

Design Services Update

8/18/2016

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Link to Previous “Design Services Update” Memos

Web: <http://mdotjboss.state.mi.us/SpecProv/trainingmaterials.htm>

General

- Aerial Imagery
- Base Maps
 - County - MIRIS
 - County - Sign Group (68 of 83 Counties)
- CADD Resource Files
 - Sheets
 - Workspaces
- Help and Support Documents
 - OpenRoads Basics
- User Updates
 - Design Services Updates
 - Quarterly Update Webinars

Workspaces

MDOT_01 Workspace

- Not to be used for any new project started after April 1, 2016.
- This workspace requires Power GEOPAK SS2 or GEOPAK Civil Engineering Suite SS2.
- The MDOT_01 Workspace is available for download by consultants at the following link:
http://mdotjboss.state.mi.us/SpecProv/getDocumentById.htm?docGuid=f95eba59-65d3-436b-aef7-fb04032c573e&fileName=%22MDOT_01_Workspace_2016-08-18.zip%22
Consultant installation instructions are located in the “C:\MDOT_01 Workspace\1_Install” folder.
- The MDOT_01 Workspace install procedure supports the following applications:
 - a) Power GEOPAK SS2
 - b) GEOPAK Civil Engineering Suite SS2
 - c) Stand-alone MicroStation (SS3 & SS4)

MDOT_02 Workspace

- This workspace is required for all new projects started after April 1, 2016.
- This workspace requires Power GEOPAK SS4 or GEOPAK Civil Engineering Suite SS4.
- The workspace continues to function with SS3, however, a number of new enhancements (SS4 civil cells, Cell Selector tool, HEC-RAS Report tool, etc.) are not accessible in SS3. In addition, the workspace installation procedure no longer supports SS3.
- The MDOT_02 Workspace is available for download by consultants at the following link:
http://mdotjboss.state.mi.us/SpecProv/getDocumentById.htm?docGuid=5ba31b41-a491-4942-8966-d5f39c2f2ca2&fileName=%22MDOT_02_Workspace_2016-08-18.zip%22
Consultant installation instructions are located in the “C:\MDOT_02 Workspace\1_Install” folder.
- The MDOT_02 Workspace install procedure supports the following applications:
 - a) Power GEOPAK SS4
 - b) GEOPAK Civil Engineering Suite SS4
 - c) Stand-alone MicroStation (SS3 & SS4)
- If you are in the early stages of a project started using the MDOT_01 Workspace and need assistance with upgrading of survey & design data for use with the MDOT_02 Workspace, please contact MDOT-CADDSupport@michigan.gov.

Software

Power Geopak SS2 or GEOPAK Civil Engineering Suite SS2

- Not to be used for any new project started after April 1, 2016.
- Requires the MDOT_01 Workspace.

Power Geopak SS4 or GEOPAK Civil Engineering Suite SS4

- Required for all new projects started after April 1, 2016.
- Requires the MDOT_02 Workspace.
- Power GEOPAK SS3 & SS4 as well as Civil Suite SS3 & SS4 **cannot** coexist on the same machine. The SS3 version must therefore be uninstalled before installing SS4.
- The two key differences between SS3 and SS4 are as follow:
 1. The file format was changed by Bentley in order to support future development of i-models, which MDOT does not currently support. When opening an SS2/3 file containing “civil data” in SS4, the users will be prompted to upgrade to the SS4 file format, which is not backward compatible with SS2 or SS3.

2. SS4 contains very few new enhancements, but does contain a number of bug fixes primarily involving 3D roadway modeling.

Supported Software Versions

Definitions:

“ * ” refers to the version of GEOPAK SS4 for which technical support is available through MDOT.

“ ** ” refers to a version of MicroStation that is only available for download by clicking on the arrow to the left of the GEOPAK Civil Suite download.

“MR” in the version names below refers to Maintenance Release.

“PB” in the version names below refers to Priority Build, which is MR1 plus earthwork customizations requested by MDOT. Note that the earthwork customizations are also available in MR2.

