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Department of
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DESIGN BULLETIN

Division of Project Support
Project Development Branch
Design Program

Earthwork Tool
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Earthwork Tool

The Earthwork Tool created via extensive region involvement is a synthesis of best practices. The tool is intended to guide designers toward CDOT standard earthwork protocol while offering the regions flexibility in making project-by-project earthwork decisions. The detailed instructions in tutorial format along with the earthwork tab templates are intended to address the most common and numerous earthwork nuances. In addition to the XLS, a PDF version of the CDOT Earthwork Typical Section can also be downloaded below.

A few notable CDOT standard earthwork tabulation practices addressed are:

- How to present earthwork quantities on projects with multiple major phases.
- How to determine whether the primary earthwork pay item should be Embankment Material (CIP) or Unclassified Excavation (CIP).
- And then, how to present the earthwork tabulations in the appropriate respective format.

The tool may initially appear unwieldy to the user given it is designed to handle a wide spectrum of projects including the complex multiphase. However, the multiple tabs in the tool can be paired down after the designer determines the primary earthwork pay item. The tabs in the tool will be further paired down on projects that do not require the presentation of phased earthwork quantities.

The XLS at the link below will be updated as additional enhancements become available. Future Design Bulletins regarding this tool will typically only be appropriate for major updates. The tool will also be included within the standard ProjectWise folder structure. Please contact jerome.estes@state.co.us for earthwork support.

Resources:

Link to Earthwork Guidance Tool:

https://drive.google.com/file/d/1GuP1q_DQCPDWbn4kh6eSJOIR3Mv7EbGm/view?usp=sharing

CDOT Earthwork Typical Section:

https://drive.google.com/file/d/1Qeao5LofPf3crb_6Gb8eEmn373sciqdc/view?usp=sharing