OpenRoads Designer User Manual

Chapter 18

SHEET INDEX

U.S. Department of Transportation
Federal Highway Administration
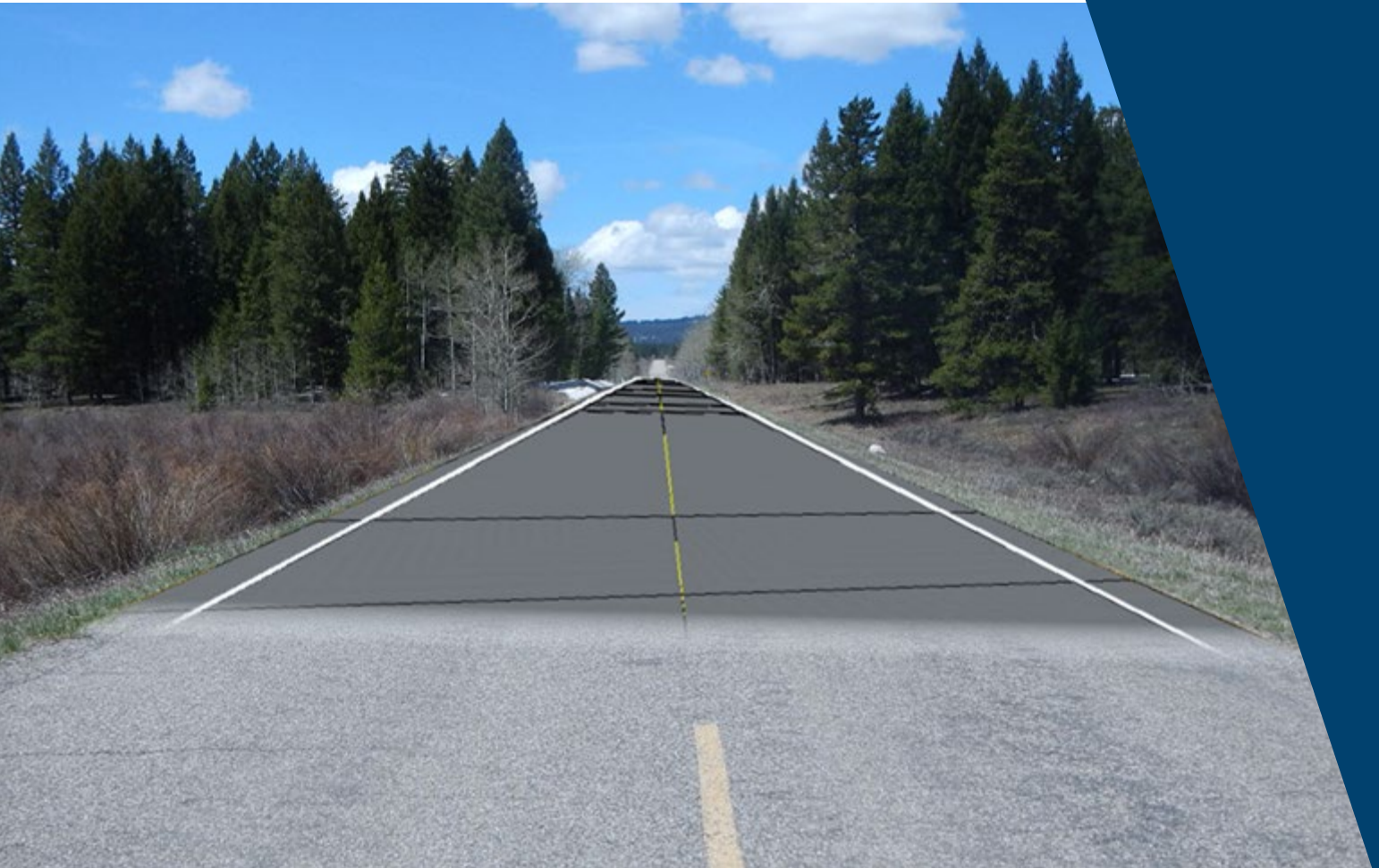
Chapter 18   Sheet Index

This chapter discusses the operation of the Sheet Index, which is in the Explorer 🔍. The Sheet Index organizes the structure of a plan set, automatically populates Sheet Numbers found in the border of a *Sheet Model* 🗎, and batch prints the plan set.

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18A – INTRODUCTION TO THE SHEET INDEX

Each project has a unique WorkSet. All ORD Files used in the project are assigned to the project WorkSet. For more information on the project WorkSet, see 2B – Introduction to the WorkSpace and WorkSet.

Each project WorkSet has a single Sheet Index. The Sheet Index is accessed in the Explorer 🔍.
NOTE: The project Sheet Index shown in the Explorer 🔍 depends on the active project WorkSet. Open an ORD File belonging to the appropriate WorkSet to access the corresponding Sheet Index.
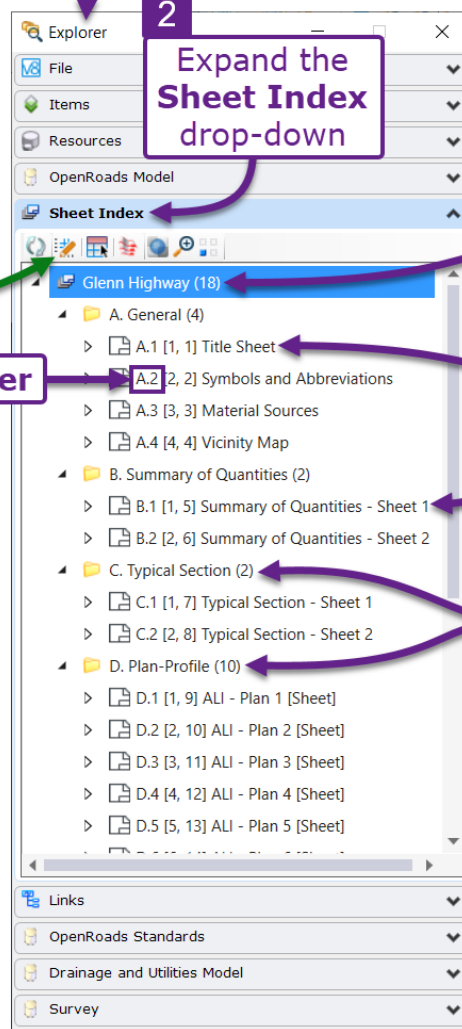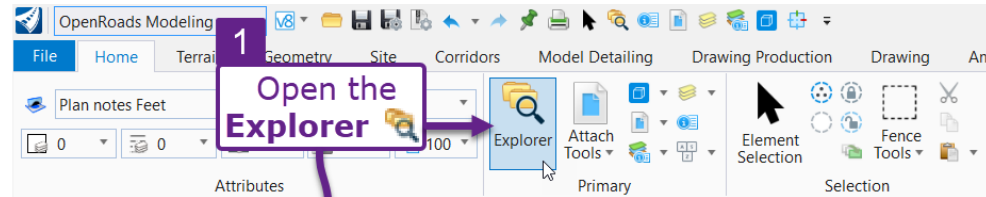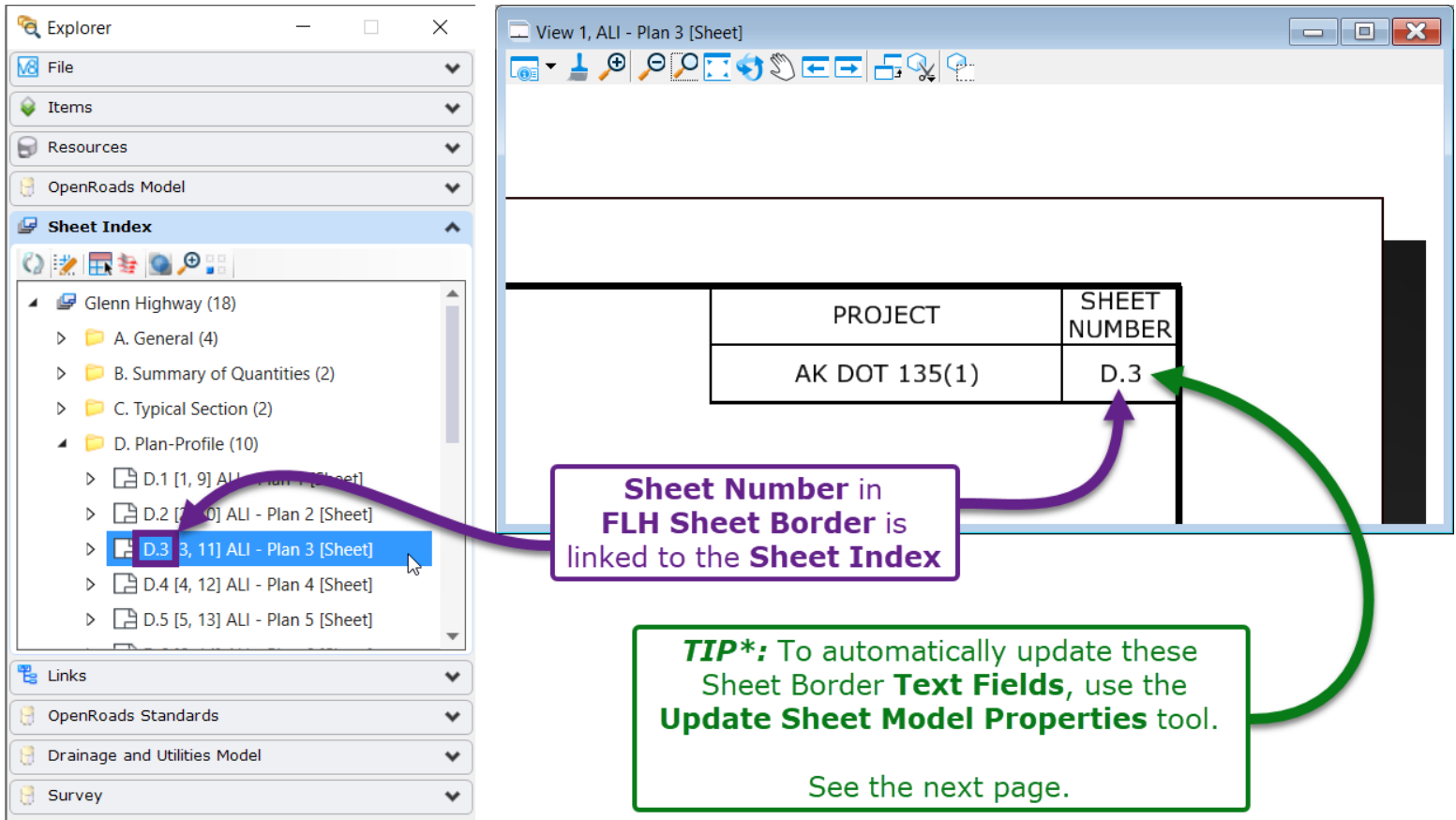
The Sheet Index is primarily used to organize and automatically number Sheet Models 🗎. After the Sheet Index is assembled, it can be exported to the Print Organizer for printing. Printing a Sheet Index is shown in 19B – Sheet Index Printing.

