Redefined Horizons
3938 Kimball Lane
Stockton, California 95206

Field Package Guidelines

What is it?

A field package should be prepared for the field crew (and reviewed by the Field Coordinator or Project Surveyor) before every field survey.

Why is it important?

We can't ask the field crew to execute a proper field survey and bring back good data if they aren't properly prepared. Field crew labor is also the most expensive labor in our company. It is critical that a properly field package is provided to the field crew so we can eliminate mistakes and reduce the need for duplicating work.

Roles and Responsibilities

The *project surveyor* is responsible to understand the requirements of the field survey and to prepare an effective field package. He may be assisted with the preparation of the field package by an *assistant surveyor*.

The *field coordinator* or *project surveyor* is responsible for review of the field package and for ensuring the *field crew party chief* has sufficient time to review it.

The *field crew party chief* is responsible to review and understand the field package before the field survey begins.

Schedule

Field packages should be prepared at least 2 working days before the field survey if at all possible. This gives both the field coordinator/project surveyor and the survey crew party chief time to review the field package and to ask any questions about the assigned tasks for the field survey.

Peer Review

As mentioned above, both the field coordinator and project surveyor are responsible for review of the field package. The field coordinator should complete a field package review checklist. **The party chief should review the field package and provide comments BEFORE the day of the field survey**, if at all possible.

Comments on Workflow Steps

The workflow to prepare a field package has the following steps:

#1: The office surveyor determines the information needed for the field package based on the requirements of the field survey.

Before making the request for ANY field survey, the Project Surveyor should have determined the following:

Survey Control

1) The horizontal datum and vertical datum.
2) The coordinate reference system and map projection.
3) The ground/grid combined scale factor.
4) The location and coordinates for existing survey control.
5) The method to tie/establish primary and secondary survey control during the field survey.

Site Access and Safety

1) The requirements for site access and any issues related to right-of-entry.
2) The type of work required in roads and an evaluation of road safety.
3) The presence of any other safety hazards on the job site that might endanger the field crew.

After determining the requirements of the field survey the Project Surveyor completes a field survey assignment sheet and road safety review.

The survey tech creates a placeholder folder for the digital field package. They determine the starting point numbers for the field survey. They place the daily log and other field notes forms in the digital field package based on the field survey assignment sheet.

#2: The boundary survey plans and topo survey plans are created.

The Project Surveyor determines the following to assist the Survey Tech with the preparation of the boundary survey plan and topo survey plan (as needed):

Topographic Survey

Before making a topographic survey request, the Project Surveyor should have determined the following:

1) The mapping limits for the topographic survey.
2) The elements required for the topo (manhole dips, tree drip lines, surface utilities, building corners).

3) The acceptable methods for executing the topographic survey. (RTN/RTK/Total Station)
4) The requirements for site access.

Boundary Survey

Before making a boundary survey request, the Project Surveyor should have determined the following:
1) The subject parcels for the boundary survey.
2) The identity of filed survey maps and other records that form the basis of the property corner monument search.
3) The location and coordinate values for property corner monument search points.
4) The search priority for property corner monuments.
5) If photos and measurements should be made of physical occupation along parcel boundaries.
6) Any special instructions for the field crew. (For example: Note points-of-access to the parcel from the public road or take photos of fences along the boundary lines.)

Survey Plan Exhibits

The Survey Tech prepares a topo survey plan exhibit or boundary survey plan exhibit. A topo survey plan and/or boundary survey plan should be prepared and provided to the field crew for every survey. (There is an existing drawing template for this purpose.) The plan should show the limits of the survey drawn on an aerial background. (Use the USDA NAIP 1 meter resolution color aerial photography if higher resolution photography is not available.) The plan should also show the location of existing survey control needed during the field survey. For boundary field surveys, the exhibit needs to include property corner monument search locations and approximate survey map locations.

The notes on the right-hand side of the mapping limits exhibit should include information on:
1) Site access.
2) Existing survey control needed during the field survey.
3) Acceptable methods of survey.
4) Any special instructions that need to be followed during field survey.

File and Folder Management

A field package should be prepared and provided to the field crew for every survey. Field packages can be stored in the project folder in the following location:

/Field/OTC

"OTC" stands for "Out To Crews".

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Separate your field packages using a folder with the date of the field survey.