

STRUCTURAL STEEL PRICING

BACKGROUND

This document has been developed to provide additional information to designers to assist with cost estimation of the Structural Steel Pay Item.

Structural Steel Pricing Table

QUANTITY CALCULATIONS

The weight of structural steel elements, including anchor bolts and threaded rods, will be paid for as the full weight computed on the basis of 490lb/cu ft. Deductions should not be made for cuts or holes. Stud shear connectors placed on new or existing structural steel will be paid for at the contract unit price per each. The weight of bolts, nuts, shear studs, and washers should be calculated using Table 7-18 (Weight of High-Strength Fasteners, pounds per 100 count) of the AISC Steel Construction Manual.

COST ESTIMATION

Historically, structural steel has been paid by lump sum (Pay Item No. 711-51038). As a result, it has been difficult to easily estimate the price per pound for structural steel. To assist designers with cost estimation, a spreadsheet has been developed. This spreadsheet includes basic information for structural steel projects that can be filtered based on a variety of criteria. Basic project information has been pulled directly from the bid tabs which includes, but is not limited to, contract number, designation number, letting date, and district.

The following data has been manually added to help the designer optimize the cost estimate:

Quantity Range – This field groups the pounds of steel for the project.

Work Type – This field identifies the type of work being done. Options include End Span Replacement, Bridge Widening, Replace Superstructure, or New Structure. Please note that New Structure includes both full bridge replacement projects and new bridges.

Shape – This field identifies the beam shape. Options include Plate Girder or Rolled Beam

Steel Grade - This field identifies the grade of steel used for the project.

Coating – This field identifies the type of coating used for the project.

This spreadsheet does not include:

- Alternate delivery projects
- Press Brake Tub Girder projects