TIP*: Edits to the Sheet Index CANNOT be made, until the Open Sheet Index For Edit 🖉 button is activated.

Automatic Sheet Numbering for FLH Sheet Borders: The Sheet Index is linked to the Sheet Number text field shown in the FLH Sheet Border. After a Sheet Model ⬚ is added to the Sheet Index, the Sheet Number field in the FLH Sheet Border is automatically populated. *NOTE:* All other text fields in border (i.e., Project, NPS PMIS No) are linked to the WorkSet Properties. See ==2D.1 Create WorkSet Properties for Sheet Borders – Workflow==.

Sheet Number in **FLH Sheet Border** is linked to the **Sheet Index**

**TIP*:** To automatically update these Sheet Border **Text Fields**, use the **Update Sheet Model Properties** tool.

See the next page.

See *TIP** on the next page. Text fields in the border (i.e., Sheet Number) can be automatically updated through the Sheet Index with the Update Sheet Model Properties command.

18A.1 Automatically Update Text Fields through the Sheet Index

Text Fields in the Sheet Model 🗋 border (i.e., Sheet Number, Project, NPS Drwg No.) can be automatically updated in the Sheet Index with the Update Sheet Models Properties command. This command is shown when right-clicking on a Sheet Model 🗋, Sub-Folder, or the Parent Folder in the Sheet Index. This command is convenient because the sheet border Text Fields are updated without having to manually enter the ORD File and Sheet Model 🗋,

For example, if sheets in the Sheet Index are rearranged, then select the Parent Folder and select the Update Sheet Model Properties command. All text fields will be updated without having to enter into each ORD File.
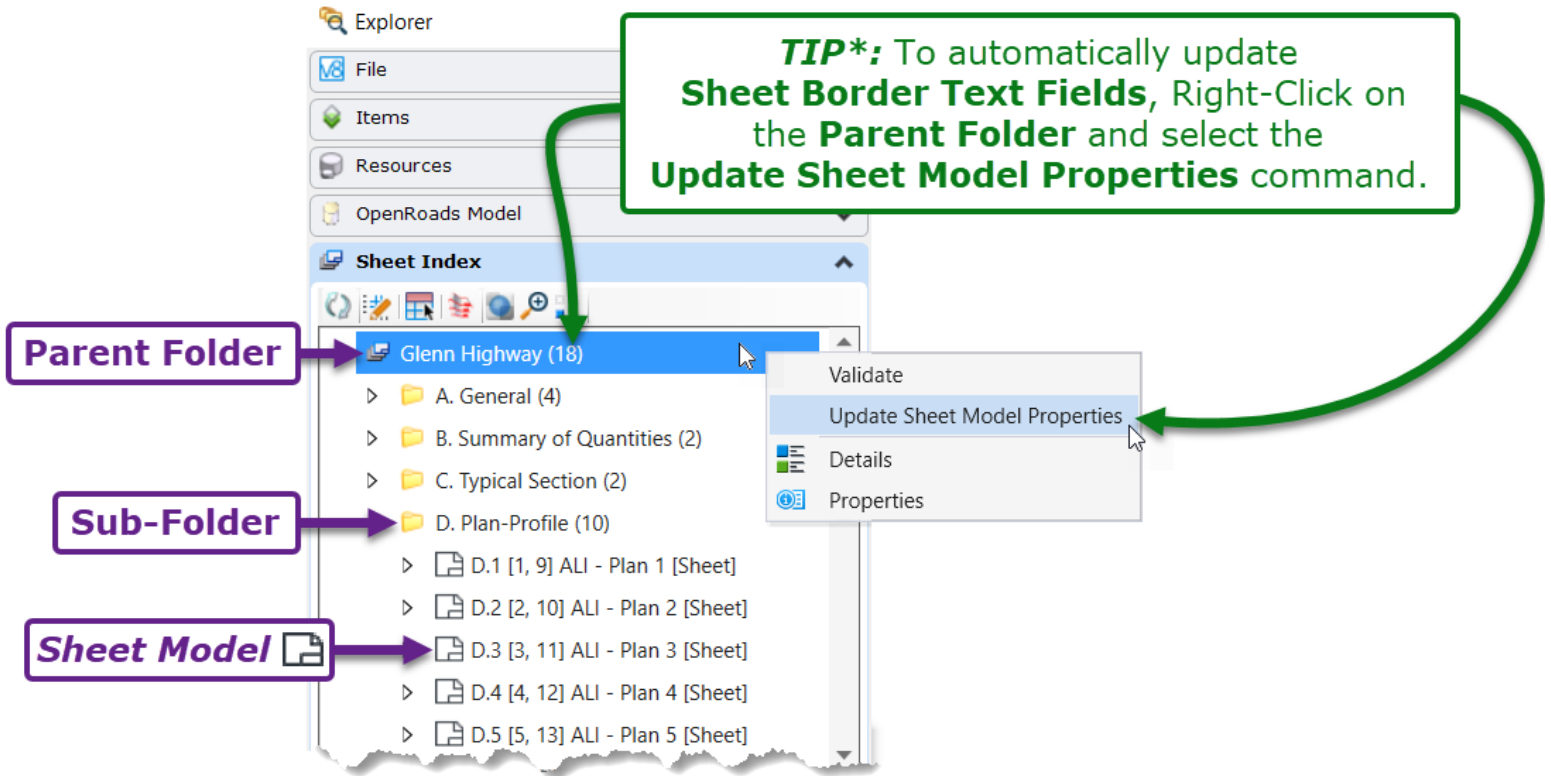
18A.2   Opening the Sheet Index for Edit