Power GEOPAK SS2:

Power GEOPAK SS2 Update2	(pgk081107615en.exe)
Power GEOPAK SS2 Update2 PB	(Setup_PowerGEOPAK_08.11.07.621.exe)

Power GEOPAK SS4:

Power GEOPAK SS4 MR1 PB*	(Setup_PowerGEOPAK_08.11.09.851PB.exe, based on .845)
Power GEOPAK SS4 MR2	(pgk081109872en.exe)
Power GEOPAK SS4 MR2.1	(pgk081109878en.exe)

MicroStation SS3 + GEOPAK Civil Engineering Suite SS2 & SS4:

MicroStation SS3 MR1**	(ms081109714en.exe)
GEOPAK Civil Engineering Suite SS2 Update2	(pbda08110703en.exe + gkste081107615en.exe)
GEOPAK Civil Engineering Suite SS4 MR1 PB*	(GPKSTE_08.11.09.851PB.zip, based on .845)

MicroStation SS4 + GEOPAK Civil Engineering Suite SS2 & SS4:

MicroStation SS4 MR2**	(ms081109832en.exe)
GEOPAK Civil Engineering Suite SS2 Update2	(pbda08110703en.exe + gkste081107615en.exe)
GEOPAK Civil Engineering Suite SS4 MR2.1	(gkste081109878en.exe)

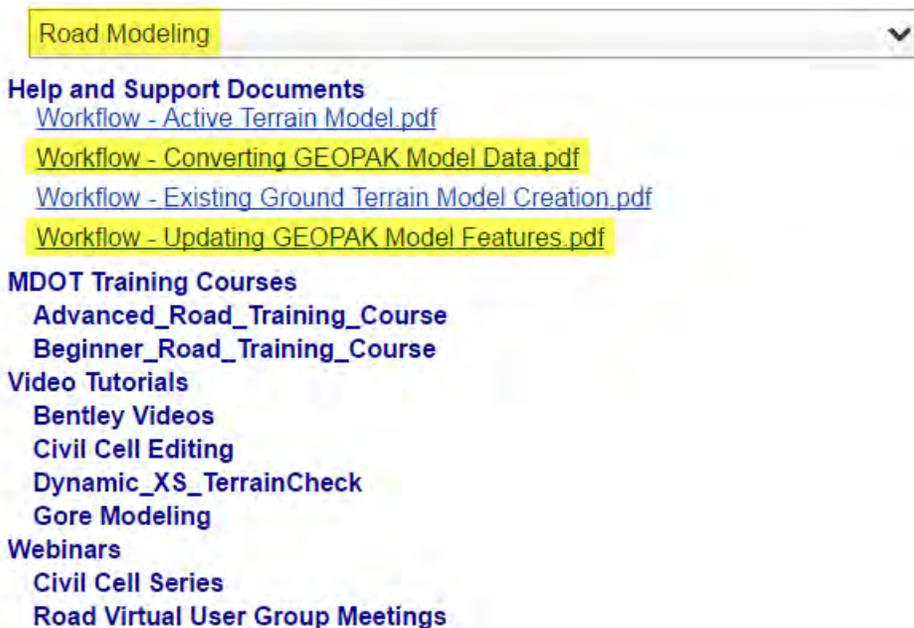
Note: The Priority Build (PB) version is only available for download at MDOT’s ftp site. Download instructions are as follows:

1. Click on the following link: <ftp://ftpmidot.state.mi.us/>, which should open Windows Explorer (not Internet Explorer).
2. If Internet Explorer opens instead of Windows Explorer, go to “View > Open FTP Site in Windows Explorer” or “Page > Open FTP Site in Windows Explorer” in order to open Windows Explorer.
3. If the drop-down menu bar is not visible in Windows Explorer, go to Organize > Layout > Menu Bar.
4. In Windows Explorer go to File > Login As... and enter the following login information:
User Name: geopak
Password: !geopak!
5. Download one of the following two folders to your hard drive or server:
 - Civil Suite SS4 MR1 - 851 Priority Build
 - Power GEOPAK SS4 MR1 - 851 Priority Build

Upgrading DGN Files from SS3 to SS4

MDOT will begin the process of migrating ongoing design projects from Power GEOPAK SS3 to SS4 starting 8/18/2016 and ending 9/16/2016. This process will involve upgrading of SS3 dgn files containing "civil data" to a new SS4 file format, which is explained in two help documents that are available for download at MDOT's Support Services web page. Download instructions are as follows:

