

OREGON
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OF
TRANSPORTATION



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Pre-Construction Survey

Standards and Procedures

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Purpose and Intended Use

The purpose of this document is to provide standards for Pre-Construction Surveys. This document relates the minimum survey work necessary to be adhered to by all ODOT employees and contractors involved in Pre-Construction Surveys and private consultants doing work for ODOT under contract.

As with any ODOT survey policy, deviation from the standards shall only be permitted in unusual situations, where logic and reason so dictate. Any deviation from the standards requires that the ODOT Chief of Surveys be notified and the deviation documented in the field survey narrative.

This is a living document, it may be updated often to adapt to new procedures developed in response to rapidly changing technology.

Suggested changes and any errors discovered in the document should be forwarded to the ODOT Chief of Surveys for consideration.

Timing of the Pre-Construction Survey

A Pre-Construction Survey should be conducted at, or near, the Bid Letting date to confirm that preparation for construction is complete.

Gather Design Data

- Project plans – both hard copy and digital.
- Control data – Horizontal and Vertical.
- Alignments – Horizontal and Vertical.
- New Roadway DTM.
- R/W Data – Maps, Descriptions, Obligations.
- Specifications.

Field work

- Recover existing horizontal and vertical control.
- Replace and augment control stations as necessary to control the project.
- Perform arbitrary checks of the horizontal control network by performing arbitrary cross ties.
- Check the vertical control.

- It is not necessary to check all the horizontal and vertical control, but check a reasonable representation.
- Compare resultant coordinates to the original coordinates, but hold to the original coordinates.
- Collect confidence points to validate and check the DTM.
- Densify or replace portions of the original ground DTM as necessary if there have been any changes.
- Document the results.
- Check for new private surveys along the project corridor, tie any new monuments and file a monumentation survey.
- Perform Utility Relocation Survey as needed.

Related documents

- Special Provision 305
- Current ODOT Route Surveying Manual