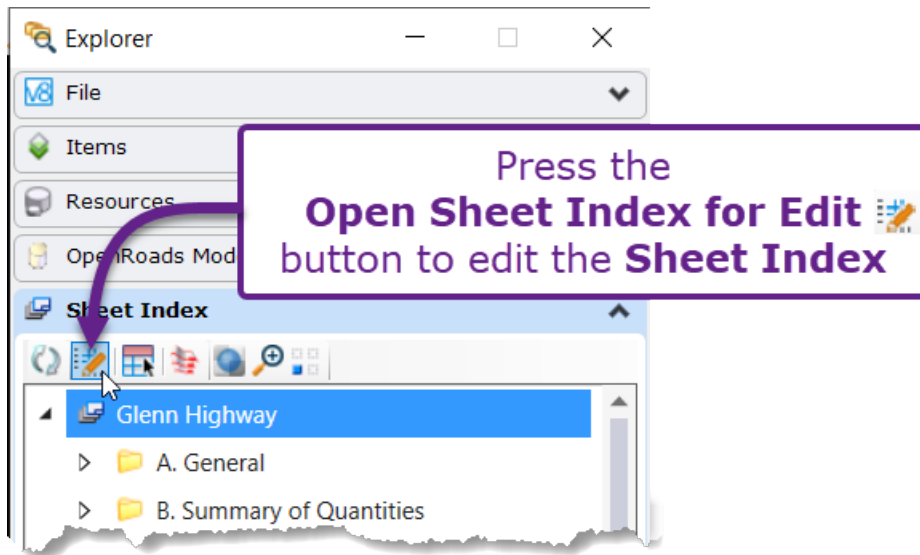Initially, the Sheet Index is in read-only mode. To make edits to the Sheet Index, press the Open Sheet Index For Edit ✏️ button.

WARNING: When the Sheet Index is open for edit, other users will NOT be able to access it.

NOTE: The Sheet Index can be printed in read-only mode.

After edits are made to the Sheet Index, push the Make Sheet Index Read Only 🚫 button to deactivate it.
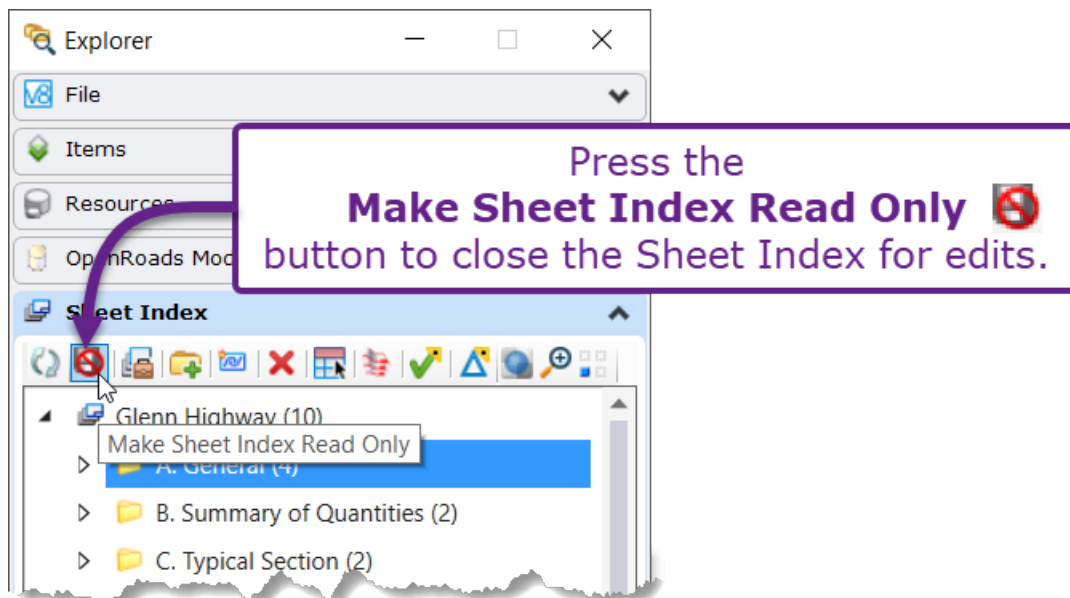
BEST PRACTICE: Always close the Sheet Index after making edits. Frequently, the ORD software will crash when the Sheet Index is left open. When left open, crashes can occur when switching between Models or ORD Files.

18A.3 Rearranging Sheets and Folders in the Sheet Index

Rearrange Sheets or Folders in the Sheet Index by dragging them into the desired location.

When a Sheet is dragged to a new location, the Sheet Number and Sheet Number Prefix automatically updates.

However, when a Sub-Folder is dragged to a new location, then the Sub-Folder Name and Sheet Number Prefix properties must be manually adjusted. To access and adjust Sub-Folder properties, see 18C.1 Sub-Folder Properties to set the Sheet Prefix.
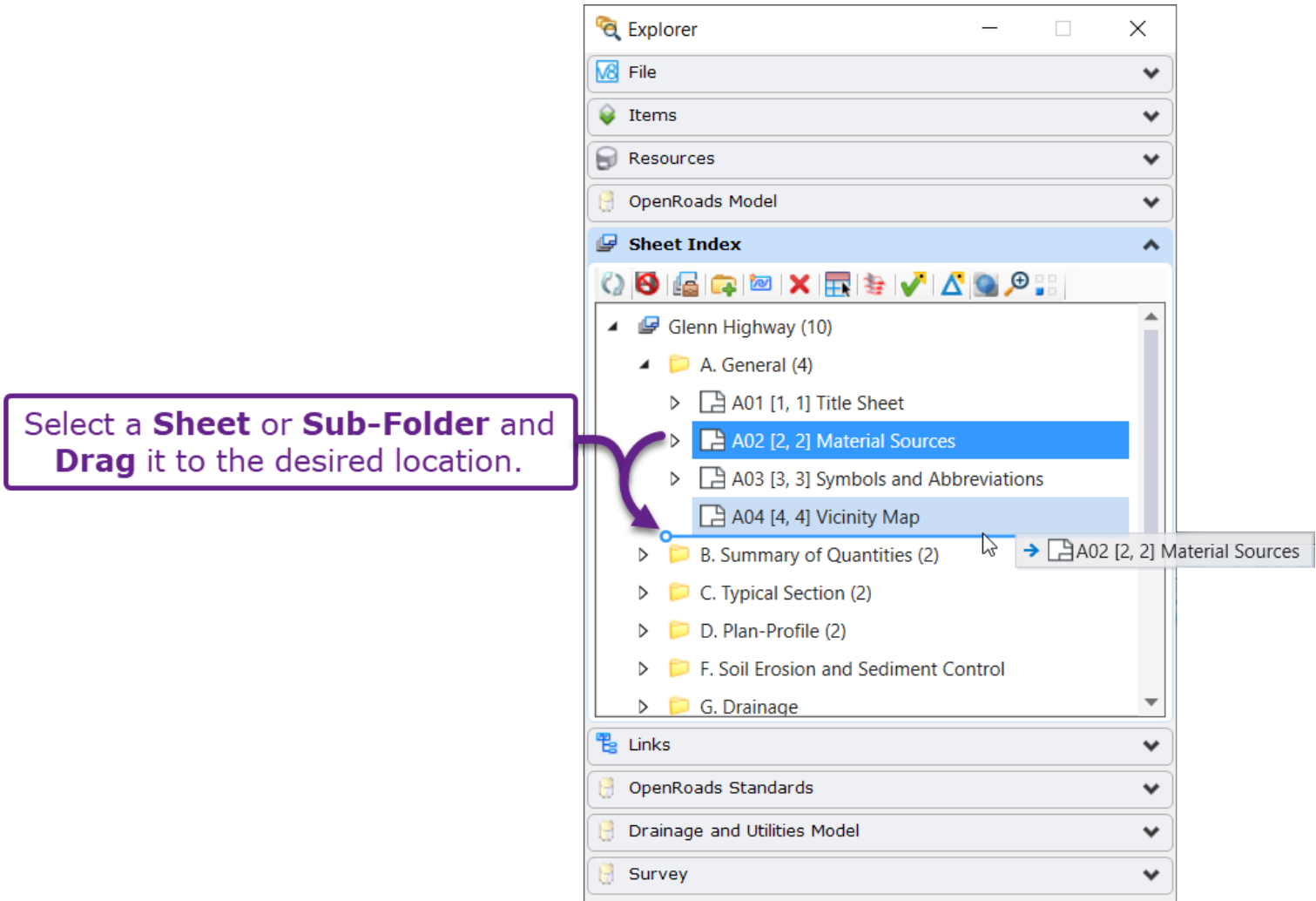
18A.4 WARNING for Managing the Sheet Index

The Sheet Index data is associated with the corresponding WorkSet.

