



Name:	ODOT_SCD_List.mvba
Tested MicroStation Version:	PowerGEOPAK v8i (Select Series 4)

Description

The ODOT_SCD_List.mvba is a Visual Basic Application developed to automate placing the list of Standard Construction Drawings (SCD) and Supplemental Specifications (Supp. Spec.) on an ODOT standard Title Sheet.

The file can be found in the following place:

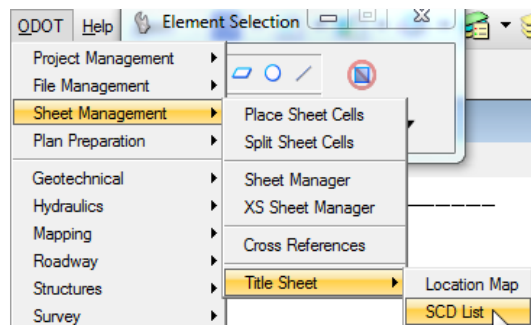
ODOTcadd Standards: ODOTcadd/Standards/vba

The main purpose of this documentation is to explain how to use this application.

Loading the Application:

To load the ODOT_SCD_List.mvba open MicroStation and select **ODOT > Sheet Management > Title Sheet > SCD List** from the MicroStation pull down menu (must be in sheet model or button will be grayed out), or by the following key-in command:

vba load ODOT_SCD_List.mvba; vba run SCD_List_Main



Starting with version 09.10.16 of the application, the SCD list is read from an ASCII text file stored on the ODOT website. This change was made to allow the SCD list to be updated at any time without the need to update the .mbva application.

Starting with version 16.01.15 of the application, the ASCII text file has been updated to contain SCD/Supp. Spec. descriptions, notes, and URLs. The application will still be able to read SCD lists placed on the title sheet from previous versions.

The text file is maintained by the ODOT Office of CADD and Mapping Services and is stored in the following location on the ODOT website:

http://www.dot.state.oh.us/Divisions/Engineering/CaddMapping/CADD_Services/Standards/SCD_List/SCDList.txt

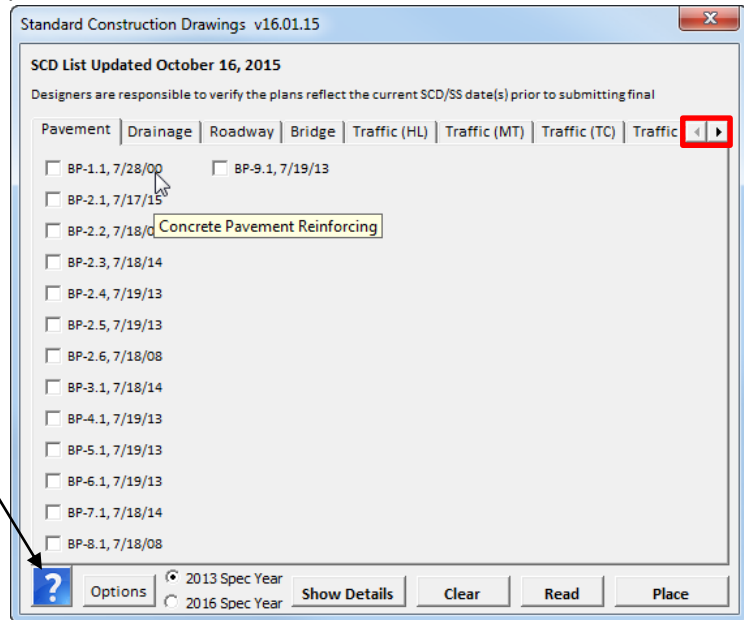
This list is not editable by users of the application.



Application Operation

When loaded the dialog shown below will appear.

This Button will open this PDF.



The SCD's are divided up into 8 different tabs as seen in the image above, Pavement, Drainage, Roadway, Bridge, Traffic (HL), Traffic (MT), Traffic (TC) and Traffic (ITS). There is also a 9th tab for Supp. Specs. The user can use the left and right arrows indicated in the image above by the red box to show the tabs that don't fit onto the dialog. Inside each tab the corresponding SCD/Supp. Spec. names and revision dates are shown, each with their own checkbox. As shown in the image above when the cursor is hovering over a checkbox a tool tip displays with a description for that item. Additionally if a tab has more items then can fit in the dialog a vertical scroll box will be seen inside the tab so that all the items can be listed. The scroll wheel on a users mouse will work with the vertical scroll bar. The Top left of the dialog will give the date that the ASCII text file was list updated and uploaded online.

CheckBoxes

Hover:

As shown in the image above when the cursor is hovering over a checkbox a tool tip displays with a description for that item.