1. Go to: <http://mdotjboss.state.mi.us/SpecProv/trainingmaterials.htm>
2. Go to the "---Select Category---" drop down menu and select Road Modeling.
3. Click on "Help and Support Documents".
4. Download the two documents highlighted below:



Road Modeling

Help and Support Documents
[Workflow - Active Terrain Model.pdf](#)
[Workflow - Converting GEOPAK Model Data.pdf](#)
[Workflow - Existing Ground Terrain Model Creation.pdf](#)
[Workflow - Updating GEOPAK Model Features.pdf](#)

MDOT Training Courses
[Advanced_Road_Training_Course](#)
[Beginner_Road_Training_Course](#)

Video Tutorials
[Bentley Videos](#)
[Civil Cell Editing](#)
[Dynamic_XS_TerrainCheck](#)
[Gore Modeling](#)

Webinars
[Civil Cell Series](#)
[Road Virtual User Group Meetings](#)

Workspace File Update Summary

Apps – Set Active Angle

File: Interface_MDOT_02_SS4.dgnlib
Location: M:\MDOT_02 Workspace\Interfaces\MDOT\mdot_02
Changes: Added "Set Active Angle" app to the "MDOT Tools" drop down menu in the SS4 user interface.

Printing

File: PrintStyles.dgnlib
Location: M:\MDOT_02 Workspace\Projects\MDOT_02\Printing\Print Styles
Changes: 1) Fixed rotation settings for the "Letter - portrait" and "Letter - portrait - color" Print Styles.
2) Updated print styles for all letter size sheets, in order to set size and rotation correctly in Print Organizer.

File: Interface_MDOT_02_SS3.dgnlib
File: Interface_MDOT_02_SS4.dgnlib
Location: M:\MDOT_02 Workspace\Interfaces\MDOT\mdot_02
Changes: Modified path for auto loading of the mdot_02.pset file.

File: MDOT_02.pcf
Location: M:\MDOT_02 Workspace\Projects
Changes: Modified path to pset folder (Print Definitions) to reflect change to folder name.

File: pdf.pltcfg
Location: M:\MDOT_02 Workspace\Projects\MDOT_02\Printing\Plot Drivers
Changes: Updated Letter size plot configuration settings for use with Print Organizer.

File: mdot_02.pset
Location: M:\MDOT_02 Workspace\Projects\MDOT_02\Printing\Print Definitions
Changes: Replaced hard coded path to print driver with configuration variable pointing to correct driver location.

File: Renamed folder.
Location: M:\MDOT_02 Workspace\Projects\MDOT_02\Printing\Print Definitions
Changes: Renamed the "Print Organizer" folder to "Print Definitions", to accurately represent its purpose, which is to store Print Definition (pset) files.

ROW / Real Estate

File: Bd_Legacy_ROW_Maps.cel
Location: M:\MDOT_02 Workspace\Projects\MDOT_02\Elements\Cells\True Scale
Changes: 1) Renamed cell library from Bd_ROW_Mapping.cel to Bd_Legacy_ROW_Maps.cel, in order to clarify that this cell library is only intended for use by MDOT's ROW Mapping group and does not match MDOT's CADD standards for design.
2) Updated text in the SURVSH (Survey Sheet Border) cell from L.L.S. (licensed land surveyor) to P.S. (professional surveyor).

Roadway – Modeling

File: Bundled Driveway Components.pdf
File: Existing Template Instructions.pdf
File: Updating Template Libraries with Template Library Organizer.pdf
Location: M:\MDOT_02 Workspace\Projects\MDOT_02\Civil Standards\Roadway Templates
Changes: Removed obsolete workflows.

Roadway – Drafting

File: MDOT_GrndPro.mvba
Location: M:\MDOT_02 Workspace\Projects\MDOT_02\Apps\VBA
Changes: Resolved bug in Ground Point Profile app involving starting station of an alignment.

File: Rd_Typical.cel
Location: M:\MDOT_02 Workspace\Projects\MDOT_02\Elements\Cells\True Scale
Changes: Grouped labeling cells together with "Label_" prefix.