The Sheet Index is ONLY a shared resource if the "WorkSet" folder is configured to a network location (i.e., ProjectWise or an agency network drive). If the "WorkSet" folder is placed on your computer's hard drive (i.e., the C:/ drive), then the Sheet Index is NOT accessible by other Users.

If unsure of the location of the "WorkSet" folder, see you Engineering Systems Manager.

WARNING: **If the "WorkSet" folder is stored and configured to your computer's hard drive (i.e., the C:/ drive), then other Users will NOT be able to edit it.**
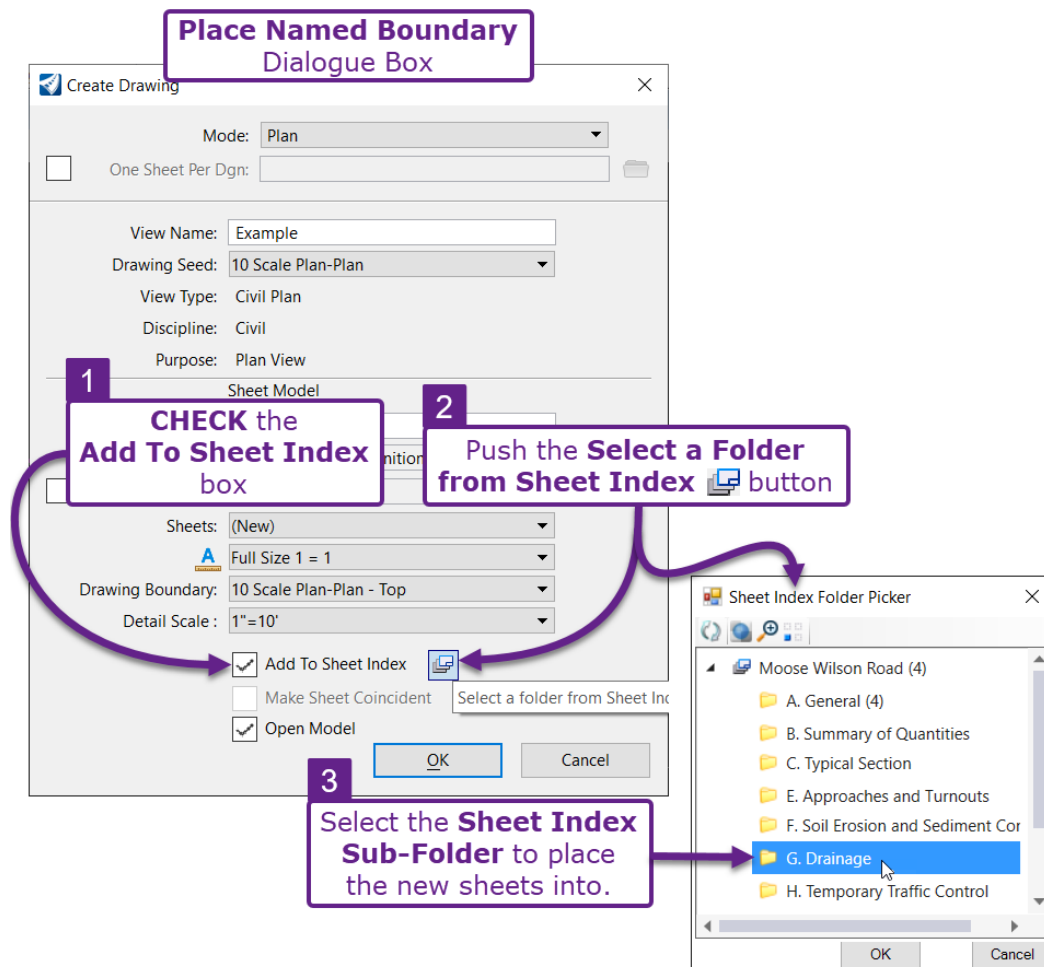
18B – ADD SHEETS TO THE SHEET INDEX

In creation of a Sheet Models 🖸 through the Place Named Boundary tool, a sheet can be added to the Sheet Index.

> **NOTE:** In the Place Named Boundary dialogue options, the **Show Dialog** box must be CHECKED to add sheet to the Sheet Index.

Place Named Boundary tool

NOTE:
CHECK the **Show Dialog** box to add the new sheet to the **Sheet Index**
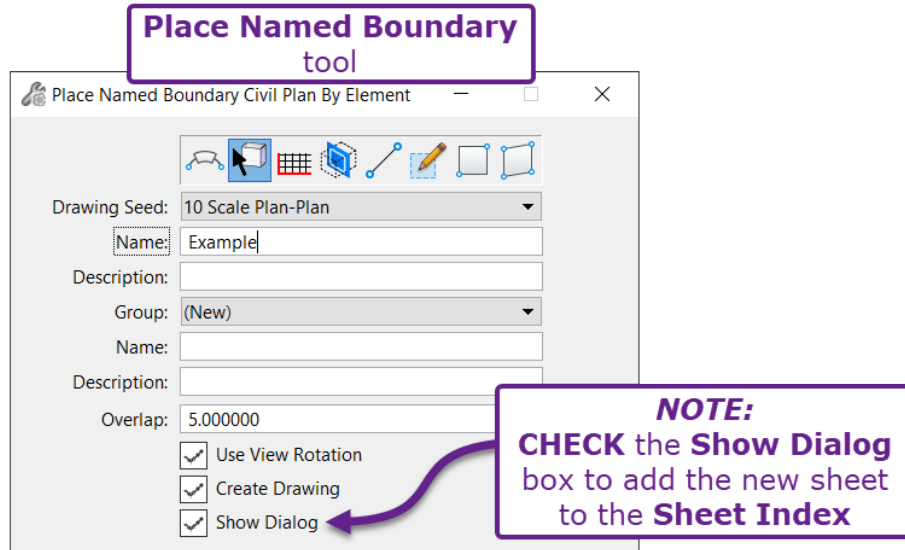
In the Place Named Boundary dialogue box, CHECK the **Add to Sheet Index** box and select the 🖻 button to specify which Sheet Index Sub-Folder the new sheets should be placed in.

