt Bid Code entries. The project cannot be sealed if the Alt Bid Groups are not within \$1 of each other and TxDOTCONNECT will generate an error message.

Averages <

Unit Price	Low Range	High Range	3mo Districtwide	3mo Statewide	12mo Districtwide	12mo Statewide
\$250.00	\$355.74	\$376.20	\$373.88	\$366.27	\$355.74	\$376.20

- Click ">" to view **Averages**.
- The **Unit Price** is compared to the **Low Range** (least) and **High Range** (greatest) of the following **Averages**:
 - ✓ 3-month Districtwide
 - ✓ 3-month Statewide
 - ✓ 12-month Districtwide
 - ✓ 12-month Statewide
- If the Unit Price is lower than the Low Range or higher than the High Range, it is highlighted.
- Note: This does not prevent you from saving.



Default										Remove	+ New Item								
Plan Set										Category	Bid Code	Alt Bid Group	Averages >						
Details	Category of Work	NBI/Utility ID	Bid Code/ Force Account	Measurement	Quantity	Unit Price	Total	Plan Set Location	Alt Bid Group	Federally Non-Participating	Excluded Bid Item								
<input type="checkbox"/>	Roadway		8031-6001	T.MX)(CL.M)(TY.A)(GR1-2)(DEL)	Ton	2000	\$3.50	\$7,000.00	page 17	<input type="checkbox"/>	<input type="checkbox"/>								

6. If applicable, enter a **Plan Set Location** to indicate where in the Plan Set this bid item can be found (page number, section title, etc.).



The Plan Set tab will group bid items by this value.

Default										Remove	+ New Item								
Plan Set										Category	Bid Code	Alt Bid Group	Averages >						
Details	Category of Work	NBI/Utility ID	Bid Code/ Force Account	Unit Price	Total	Plan Set Location	Alt Bid Group	Federally Non-Participating	Excluded Bid Item										
<input type="checkbox"/>	Roadway		8031-6001	T.MX)(\$3.50	\$7,000.00	page 17	<input type="checkbox"/>	<input type="checkbox"/>										

7. If applicable, enter an **Alternative Bid Group** identifier.

To indicate an alternative bid group, enter a number for the primary bid code and a combination of a number and letter for its alternates.

For example, items **1A** and **1B** would be alternates for item **1**.



You cannot enter an alternate code (for example, **1A**) without a corresponding primary code (for example, **1**).

8. If applicable, indicate if the bid item **is** or **is not** paid for by federal dollars by checking the box under:

- For **Construction** projects, TxDOTCONNECT assumes the bid item is federally participating unless this box is checked to indicate **Federally Non-Participating**.
- For **Maintenance** projects, TxDOTCONNECT assumes the bid item is not federally participating unless this box is checked to indicate **Federally Participating**.



Default	Plan Set	Category	Bid Code	Alt Bid Group			Remove	New Item	
Details				Averages >					
<input type="checkbox"/>	Category of Work	NBI/Utility ID	Bid Code/ Force Account	Unit Price	Total	Plan Set Location	Alt Bid Group	Federally Non-Participating	Excluded Bid Item
<input type="checkbox"/>	Roadway		8031-6001	(\$3.50)	\$7,000.00	page 17	1	<input checked="" type="checkbox"/>	

9. If applicable, check the box under **Excluded Bid Item**.
This means the bid item will not be calculated into project totals.

Removing a Bid Item

To remove a bid item, check the box at the beginning of the row, and click **Remove**.

Measurement	Quantity	Alt Bid Group	Federally Non-Participating	Exc Bid
Ton	2000	1	<input checked="" type="checkbox"/>	



Special Categories of Work

The four **Categories of Work** described below determine unique requirements.

Bridge

Items with Category of Work: **Bridge** require an **NBI Number**. The values in the drop-down menu populate from the Proposed Bridge Work section of the Location page.

Category of Work	NBI Number	Bid Code/Force Account	Description	Measurement	Quantity	Unit Price
Bridge	142460001509258					

Barricades

Items with Category of Work: **Barricade** populate the Barricades bid code automatically.

Category of Work	NBI Number	Bid Code/Force Account	Description	Measurement	Quantity	Unit Price
Barricades		502-6001	BARRICADES, SIGNS AND TRAFFIC HANDLING	Monthly		

Mobilization

Items with Category of Work: **Mobilization** populate the Mobilization bid code automatically. The **Quantity** field must contain a percentage, and the **Unit Price** field must contain the total Mobilization Lump Sum.

Category of Work	NBI Number	Bid Code/Force Account	Description	Measurement	Quantity	Unit Price
Mobilization		500-6001	MOBILIZATION	Lump Sum		

Force Accounts

Items with Category of Work: **Force Account** allow you to select Force Account numbers instead of Bid Codes.

