# OHDOT\_SCD\_List.mvba

# **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.

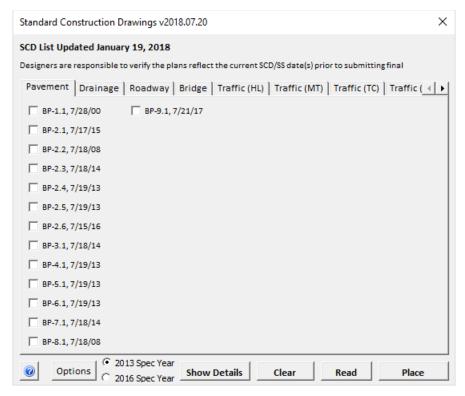
The SCD and Supp. Spec. lists are read from the ODOT website. An internet connection is required.

# Loading the Application:

The application is loaded in MicroStation Connect Edition or OpenRoads Designer Connect Edition by selecting the **Title Sheet > SCD List** option from the Ohio DOT Workflow.

# **Application Operation:**

When the application is accessed, a dialog like the example below is opened.



The SCD's are divided up into 8 tabs as seen above: Pavement, Drainage, Roadway, Bridge, Traffic (HL), Traffic (MT), Traffic (TC) and Traffic (ITS). There is also a 9th tab for Supp. Specs.

When a tab is selected, the corresponding SCD/Supp. Spec. names and revision dates are shown, each with their own checkbox.

The top left of the dialog displays the date that the ASCII text file was list updated and uploaded online.

#### CheckBoxes

#### Hover:

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 to select the spec year are located at the bottom of the dialog. When one of the spec years is selected, any checkboxes that are currently checked on in the Supp Spec tab will be toggled off.

#### 2013 Spec Year:

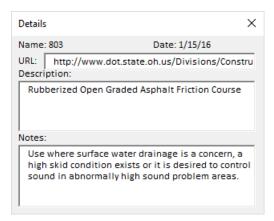
When this option button is selected the tab that contains Supp Spec will be repopulated with the supplemental specs for spec year 2013.

## 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.



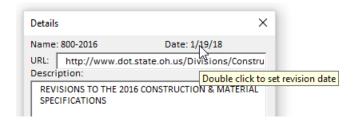
When the Details dialog is open the **Show Details** button will read **Hide Details**. Selecting the button when it says Hide Details will close the Details dialog. The details dialog will show the name, revision date, URL, Description, and Notes for an item.

The dialog is populated by a Right-Click on a checkbox.

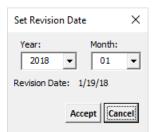
Double Clicking on the URL will open the link.

## Changing 800 Supp Spec Date:

When the details dialog is displaying details for the 800 Supplemental Spec, double-clicking on the date will open **Set Revision Date** dialog.

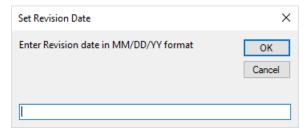


#### Set Revision Date



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.

If by chance the program does not display the correct date the user can set the date manually. Double-click the date to set it manually using the **Set Revision Date** input box shown below.



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 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 actions are performed:

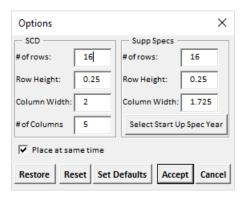
- All checkboxes checked on will be shown as a temporary graphics in MicroStation that follows the user's cursor.
- Place the list by snapping to the upper left enter data field to ensure that the text is aligned properly on the Title Sheet cell.
- The text is placed as a graphic group for easy deletion.
- 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 on 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.

To view engineering links, use the E-Links toolbar.

# **Options**

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



This dialog has the default settings for the standards ODOT title sheet cell. These settings set up how the text is drawn 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:

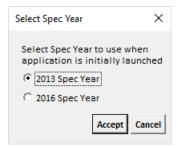
This sets the height of each row in the Supp. Spec. area of the table. The default value is 0.25.

#### 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 user configuration file (.ucf).

#### 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 effect.

# **Updates:**

Version 2018.07.20

Initial release for MicroStation and OpenRoads Designer Connect Edition

Version 2021.10.04

- -Updated to sort Pavement, Drainage, and Roadway SCD together alphanumeric to follow L&D vol. 1.
  - -Moved ITS tab to after the HL tab to also sort traffic sections alphanumerically.

Version 2021.11.17

- Fix bug in code that was introduced in last update that wouldn't place text if a pavement, drainage, or Roadway SCD was not checked on

Version 2021.11.18

- Fixed problem introduced in last update with the app not placing SCD if less than 3 SCD are checked on in the first three tabs
  - -(OHDOTCEvo2 only) Changed the text styles to use the new v2 text styles

## **Contacts**

For any questions, suggestions, or problems with this document please contact the ODOT Office of CADD and Mapping Services by use of the following form on the ODOT website:

https://odot.formstack.com/forms/cadd servicerequest