Place Named Boundary Dialogue Box

1 CHECK the **Add To Sheet Index** box

2 Push the **Select a Folder from Sheet Index** 🖻 button

3 Select the **Sheet Index Sub-Folder** to place the new sheets into.

If a previously-created sheet needs to be added to the Sheet Index, then open the ORD File that contains the sheet. Open both the Models 🗗 manager and the Sheet Index in the Explorer 🔍. Drag sheets from the Models 🗗 manager into the Sheet Index.
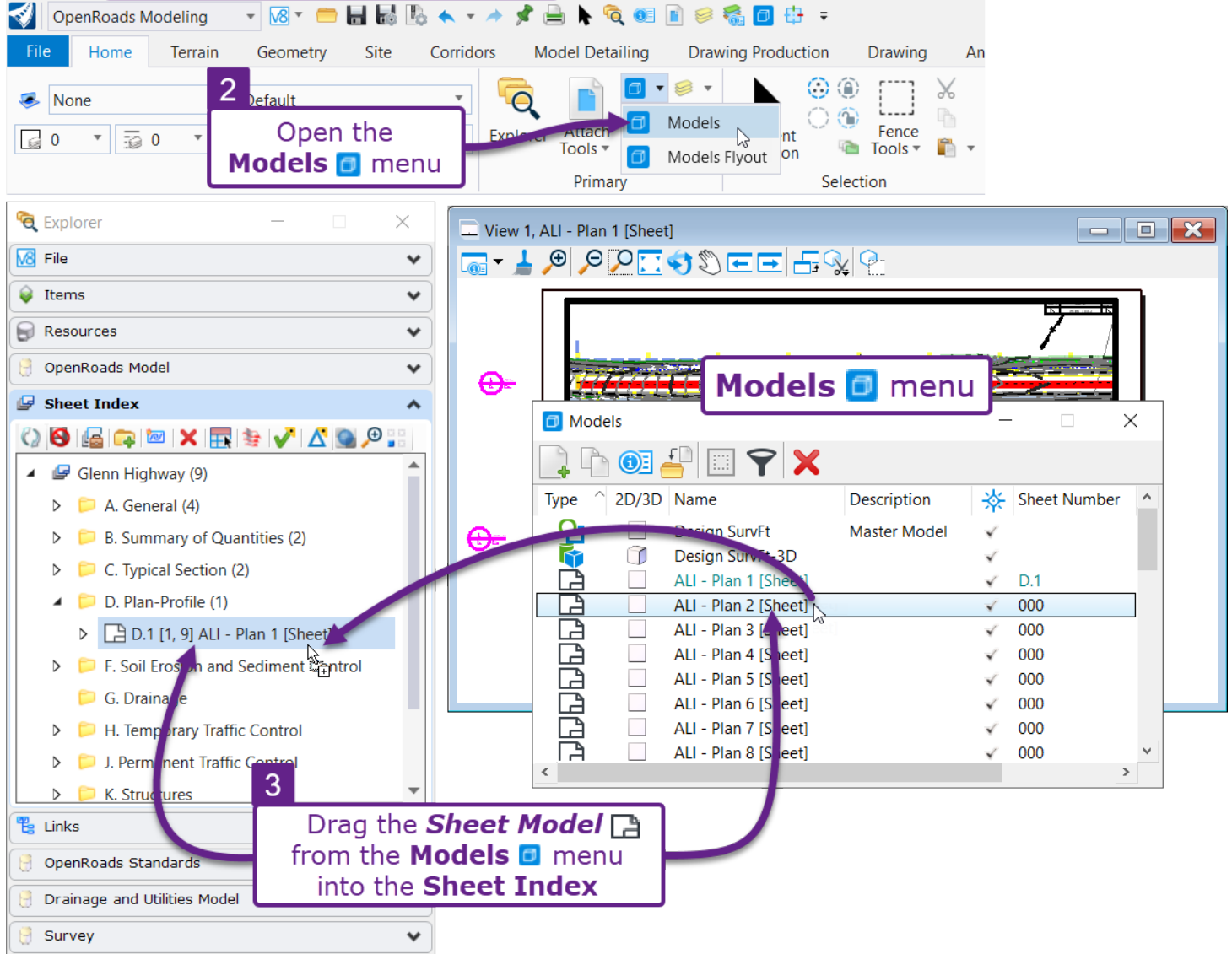
> **TIP:** Edits to the Sheet Index CANNOT be made, until the Open Sheet Index For Edit 🖊 button is activated.

1	Open the ORD File that contains the Sheet Models 🗋 to be added to the Sheet Index.
2	Open the **Models** 🗗 menu.
3	In the Models 🗗 menu, left-click on a Sheet Model 🗋 and hold down the left-click button. Drag the Sheet Model 🗋 to the appropriate location in the Sheet Index.

18B.1 Alternate Method for Adding Sheets to the Sheet Index

An alternative method for adding sheet to the Sheet Index is with the Add Sheet ▨ button located in the Explorer 🔍.

WARNING: Check that the ORD File that contains the Sheet Model 🗋 is assigned to the appropriate project WorkSet. If the Sheet Model 🗋 belongs to a different project WorkSet, then an error message is shown.

1	Activate the Sheet Index by pushing the Open Sheet Index for Edit 📝 button.
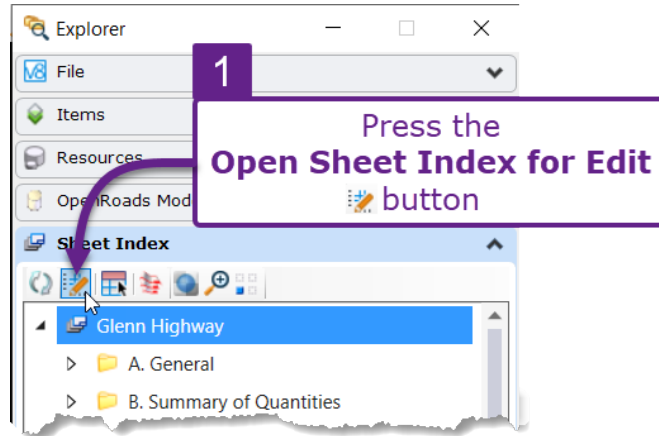
2	Select (highlight) the **Sub-Folder** to place the Sheet Model 🗋 in.
3	Push the Add Sheet ▨ button. **ALTERNATE LOCATION:** Right-Click on a Sub-Folder and select Add Sheet.
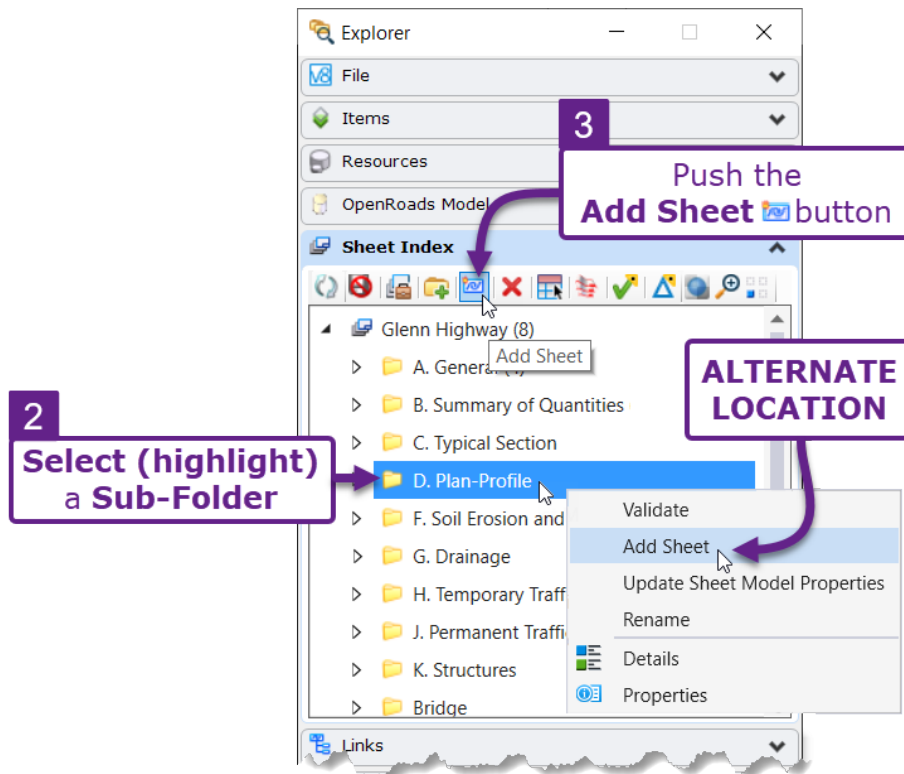
4	Navigate to the file location that contains the ORD File which contains the desired Sheet Model ⊡ to add.
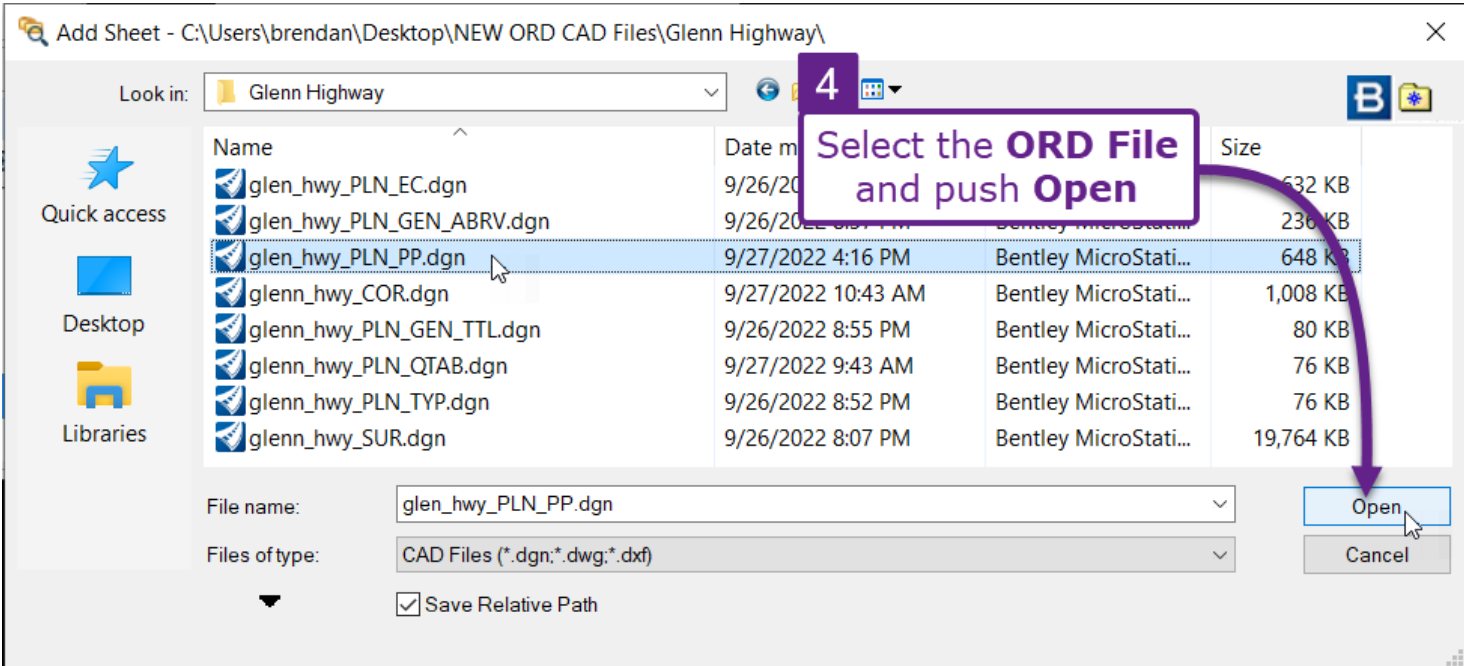
5	Select the Sheet Model(s) ⊡ to be added to the Sheet Index. **TIP:** Hold down the CTRL key to select multiple Sheet Models ⊡. To select ALL Sheet Models ⊡ in the ORD File, select the Sheet Model ⊡ at the top of the list, hold down the SHIFT key, and then select the Sheet Model ⊡ at the bottom of the list.
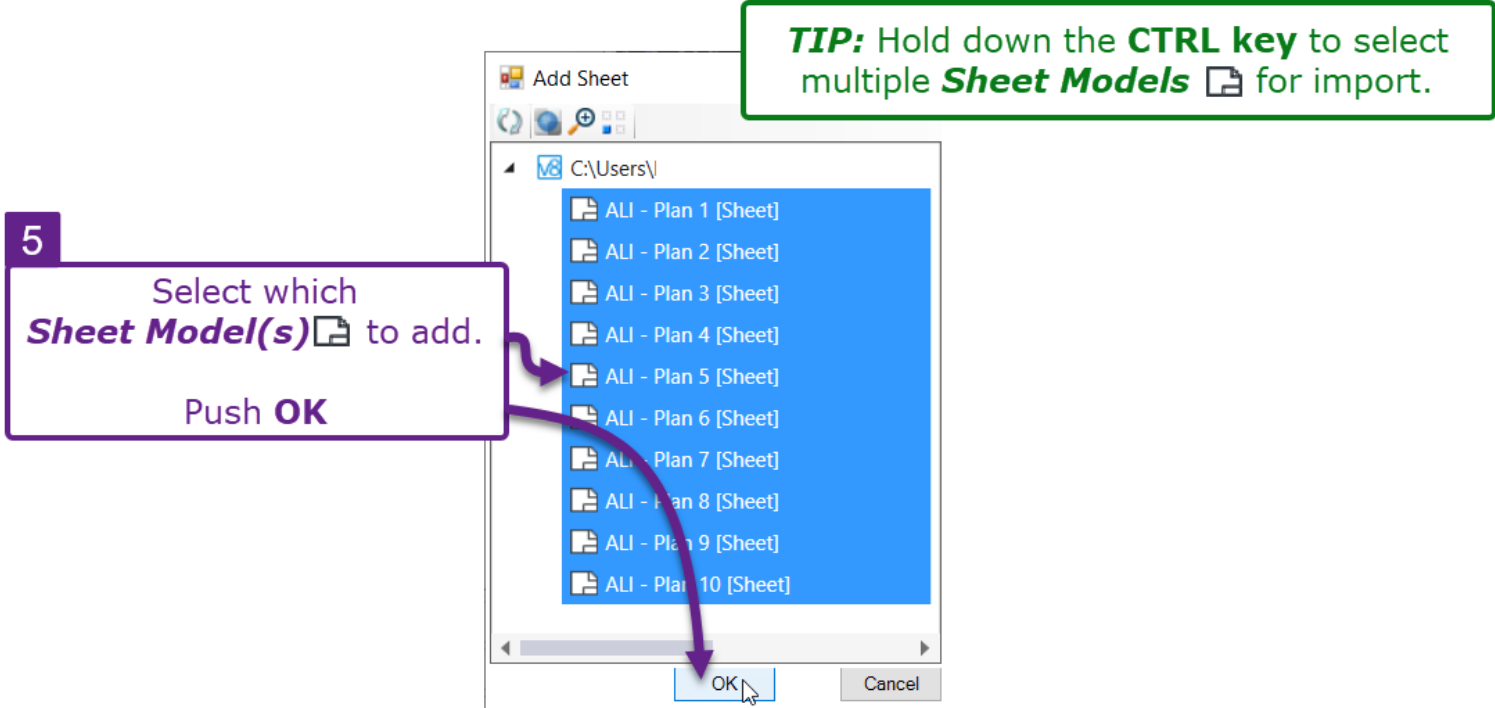
18C – SHEET INDEX FOLDER STRUCTURE AND SHEET PREFIXES