Left Click:

A left click on a checkbox will check that item on or off. The user should check on the necessary items for a given project.

Right Click:

A right click on a check box will open the details dialog (if not already open). See [Show Details](#) for more information.



Spec Year Option Buttons

The two option buttons can be found between the [Options](#) button and the [Details](#) button. When selected these options buttons any checkboxes check on in the Supp Spec tab will be checked off.

2013 Spec Year:

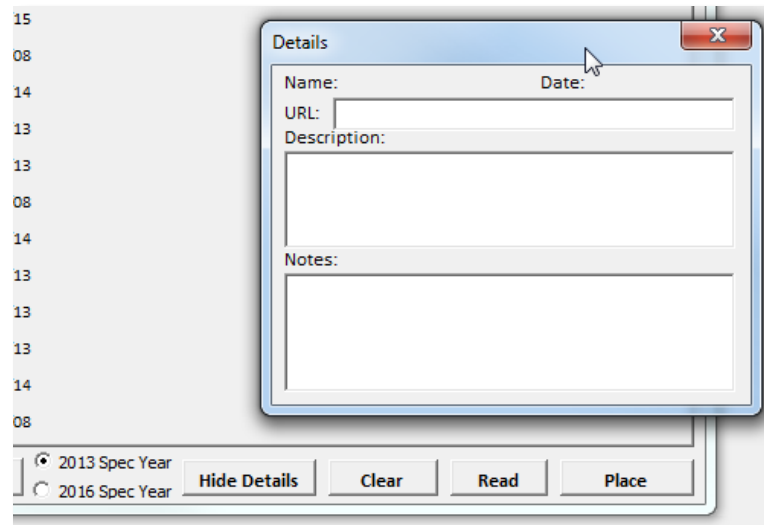
When this option button is selected the tab that contains Supp Spec will be repopulated with the supplemental specs for spec year 2013.

2016 Spec Year:

When this option button is selected the tab that contains Supp Spec will be repopulated with the supplemental specs for spec year 2016.

Show Details

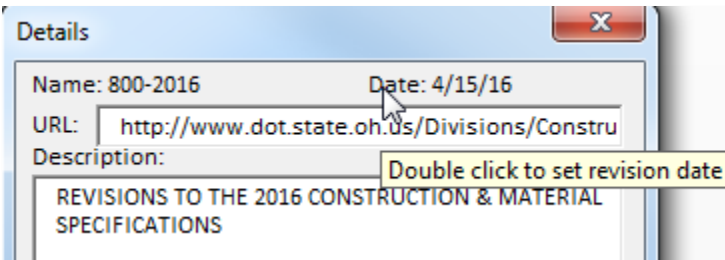
When the **Show Details** button is selected the dialog imaged below will appear.



When the Details dialog is open the **Show Details** button will say **Hide Details**. Selecting the button when it says Hide Details will close the Details dialog. Alternatively the user can hit the X button in the top right of the Details dialog to close it. The details dialog will show the name, revision date, URL, Description, and Notes for an item. The dialog is populated by a [Right Click](#) on a checkbox. Double Clicking on the URL will open the link.

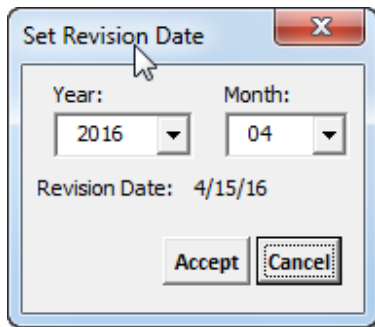
Changing 800 Supp Spec Date:

When the details dialog is displaying details for the 800 Supplemental Spec the Date will be clickable. Hovering the cursor over the date will show a tool tip, as imaged below. Double clicking on the date will open [Set Revision Date](#) dialog.

