# **OHDOT SHEETS**

# Description

The OHDOT Sheet app is a resizable C# Windows Presentation Form MicroStation Addin application that is fully integrated with ProjectWise.

This application is used to place OHDOT sheets.

# Software Requirements

This application was developed using .NET Framework 4.6.2 in 64 bit Windows 10.

Since it's a MicroStation Addin, MicroStation CONNECT edition is required to run this (or Open Roads Designer CONNECT edition, Open Bridge Designer CONNECT edition...)

# Loading the Application

The application is loaded via the OHDOT Sheet Cells option from the Ohio DOT Workflow within the Sheets Group.

It can also be launched with the following Key-in commands

mdl load OHDOTSheetCells; OHDOTSheetCells Open; OHDOTSheetCells openohdotsheettool

Note that the OHDOT workspace must be loaded.



Loading this application opens the OHDOT Sheets Window as well as starts the Place Active OHDOT Sheet tool.

This application requires that the OHDOT\_CELLDIR variable be set to the directory containing the OHDOT\_Sheets.cel file.

# Application Operation

This application consists of the OHDOT Sheets Window and the Place Active OHDOT Sheet Tool.

### **OHDOT Sheets Window:**

	🖉 OHDOT Sheets					_	×
ł	Help						
c	ategory: All	3					
	Category	Sheet Name	Cell(s) Name	Description	П		
	Manual Configuration	BORDER	BORDER	ANSI D Shee 📥			
	Manual Configuration	BORDER_2N	BORDER_2N	ANSI D Shee			
	Manual Configuration	BORDER_3	BORDER_3	ANSI D Shee			
	Manual Configuration	BORDER_1N	BORDER_1N	ANSI D Shee			
	Manual Configuration	BORDER_2NS_8.5x14	BORDER_2NS_8.5x14	8.5x14, 2-Lin			
	Manual Configuration	BORDER 2 8.5x11	BORDER 2 8.5x11	8.5x11, 2-Line			

This window contains <u>Help Menu</u>, <u>Category Filter</u>, <u>OHDOT Sheets List</u>, and <u>Sheet Preview</u>. There is also a vertical slider bar to the left of the <u>Sheet Preview</u> that can be dragged to the left or right to resize the sections of the window.

#### Help Menu:

The Help Menu consists of two items Wiki and About.

#### Wiki-Help Doc/Video(s)

Clicking this item will launch a wiki page that consists of a link to this help document and a YouTube video (link below) explaining how to use this application. <u>https://uoutu.be/dx27-yjIieA</u>



 $\times$ 

#### About

Clicking this item will open another dialog, pictured to the right. This dialog displays the following information.

- o Application Name
- Application version
- Copyright
- Company
- o Description

# OHIO DEPARTMENT OF CHDOTSheetCells Version 1.0.0.0 Copyright © 2019 OhioDOT CADDServices Ohio Department of Transportation Application to help place Ohio DOT sheet cell borders

#### **Category Filter**

Category:	All		
Categor	All		
Manual	Custom		
Manual	Manual Configuration	- F	
Manual	Generic Sheets		
Manual	Bridge Sheets		
Manual	Geotechnical Sheets	- L	
Manual	Right-of-Way Sheets		

This filter is a dropdown list of

the different categories of Sheets available. Selecting one will filter the <u>OHDOT Sheets List</u> to display only sheets for the selected category. If the Custom option is selected from the dropdown then the user will be able to create a custom Sheet by selected a border cell and interior cell. See <u>Custom Sheets</u> for more information.

About

#### **OHDOT Sheets List**

#### **OHDOT Sheets List Columns**

This list gets populated from an csv file when the application is initially loaded. It contains the following columns

#### Category

Represents what category a given sheet falls under

#### Sheet Name

Represents the name of a given sheet

#### Cells(s) Name

Represents the cell name(s) of a given sheet. If a sheet is made up of multiple cells then all cell names are listed here.

#### Description

Represents a description for a given sheet.

#### **OHDOT Sheet List Actions**

The following actions are available within the OHDOT Sheets List.

#### Double Click Row

This is set the row that was double clicked to the active OHDOT Sheet. And activate the <u>Place Active OHDOT Sheet Tool</u>.

#### Selecting Row

Updates the Sheet Preview to display a image of the selected sheet.

#### **Custom Sheets**

Sheet Name: Custom Border: Interior:

BORDER Y None

Custom sheets can be created when the Custom option is selected from the <u>Category Filter</u>. then the user will be able to create a custom Sheet by selected a border cell and interior cell. When this is selected the

active sheet will be set to Custom. The <u>sheet preview</u> will display an image of the selected border and select interior to the sheet.