The folder structure of the Sheet Index consists of a **Parent Folder**, **Sub-Folders**, and **Sheet Models** 🗋.

Parent Folder: The Parent Folder is located at the top of the Sheet Index. The name of the Parent Folder is inherited from the project WorkSet. The parenthesis value (i.e., "18") represents the total number of sheets in the Sheet Index.

Sub-Folders: Each section in the plan set should have a corresponding Sub-Folder (i.e., D. Plan-Profile). Sheet Models 🗋 are placed into the appropriate sub-folder. Sub-Folders properties control how Sheet Numbers are automatically prefixed, numbered, and incremented. The parenthesis value (i.e., "10") represents the total number of sheets in the Sub-Folder.

Sheet Models 🗋**:** *Sheet Models* 🗋 represent a single sheet in the plan set. In the Sheet Index, *Sheet Models* 🗋 are shown in the following example format: "D.3 [3,11] ALI – Plan 3 [Sheet]"

The "D.3" portion represents the Sheet Prefix ("D.") and the Sheet Number ("3).

The "[3,11]" portion represents the placement order of the sheet in the Sub-Folder and total sheet position in the Sheet Index, respectively.

> For example, the "3" represents that this is the third sheet in the Sub-Folder. The "11" represent that this the eleventh total sheet in the Sheet Index.