Category of Work	NBI/Utility ID	Bid Code/ Force Account	Description	Measurement	Quantity	Unit Price
Force Account						
		01	CLEAN EXIST CULVERTS: STATE FORCE ACCOUN...			
		01	DITCH CLEANING AND RESHAPING: STATE FORC...			



Five Views

The bid items in the Estimate grid can be viewed in five different arrangements by selecting the tabs across the top of the grid: Default, Plan Set, Category, Bid Code & Alt Bid Group.

Default

Items are displayed in the order they are entered.

Default	Plan Set	Category	Bid Code	Alt Bid Group	Remove + New Item			
Details		Details						
<input type="checkbox"/>	Category of Work	NBI/Utility ID	Bid Code/ Force Account	Description	Measurement	Alt Bid Group	Federally Non-Participating	Ext Bid
	<input type="checkbox"/> Roadway		100-6002	PREPARING ROW	Station		<input type="checkbox"/>	
	<input type="checkbox"/> Roadway		110-6001	EXCAVATION (ROADWAY)	Cubic Yard		<input type="checkbox"/>	

Plan Set

Items are grouped by their Plan Set Location value.

Default	Plan Set	Category	Bid Code	Alt Bid Group	Remove + New Item			
Details		Details		Averages >				
	Bid Code/ Force Account	Category of Work	NBI/Utility ID	<input type="checkbox"/> Group	Plan Set Location	Description	Unit Price	Total
	100-6002	<input type="checkbox"/> Roadway		<input type="checkbox"/> 100-6002 (1)		PREPARING ROW	\$5,135.07	\$123,241.68
				<input type="checkbox"/> 110-6001 (1)				\$10,678.00

Category

Items are grouped by their Category of Work value.

Default	Plan Set	Category	Bid Code	Alt Bid Group	Remove + New Item				
Details		Details		Averages >					
	Category of Work	NBI/Utility ID	Bid Code/ Force Account	<input type="checkbox"/> Group	Measurement	Quantity	Unit Price	Total	Plan Set Location
				<input type="checkbox"/> Roadway (92)		100794		\$821,884.45	
				<input type="checkbox"/> 100-6002 (1)		24		\$123,241.68	
	<input type="checkbox"/> Roadway		100-6002		Station	24	\$5,135.07	\$123,241.68	
				<input type="checkbox"/> 110-6001 (1)		950		\$10,678.00	



Bid Code

Items are grouped by Bid Code and displayed in numerical order.

Default	Plan Set	Category	Bid Code	Alt Bid Group					Remove	New Item
Details					Averages >					
Bid Code/ Force Account	Category of Work	NBI/Utility ID	<input type="checkbox"/> Group	Measurement	Quantity	Unit Price	Total	Plan Set Location		
<input type="checkbox"/> 100-6002	Roadway		<input type="checkbox"/> 100-6002 (1)	Station	24	\$5,135.07	\$123,241.68			

Alt Bid Group

Items are grouped by Category of Work and displayed in numerical order. Any bid items designed as part of an Alt Bid Group will be displayed together.

Default	Plan Set	Category	Bid Code	Alt Bid Group					Remove	New Item
Details					Details					
Category of Work	NBI/Utility ID	Bid Code/ Force Account	<input type="checkbox"/> Group	Description						
<input type="checkbox"/> Roadway		400-6001		STRUCT EXCAV						
<input type="checkbox"/> Roadway		5009-6001		STONE MASONRY (ROCK WALL)						
<input type="checkbox"/> Roadway		400-6002		STRUCT EXCAV (BOX)						
<input type="checkbox"/> Roadway		5009-6002		STONE MASONRY (ROCK WALL)						

Rearrange Bid Items

To rearrange bid items in the Default or Category of Work tab, click  and drag to the desired location.

Category of Work	NBI Number	Bid Code/Force Account	Description	Measurement
<input type="checkbox"/> Roadway		310-6004	PRIME COAT (AC)	Gallon
<input type="checkbox"/> Roadway		6047-6311	PREFB PAV MK TY C (Y)4"(SLD)ALT 4X	Linear Feet
<input type="checkbox"/> Roadway		251-6001	REWORK BS MTL (TY A) (6") (ORD COMP)	Station



Bulk Uploading an Engineer's Estimate

There is an alternative method to adding bid items to an estimate in **TxDOTCONNECT** other than manual entry: submitting an Excel spreadsheet using the **Bulk Upload** functionality. For more information on the **Bulk Upload** process, please see the **Bulk Upload Job Aid** [here](#) on Crossroads.