

Chapter 10
Submitting Survey Data

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10. Submitting Survey Data

Changing technology has made it easier to send survey files to the Photogrammetry & Surveys Section (P&S). Typically, files sent to P&S have been collected by a WYDOT field office or by a consultant. In either case, survey files should be carefully reviewed and appropriate edits to the survey data should be made before submitting it to P&S. As previously discussed in Chapter 8 of this manual, the two types of data files submitted to P&S are measurement files and coordinate files.

A. WYDOT Survey Files

Measurement files are survey files collected with a data collector and an optical total station. The conventionally collected measurement files are submitted to P&S by WYDOT field personnel. When these files are submitted to P&S, they should be in the Trimble format as downloaded from the data collector.

When received by P&S, the surveys are processed in a MicroStation design file with Geopak. After a survey file has been processed, an error analysis is reviewed to determine if the survey data is within acceptable limits. If the survey contains processing errors or formatting issues, the field personnel will be notified. Many feature code or linking code errors can be corrected by P&S personnel. However, for more complex or systemic errors it may be necessary for the field to correct the problem(s) and resubmit the survey. Only then is the survey data added to the project mapping files.

Coordinate files are non-proprietary text files that contain survey data in an x, y, and z format. These coordinate files are submitted to P&S by WYDOT field personnel for GPS/RTK surveys. All survey data submitted by consultants shall also be submitted to P&S in a coordinate file format. Consultants are required to use the coordinate file format because WYDOT does not specify surveying equipment or processing software. Each coordinate file shall also be accompanied by a signed and sealed cover letter. The cover letter should state that the work was completed under the direction of a PE/PLS and has been reviewed by the PE/PLS. Other information such as project name, section, number, a brief description of the survey, and any other pertinent information should be included.

Because coordinate files are accompanied by a signed and sealed cover letter, P&S cannot edit any data within these files. If processing errors are encountered, the PE/PLS submitting the survey will be notified. It is the responsibility of the PE/PLS to correct the errors and resubmit the survey to P&S with a revised signed and sealed cover letter. A hard copy printout of the cover letter can be mailed to P&S or it may be scanned and attached to an e-mail along with the coordinate file(s).

Prior to submitting a survey, please review the following chapters in this manual to ensure the survey data is in compliance with P&S policies:

- Review Chapter 4 for information on feature codes, linking codes, and attributes.
- Review Chapter 5 for the proper placement of survey shots on specific features.
- Review Chapter 6 for instructions on file naming conventions.

- Review Chapter 7 for procedures on editing, downloading, and archiving survey data files from the Trimble data collector.
- Review Chapter 8 for instructions on editing, processing, and plotting survey data in MicroStation using Geopak. Also, review Chapter 8 for more information on coordinate file formats.

B. Survey Data Submittal

All correspondence shall be sent to the State Photogrammetry & Surveys Engineer. Survey data files may be sent as attachments in an e-mail or saved to a CD and sent by mail. Use the following mailing address to send survey data or correspondence:

Wyoming Department of Transportation Photogrammetry and Surveys Section ATTN: State Photogrammetry & Surveys Engineer 5300 Bishop Boulevard Cheyenne, WY 82009-3340

C. Project Information

Please include, at a minimum, the following information with each survey submittal:

- Project Name
- Project Section
- Project Number
- County
- Brief description
- Attached files

Submitting Survey Data

Figure 10-1 is an example of an e-mail message for a survey submittal.

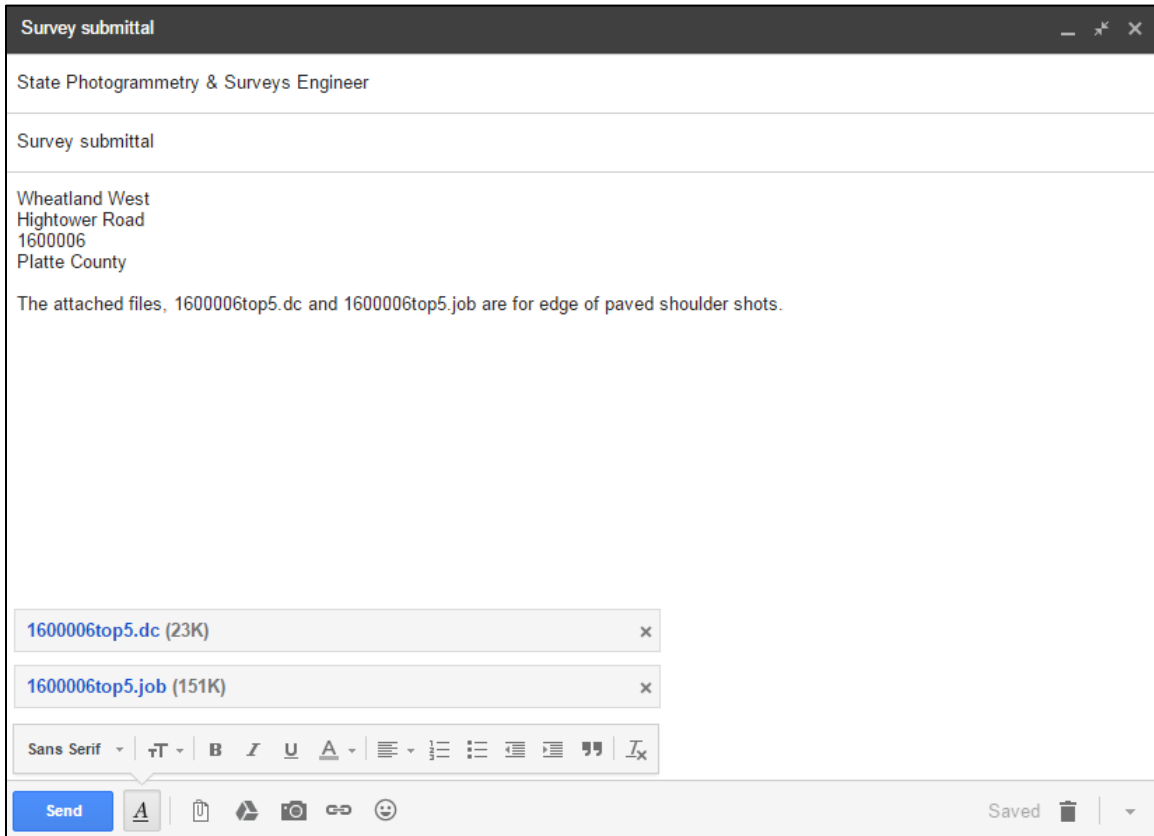


Figure 10-1. Sample e-mail message.

D. Archiving Files

When P&S receives a survey file submittal, the correspondence and survey data files are saved in the project folder on one of the network drives. Field office personnel and consultants should also archive their survey files.