

5B-3

Design Manual Chapter 5 Earthwork

Originally Issued: 08-05-16 Revised: 01-15-19

Bidding Contractor Furnished Borrow

This section covers several topics related to bidding contractor furnished borrow:

- Bidding.
- Subgrade treatment on grade then pave projects.
- Earthwork sheets.
- Plan sheets.
- Topsoil.

Bidding

If the amount of contractor furnished borrow exceeds 10,000 cubic yards, use the **Embankment-in-Place, Contractor Furnished** bid item.

If the amount of contractor furnished borrow is less than 10,000 cubic yards, use the **Embankment-in-Place** bid item. PSS has a default Estimate Reference Note indicating the embankment is contractor provided. This item does not require the testing and approval involved with the contractor furnished item above.

Bid material that cannot or should not be placed in the fill using either the **Excavation**, **Class 10**, **Waste** or the **Excavation**, **Class 13**, **Waste** bid item. Include a note informing the contractor that wasting of material can only be done when it is clear more than enough fill is available for the roadway, unless there is no desire to use it as fill.



On projects with Contractor Furnished Embankment or Contractor Furnished Select Treatment, or a combination of Contractor Furnished Embankment and Contractor Furnished Select Treatment, greater than 50,000 cubic yards, coordinate with the Office of Design Plan Review section and ODAC to post the A, B, D, E, H, and T sheets 4 to 6 months ahead of the letting (often at DM5 Turn-in) to allow contractors time to seek out borrow sources. Industry recognizes estimates may be very preliminary and are subject to change. Plans should be initially sent to the Plan Review group. With the Plan Review approval, ODAC will publish the sheets.

Select Subgrade Treatment

Select soil is an economically desirable treatment if it is available. However, for the purposes of bid items, it remains a part of the Class 10, Excavation and Borrow Quantity. It is the contractor's choice whether to use it from the project site or bring in additional from off site. The Select material appears in its own column in the cut side of the T Sheets.

Earthwork Sheets

The earthwork sheets will show the placement areas available below 3 and 5 feet and above 20 feet for unsuitable materials. Subtotals will be provided at the end of each alignment or stage. A summary of each stage will be shown listing each material to be placed and what borrow/waste for that stage is.

Overhaul will no longer be calculated or shown.

Plan Sheets

Plan and profile sheets will no longer show earthwork balance information.

Topsoil

Refer to Section <u>10A-1</u> for information regarding topsoil replacement. Topsoil is a valuable resource, so stripping, salvaging, and spreading topsoil should be considered whenever possible. This will reduce the quantity of topsoil contractors will need to furnish. However, projects involving shallow sliver fills, e.g. median cable guardrail projects, generally do not need to include stripping, salvaging, and spreading topsoil.

Chronology of Changes to Design Manual Section:

005B-003 Bidding Contractor Furnished Borrow

1/15/2019 Revised

Added in information notifying designers if a combination of Contractor Furnished Embankment and Contractor Furnished Select Treatment is greater than 50,000 cubic yards, coordinate with the Plan Review section and ODAC to post A, B, D, E, H, and T sheets.

8/5/2016 NEW

New. Information formerly contained in Section 5B-1. Changed process for determining contractor furnished borrow need. A weighted average will be used for shrink. Changed how to bid unsuitable material that is not placed. Changed how and when Selected Backfill and Contractor Furnished Select Treatment are bid. Moved shrink from cut to fill.