Seed Files

File: All design seed files.
Location: M:\MDOT_02 Workspace\Projects\MDOT_02\Seed Files\Design
Changes: Changed the keypoint divisor for all seed files from 2 to 1.

Sheets & Sheet Labeling

File: Sh_Sheet_Labels.cel
Location: M:\MDOT_02 Workspace\Projects\MDOT_02\Elements\Cells\True Scale
Changes: Fixed cell background mask in cell "Line_Break_Wt0_Masked".

File: Sh_Sheet_Labels.cel
Location: M:\MDOT_02 Workspace\Projects\MDOT_02\Elements\Cells\True Scale
Changes: Renamed the following cells:
Line_Terminator_Wt0 to Line_Terminator_Ex
Line_Terminator_Wt1 to Line_Terminator_Pr
Line_Terminator_Wt1_Double to Line_Terminator_Pr_Double

File: Sh_Sheet_Labels_SectionCorners.cel
Location: M:\MDOT_02 Workspace\Projects\MDOT_02\Elements\Cells\True Scale
Changes: Added cell library for labeling of section corners.

File: Sh_Sheet_Tables_PlanQuantSpreadsheet.cel
Location: M:\MDOT_02 Workspace\Projects\MDOT_02\Elements\Cells\True Scale
Changes: Added cell library for Plan Quantity Spreadsheet tables.

Structures

File: Structures.dgnlib
Location: M:\MDOT_02 Workspace\Projects\MDOT_02\Civil Standards\General\Level Filters
Changes: Modified Substructure level filter to include SubFooting levels.

File: St_Slab.cel
Location: M:\MDOT_02 Workspace\Projects\MDOT_02\Elements\Cells\True Scale
Changes: Removed Hot Poured Joint Sealant (HPJS) and replaced with Polyurethane or Polyurethane Hybrid Sealant. Replaced cell APPR_HPJS with APPR_CONSTJT. Updated per Road and Bridge Design Publication Monthly Update - July 2016.

File: St_Deckre.cel
Location: M:\MDOT_02 Workspace\Projects\MDOT_02\Elements\Cells\True Scale
Changes: Removed Hot Poured Joint Sealant (HPJS) and replaced with Polyurethane or Polyurethane Hybrid Sealant. Updated per Road and Bridge Design Publication Monthly Update - July 2016.

SUE / SUDA / Geopak Drainage

File: mdot_drainage.mvba
Location: M:\MDOT_02 Workspace\Projects\MDOT_02\Apps\VBA
Changes: Updated references to level libraries, dimension styles, & cell libraries.

File: MDOT_DrainTab.mvba
Location: M:\MDOT_02 Workspace\Projects\MDOT_02\Apps\VBA\Drainage Reports
Changes: Minor updates.

Traffic - ITS

File: Features_General_MDOT_SS4.dgnlib
Location: M:\MDOT_02 Workspace\Projects\MDOT_02\Civil Standards\General\Features
Changes: Updated all ITS colors to orange to match the Miss Dig Standard.

Utilities

File: Features_General_MDOT_SS4.dgnlib
Location: M:\MDOT_02 Workspace\Projects\MDOT_02\Civil Standards\General\Features
Changes: Updated all Electrical colors to red to match the Miss Dig Standard.

Workspace Configuration

File: MDOT_02.pcf
Location: M:\MDOT_02 Workspace\Projects
Changes:

- 1) Added configuration variable to prevent loading of the CONNECTION client's "Assign Project" dialog box, which is used to set up a CONNECTED Project for cloud based file sharing. MDOT does not install the CONNECTION Client for internal use.
- 2) Updated AutoTURN folder path name to version 9.
- 3) Set MicroStation SS3 to use the SS4 user interface, in order to support "GEOPAK Civil Engineering Suite SS4 MR1 PB".

File: Removed folder.
Location: M:\MDOT_02 Workspace\2_Documentation
Changes: Removed folder.

File: Added folder.
Location: M:\MDOT_02 Workspace\2_Release Date 05-23-2016
Changes: Added folder.

MDOT Technical Support

Technical support email addresses are available on the [Development Guide Help](#) page, under Support Resources.