

MicroStation V8 Cell Libraries

Design Manual
Chapter #1
General Information

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The MicroStation V7 to V8 conversion of the cell libraries caused virtually no change to the cells. However, some changes have occurred due to the reorganizing and possibly renaming of the cells and libraries, which will be described in detail, below.

- **Cell Library Names** – The cell libraries have been renamed and condensed into topic groupings to better organize their location. The cell libraries that currently exist are:
 - **dsnDBG_Guide_Shapes.cel** – These cells are used as a visual guide while placing ditch bar graph information, profile grade elevations, and possibly earth work balances on the profile portion of plan and profile sheets.
 - **dsnDrainage.cel** – The Geopak Drainage software program uses these cells, which contain construction elements that are specifically configured for this purpose.
 - **dsnMethods.cel** – These cells are used by the Methods Section for the creation of Standard Road Plans and Road Design Details.
 - **dsnPhoto.cel** – This library contains cells used by the Photogrammetry Section for the creation of existing topographic files.
 - **dsnRoad.cel** – Cells in this library are used by the design sections for the creation of general purpose roadway design sheets.
 - **dsnSoils.cel** – These cells are used by the Soils Design section for the creation of Soils Information sheets.
- **Individual Cell Names** – The names of the cells themselves have been changed only when necessary to make a cell name unique, or to simplify the consolidation of several cells into a single one, (example: in V7 there were two cells for a 100 foot scale block, which were called 100SC1, to be placed on mainline sheets, and 100SC2, to be placed on sideroad sheets. The single new cell that is replacing these two older cells is simply called 100SC).
- **English versus Metric Cells** – Separate English and Metric V7 cell libraries have been converted to one single V8 library to meet all needs. If cells are not specifically English or Metric, they are created in the cell library as full size, (100 scale), English cells. When a cell is placed, in either an English or Metric model, the cell placement macro, (launched from Geopak D&C Manager), will read the scale portion of the model name, (example: ML_0100), and place the cell at the correct size for that model. If a cell is not to be scaled up or down, (such as a plan sheet scale block cell), the D&C Manager cell placement macro will still read the scale portion of the model name to place the correct cell. If the model name does not include the correctly formatted scale numbers, a warning will be issued stating the model scale can not be determined and the cell will not be placed.
- **Cell Library Resolution** – All of the new cells have been moved into models that have a resolution of either 10,000 per Survey Foot or 10,000 per Meter, as needed. The “True Scale” place cell option should be checked on, in the Tools Settings dialog, for cells to place at the correct size in any file and model of any resolution. “True Scale” is automatically turned on when any D&C Manager Place Cell macro is run.
- **Cell Library Leveling** – All cells have been created on the level dsnCellElements. All D&C Manager Place Cell macros turn on the “Relative” Place Cell option so cells will be placed on the active level, which has also been set by the D&C Manager Place Cell macro.

- **Specifying Cell Names without Specifying Cell Library** – If the full file paths to all cell library locations are included in the definition of the MicroStation variable MS_CELLLIST, all cells will be located automatically by entering the cell name only, without the cell library name or file path. For all cells in the MS_CELLLIST path to display in the Cell Library dialog, the “Display All Cells In Path” option (in the Cell Library dialog) must be checked on.