#### Border



This dropdown box is populated will the available borders a OHDOT sheet can have. Selecting one will update the <u>Sheet Preview</u> to show the selected border.

#### Interior

This dropdown box is populated will the available interiors a OHDOT sheet can have. Selecting one will update the <u>Sheet Preview</u> to show the selected Interior.



#### **Sheet Preview**

This section will display an image of the selected sheet in the <u>OHDOT Sheets List</u> or the <u>custom</u> <u>sheet</u> if the <u>Category Filter</u> is set to Custom.

## Place Active OHDOT Sheet Tool:

here Active OH 🗆 🗙					
Active Sheet:	BORDER_2N				
Scale:	1				
Rotation: Use Active Angle					
Place at 0, 0					
Property	Value				
PID	0				
Sheet Title	SHEET TITLE				
Sub-Title	SHEET SUB-TITLE				
Sheet Numbe	r P.O				
Sheet Total	0				
Designer	XXX				
Reviewer	XXX				

This tool, when activated takes over the tool settings dialog.

#### Active Sheet

This displays the name of the active OHDOT Sheet.

#### Active Sheet Button

The will open the <u>OHDOT Sheets Window</u> if it is not already open. This window is used to view OHDOT sheets and set the active OHDOT Sheet.

#### Scale

This text box only accepts numbers and is used to set the scale the OHDOT Sheet will be placed at.

#### Rotation

There are two options for setting the rotation of the OHDOT Sheet.

#### Use Active Angle

If this is set then the rotation value will be the files active angle.

#### **Use View Rotation**

If this is set then the rotation value will match the view rotation.

#### Place at 0,0 Checkbox

If checked then the OHDOT Sheet will be placed at 0,0.

#### **Property List**

This section will list all the Sheet Properties that can be set for the active OHDOT Sheet. It consists of the property name and its value. The values can be edited as desired.

#### Operating the Place Active OHDOT Sheet Tool

This tool acts like any other tool. For details on what action should be performed next within the tool make sure to look at the bottom left corner of MicroStation.

If tool is active but there is not an active OHDOT Sheet.



If tool is active and there is an active OHDOT Sheet.

```
Place Active OHDOT Sheet > Data Point to Place Sheet, Reset to cancel
```

Once the tool is active and there is an active OHDOT Sheet the sheet will dynamically be displayed in the view, following your cursor (unless place at 0,0 is checked on, then the OHDOT Sheet will be displayed at 0,0).

Issue a datapoint to place the OHDOT Sheet or Reset click to cancel the tool at start the default tool (Element selection in most cases).

If a datapoint is issued the OHDOT sheet is drawn to the model, the Sheet properties are set to the values defined in the <u>Property List</u>, and the model sheet definition is updated to match the size and location of the newly placed OHDOT Sheet, then just like any other tool, the tool is reset. The design agency cell is also placed if found. The design agency cell can be set via the DesignAgencyCellName property within the <u>Property List</u>. The DesignAgencyCellName property dropdown is populated with all values set on the **DESIGN\_AGENCY\_CELLNAMES** variable. Note that the first value on this variable is used as the default for this application. If a cell exists with the name defined by this variable, then it will be used as the design agency cell and placed with the OHDOT sheet.

If an error occurs, an error message will be added to the Message Center. Below lists the possible errors

Unknown error occurred when displaying active OHDOT sheet, Tool aborted

Unknown error occurred when placing active OHDOT sheet, restarting tool

Cannot place active OHODT sheet since active model is not of Sheet Type!

# **Updates**

Version 1.0.0.0: Initial Release

Version 1.0.0.1:

-Fixed placement of Design Agency Cell

-Fixed placement of sheet cell using Active Angle or view rotation.

Version 1.0.0.2:

-Added Custom option to Category. This allows the user to create custom sheet cells by selecting a border and interior.

Version 1.0.03: Minor stability updates.

Version 1.0.0.4: Fixed crashing error that happened when placing OHDOT sheet with the OHDOT Sheets window closed.

Version 1.0.0.5:

-Fixed incorrect placement of agency cell.

-updated to allow selection of agency cells using DESIGN\_AGENCY\_CELLNAMES variable. Version 1.0.0.7

-Updated to include any cell that is configured and has a name that starts with INTERIOR\_.

-Updated to sync the copy of the OHDOT\_ItemTypes Item Type Library in the active file with the dgnlib when the application is launched.

Version 1.0.0.8

-Removed Google Analytics from app

# 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