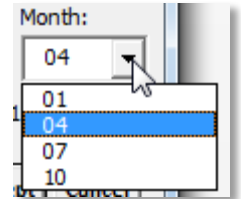




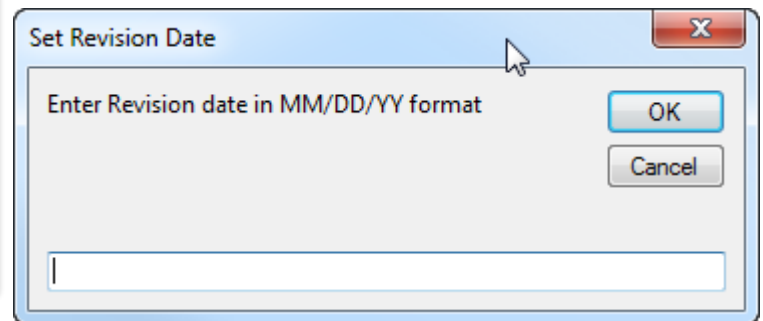
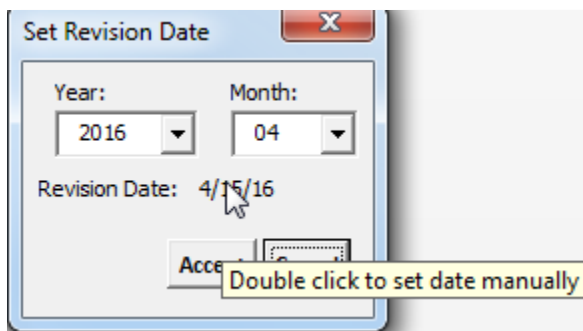
Set Revision Date:



See [Changing 800 Supp Spec Date](#) for information on how this dialog is opened. When opened the user can change the date for the 800 supplemental specification. This should be one of the release dates listed on the [DRRC website](#). The User can select a year and month and the revision date will change automatically to the correct revision date. The revision date is the third Friday of the selected month. The month pull down only has options for the four months in which revisions are made. See image to the right. If by chance the program does not display the correct date the user can set the date



manually. When hovering the cursor over the Revision Date (as imaged below) a tool tip appears saying Double Click to set date manually. When double clicking on the date a input box opens as imaged below.



The input box will accept only dates. If the text entered in the input box is not a valid date, when the user selects OK the input box will reappear until a valid date is entered or Cancel is selected. Once a valid date is entered the Set Revision Date dialog will now show the entered date as the revision date. To accept the revision date the user must select the Accept button. Selecting Cancel will not change the date for the 800 Supp Spec. When the user selects the Accept button only the 800 Supp Spec's date will be changed to the revision date that was set in the Set Revision Date dialog.

Clear

When the **Clear** button is selected all the checkboxes will be unchecked.

Read

The **Read** button is used to read a list of previously placed SCD/Supp. Spec. names and revision dates from the design file and check-on the corresponding SCD/Supp. Spec. name(s) in the ODOT_SCD_List dialog. This option is used to add or remove drawings from the Title Sheet, or to update the revision dates of the drawings.

To update the list of SCD/Supp. Spec., take the following steps:

- Select the **Read** button. Any SCD/Supp. Spec. items that are currently toggled on in the dialog will be automatically cleared.
- Select one of the text strings previously placed with the SCD_List.mvba application. Note: The text must be all contained in the same graphic group in order for the application to pick up all the SCD/Supp. Spec. names.
- Accept the text. When you accept the text, the application will automatically take the following steps:



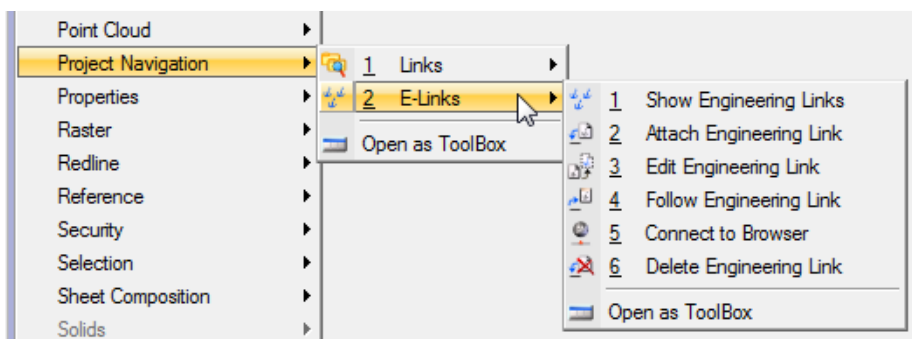
- Delete the text for the entire group of previously placed SCD/Supp. Spec. names and dates from the design file.
- Check-on the corresponding SCD/Supp. Spec. names matching the list of SCD/Supp. Spec. that were selected and subsequently deleted from the design file.
- Set all the values in the [options](#) dialog to the values that were used when originally placing the list as well as sets the spec year that was used when placing the list and the 800 Supp Spec Date that was used when originally placed. These values are obtained from the engineering links that were created at the time the list was placed.
- Now the user should check on/off additional SCD/Supp. Spec. as needed.
- Use the [Place](#) button to place an updated list of SCD/Supp. Spec. on the Title Sheet.