The "ALI – Plan 3[Sheet]" portion represents the Name assigned to the *Sheet Model* 🗋. The Name of a *Sheet Model* 🗋 is typically assigned in creation of the *Sheet Model* 🗋.
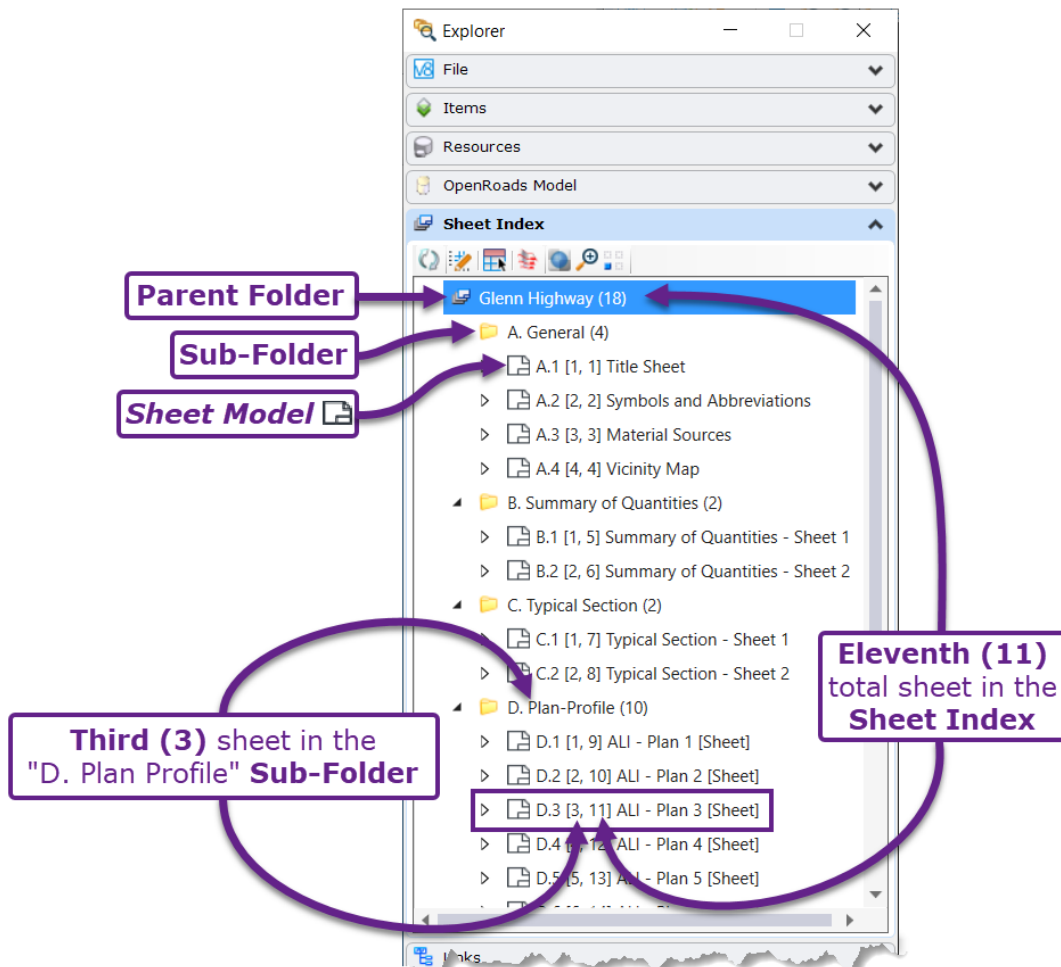
Before any edits are made to the Sheet Index, the default Division folder structure is automatically generated from the FLH WorkSpace. For a typical project, each section in the plan set should have a corresponding Sub-Folder in the Sheet Index. If the project plan set has a unique organization, then Sub-Folders must be added and deleted. See *18C.2 Adding and Deleting Sub-Folders from the Sheet Index*.

Sub-Folder Properties: Each Sub-Folder has a set of properties that are shown in the Properties 🔵 box. The Sub-Folder properties control how sheets contained in the Sub-Folder are prefixed and incremented. See the next page for an explanation of the important Sub-Folder properties.

NOTE*: Typically, the default Sub-Folder properties should be used. However, it may be necessary to manually change the **Sheet Number Prefix** when adding, deleting, and rearranging Sub-Folders in the Sheet Index.

18C.1   Sub-Folder Properties to set the Sheet Prefix

Sub-Folder properties control the automatic numbering (increment) and prefixing of sheets contained in the Sub-Folder. To access the properties for a Sub-Folder, right-click on it and select Properties   (which is shown on the previous page).

Sub-Folder Properties	
Property:	**Description:**
Automatic Naming of Sheet	This property should be set to **ON** to utilize automatic prefixing and numbering for sheets in the Sub-Folder. If set to ON, then newly added *Sheet Models* will be automatically assigned a Name that corresponds with the prefix and numbering convention set in the Sub-Folder properties. If set to OFF, then the new *Sheet Model* is named according to the sheet's name shown in the Models manager.
Increment	This property should be set to **1**. If NOT, then sheets in the Sub-Folder are incremented by the set value. For example, if this property is set to 2, then the first sheet would be numbered at 1. The second sheet would be numbered at 3.
Inherit Naming Rule from Parent	This property should be set to **OFF**. If set to **ON**, then **Sheet Number Prefix** properties are ignored. The sheet is numbered according to its order in the Sub-Folder and will NOT include a prefix.
Number of Digits	This property directly corresponds to the **Show Leading Zero** property. This property would be used if the desire is to show a "0" before the sheet number (i.e., A01). In this case, the **Number of Digits** must be set to **2**. Also, the **Show Leading Zero** property must be set to **ON**. If the **Show Leading Zero** property is set to **OFF**, then the sheet number would be A1. *NOTE:* For EFL plan sets, the **Number of Digits** should be set to 2 and the **Show Leading Zero** should be set to **ON**. For CFL and WFL plan sets, the **Show Leading Zero** property should be set to **OFF**, which makes the **Number of Digits** property inconsequential.
Sheet Number Prefix	Sets a prefix to be shown before the sheet number. **The prefix must match the corresponding section in the plan set.** *NOTE:* The prefix for WFL plan sets includes a period (i.e., A.1). For CFL and EFL plan sets, the prefix does NOT include a period (i.e., A1).
Sheet Number Suffix	Sets a suffix to be shown after the sheet number. In FLH plan sets, suffixes are NOT used.

| Sub-Folder Properties	
Property:	**Description:**
Show Leading Zero	This property works in conjunction with the **Number Digits** property. If set to **ON**, then sheet numbers will be shown with the number of digits specified in the **Number of Digits** property (i.e., A01). *NOTE:* For CFL and WFL plan sets, this property should be set to **OFF**. For EFL plan sets, this property should be set to **ON**.
Start Number	Sets the sheet number for the first sheet in the Sub-Folder. **This property should be set to 1 in normal circumstances.** This property could be set to a different value if the first pages in the plan set section are produced by a PDF or a different software. For example, if the first 3 pages of plan set are from a PDF, then this value should be set to 4 to number sheets in the Sub-Folder consistently. *TIP:* If PDF sheets are to be inserted in the middle of the plan set section, the Sheet Numbers in the Sub-Folder can be manually numbered. Open the Properties for a Sheet to manually edit the **Sheet Number** property.
Total Sheet Count	This property is NOT editable. This property simply states the number of sheets contained in the Sub-Folder.

18C.2   Adding and Deleting Sub-Folders from the Sheet Index

TIP*: Edits to the Sheet Index CANNOT be made, until the *Open Sheet Index For Edit* 🖊 button is activated.

