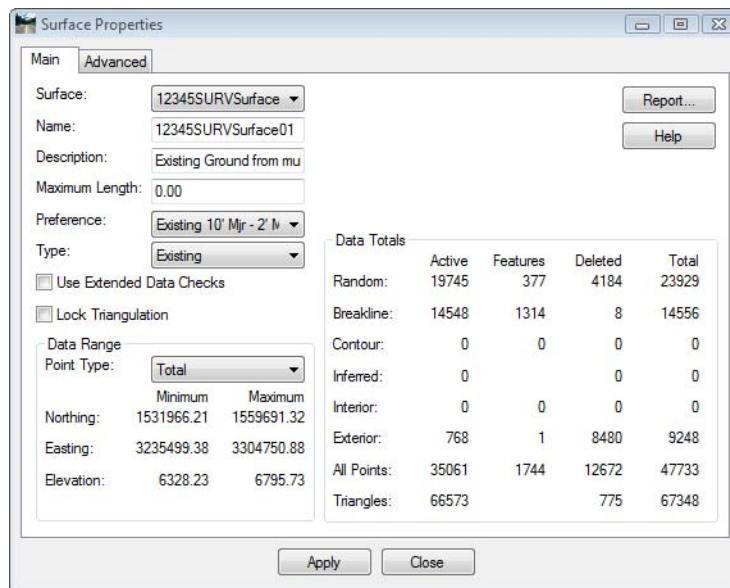


Chapter 9 - DTM Evaluation


As part of the deliverables the survey department will provide to the designers is the Surface DTM file. The DTM file is to be an exact copy of what exists in the fieldbook. Meaning that any edits required to the DTM for correction of crossing breaklines or busted elevations is fixed first in the Survey fieldbook and the DTM is then reexported from the fieldbook.

Surface Properties dialog



Dialog Items

- **Surface** - drop-down shows the active surface by default, other surfaces are selectable
- **Name** – the name of the DTM as InRoads has it stored in memory (not necessarily the file name on disk). The surface can be renamed here by typing in a new name.
- **Description** – user defined description
- **Maximum Length** – maximum length any one triangle segment (leg) can span during the triangulation process. If set to 0, triangle legs can extend to any length. Used to constrain triangulation to prevent unnecessary ‘surface’ data.
- **Preference** – predetermined display settings – bypasses the **View Contour** dialog box if the Style lock is enabled.
- **Type** – surface identifier for cross sections, used in end-area volume computations. Set to ‘Existing’ for newly created original ground surfaces.
- **Use Extended Data Checks** – checks DTM integrity (during triangulation) for crossing breaklines and miss-matched elevations. Will eliminate crossing breaklines and miss-matched elevations by deleting segments or elevations. These errors should be corrected in the fieldbook.

-  **Report** – generates a separate window summarizing surface properties. The generated report can be printed, written to the CAD file, or stored as an ASCII file
- **Lock Triangulation** – user will not be prompted to retriangulate when surface data is out of date. Not recommended for use.
- **Data Range** – selectable field to show minimum and maximum Northing, Easting, and Elevation of surface features.
- **Data Totals** – displays as summary of the surface composition.
- **Advanced** tab – graphic display attribute settings (named symbologies) related to profiles & cross section display of the surface. Also input fields for defining multiple-line parallel offsets for use in profile display. The ‘Use Features Only’ check box instructs InRoads to interpolate cross-section elevations from crossing features vs. from triangle legs.

Data File Naming & Saving

- As noted above, a user can rename a surface in the **Surface Properties** dialog. A critical point to remember is that InRoads is a memory based program. The name given the file on disk can differ from the name used in memory. While they do not have to be the same, it is highly recommended that they share a common name.
- Assigning a different name to a surface in the **Surface Properties** dialog box or by using **Surface > Rename Surface** simply redefines the surface name as it resides in memory, not on disk.
- Renaming a surface in both memory and on disk is a two step process. Use one of the methods described in the preceding paragraph to rename the surface in memory and then use the **File > Save As** command, using the new name, to save it to disk.