Place

When the **Place** button is selected the following happens,

- All checkboxes checked on will be shown as a temporary graphics in MicroStation that follows the user's cursor.
- Place the list by snapping to the upper left enter data field to ensure that the text is aligned properly on the Title Sheet cell.
- The text is placed as a graphic group for easy deletion.
- The list will automatically skip a line between each category, and will also move to the next column as needed.
- The list of drawings is placed as text elements on top of the title sheet cell. The application does not use the enter data fields that are contained in the Title Sheet cell.
- The text is placed with the active level.
- Once the SCD list is placed in a MicroStation file an engineering link is assigned to each text containing a SCD/Supp. Spec. name. This link is currently pointing to the discipline specific SCD/Supp. Spec. webpage. This link can be carried to a PDF when printed using print organizer. ODOT plans to switch these links to link to the specific SCD/Supp. Spec. and is currently looking into updating the way SCD are named and stored online to achieve this. The engineering link also contains all the [option](#) settings the current [spec year](#) and the [800 Supp Spec date](#). This is used with the [Read](#) button so that all data on how and what was placed originally is retained.

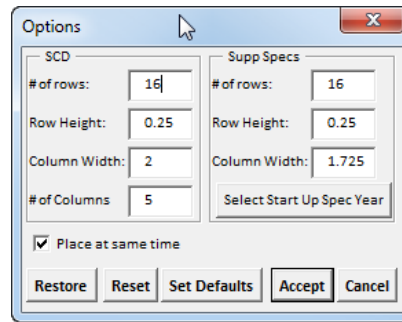
The list can be placed a couple different ways. This is controlled by the values set in the [Options](#) dialog. To view engineering links use the E-Links toolbar. The image below shows how to get to the E-Links toolbar from the Tools tab in MicroStation.





Options

The options dialog controls how to place the SCD/Supp. Spec. list. When the Options button is selected the dialog imaged below appears.



This dialog has the default settings for the standards ODOT title sheet cell. These settings set up how the text is drawn in order to fit into the table on the ODOT title sheet cell. For situations where this size of this table is changed these settings can be changed to correspond with the new dimensions of the table.

SCD # of Rows:

This sets the number of rows there are in the SCD area of the table. The default value is 16.

SCD Row Height:

This sets the height of each row in the SCD area of the table. The default value is 0.25.

SCD Column Width:

This sets the width of each column in the SCD area of the table. The default value is 2.

SCD # of Columns

This sets the number of columns there are in the SCD area of the table. The default value is 5.

Supp Spec # of Rows:

This sets the number of rows there are in the Supp. Spec. area of the table. The default value is 16.

Supp Spec Row Height:

This sets the height of each row in the Supp. Spec. area of the table. The default value is 0.25.

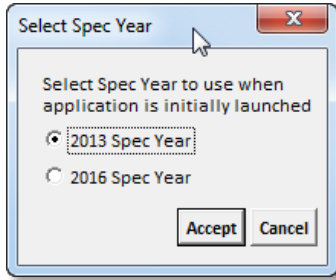
Supp Spec Column Width:

This sets the width of each column in the Supp. Spec. area of the table. The default value is 1.725.



Select Start Up Spec Year:

When this button is selected the dialog shown below will appear. This dialog allows you to choose which spec year you want this application to use when the application is initially launched. Changing the year in this dialog does not set what spec year to use currently. That setting is on the main dialog. This is strictly only for when the application is first loaded. The selection takes affect once the accept button is selected. Hitting Cancel will not make any changes. When Accept is selected the selected spec year is stored in a user variable named *ODOT_SPECYEAR_DEFAULT*. This variable will be stored in the users .ucf file.



Place at same time

This checkbox give the user the ability to place the SCDs on the first click and then place Supp. Specs. on a second click when this checkbox is checked off. When checked on SCDs and Supp. Specs. are placed at the same time. The default setting for this is checked on.

Restore

Since the user can [Set Default](#) values for this dialog, the Restore button will restore the values of this dialog back to ODOT defaults.

Reset

This button is return all values in this dialog back to their default values.

Set Defaults

This button will save the current values in the dialog to a user variable named *ODOT_SCD_DEFAULTS*. This variable will be stored in the users .ucf file. This will overwrite ODOT's default values for this application and use the entered values as the new defaults. Use the [Restore](#) button to return the default values back to ODOT's original default values.

Accept

This button will accept any changes the user makes in this dialog. Changes to this dialog do not take effect until the **Accept** button is selected.

Cancel

This button will close the dialog and any changed to any of the options will not take affect.

Contacts

If you have any questions, suggestions, or problem with this application please contact the ODOT Office of CADD and Mapping Services by use of the following form on the ODOT website:

<http://www.dot.state.oh.us/Divisions/Engineering/CaddMapping/CADD/Pages/Suggestions.aspx>