To **Delete a Sub-Folder** from the Sheet Index, select (highlight) a Sub-Folder and push the *Delete* ❌ button.
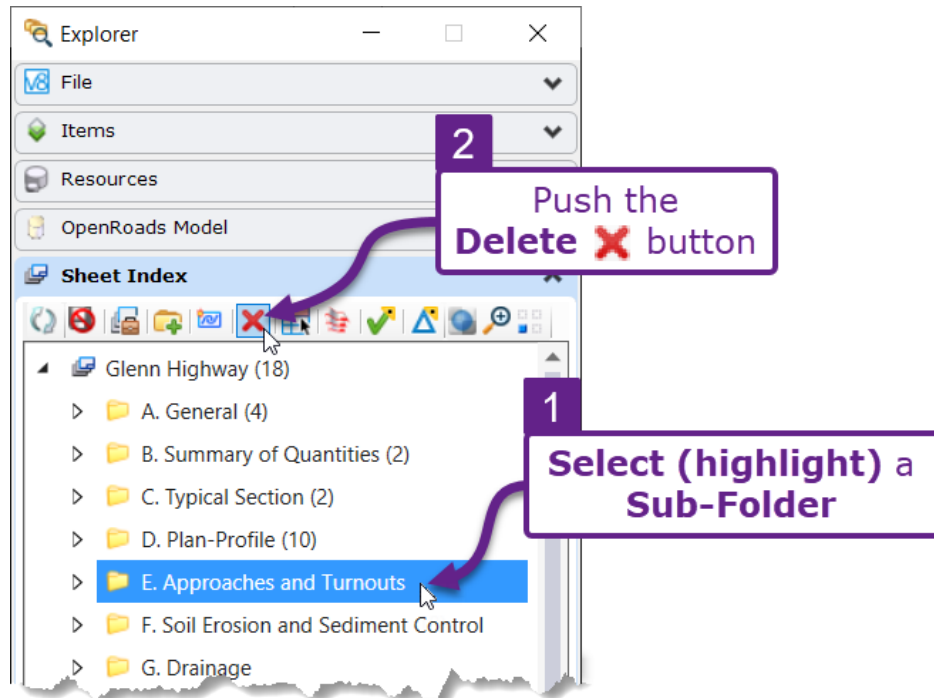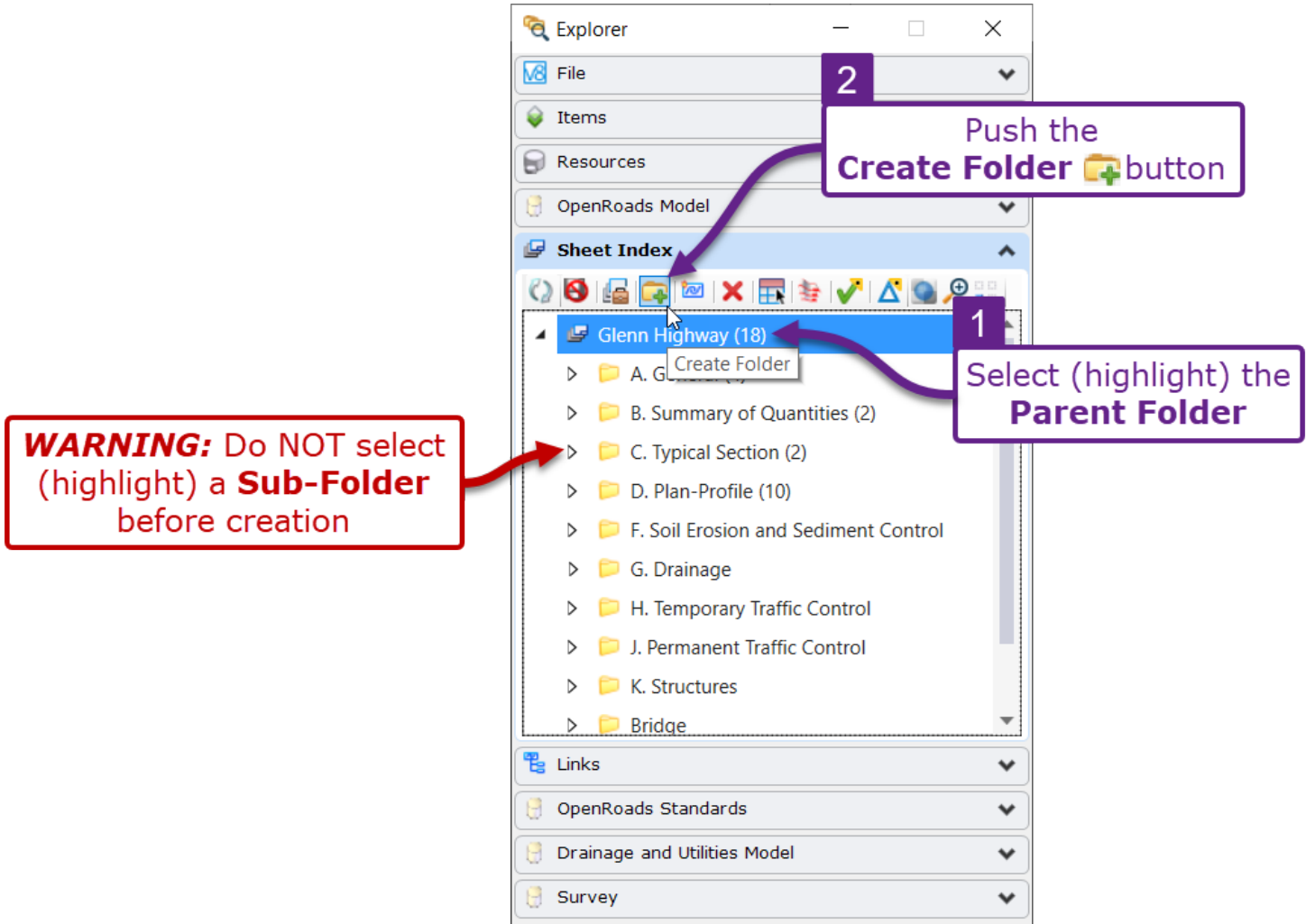

WARNING: The **Sheet Number Prefix** properties for all Sub-Folders that come after the deleted Sub-Folder must be adjusted. In the example shown above, Sub-Folder E is deleted. Sub-Folders F – K must be renamed and the **Sheet Number Prefixes** (found in the subsequent Sub-Folder properties) must be manually adjusted.
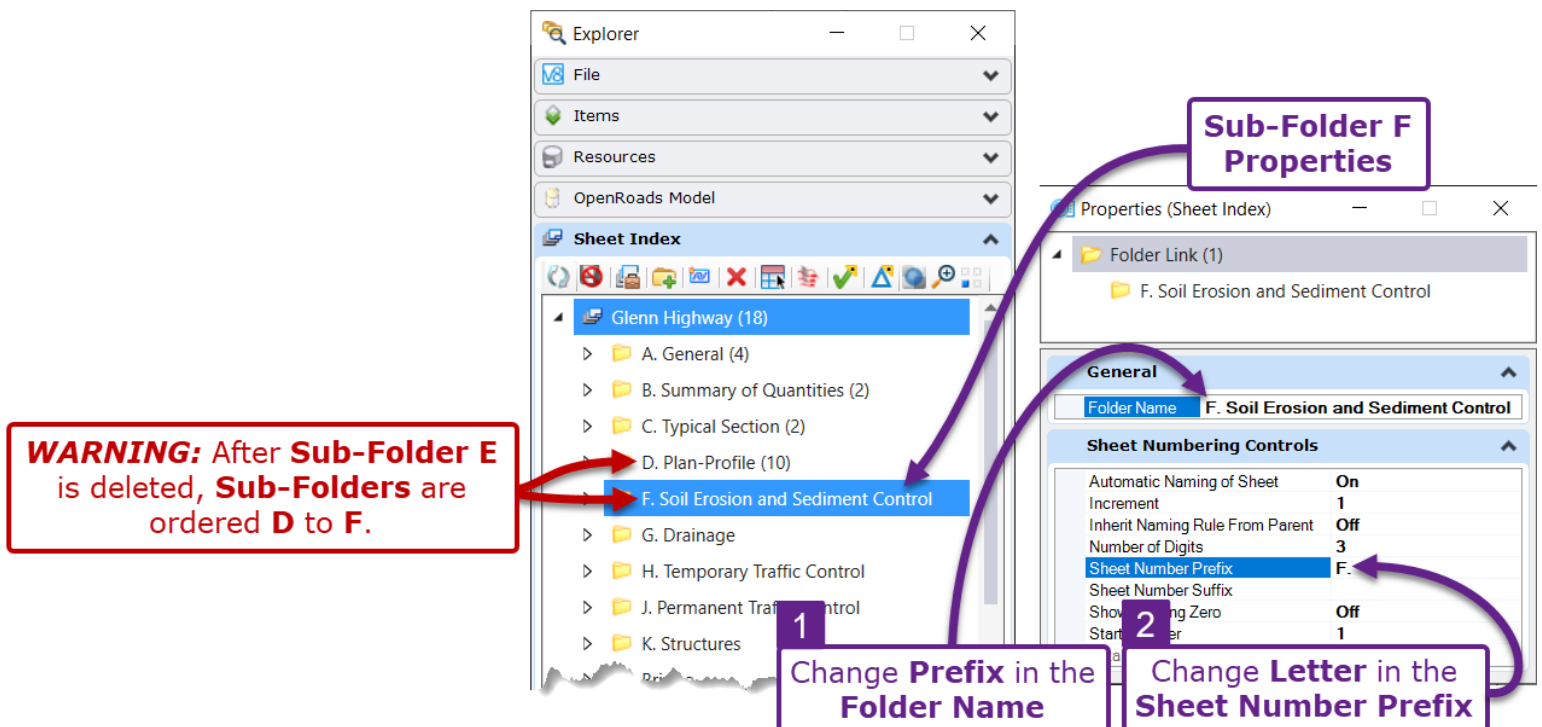
To **Add a Sub-Folder**, select (highlight) the Parent Folder and push the *Create Folder* 🗀 button.

WARNING: Do NOT select a Sub-Folder before pushing the *Create Folder* 🗀 button. This results in the new Folder being created underneath the selected Sub-Folder.

WARNING: The new Sub-Folder will be placed at the end of the Sheet Index list. Drag the new Sub-Folder to the appropriate location.

Additionally, the properties for the new Sub-Folder must be edited to set the appropriate **Sheet Number Prefix**.

NOTE: The Sheet Number Prefix properties for all Sub-Folders that succeed the new Sub-Folder must be edited. **Existing Sub-Folder Prefixes do NOT automatically adjust when a new Sub-Folder is created or when Sub-Folders are rearranged.**

18D – PRINTING FROM THE SHEET INDEX

When the *Open Print Organizer* 🔻 button is pushed, the current Sheet and Sub-Folder is exported to the Print Organizer. In the Print Organizer, PDFs of the Sheet Index can be printed.

Printing a Sheet Index through the Print Organizer is shown in <mark>*19B – Sheet Index Printing*</mark>.
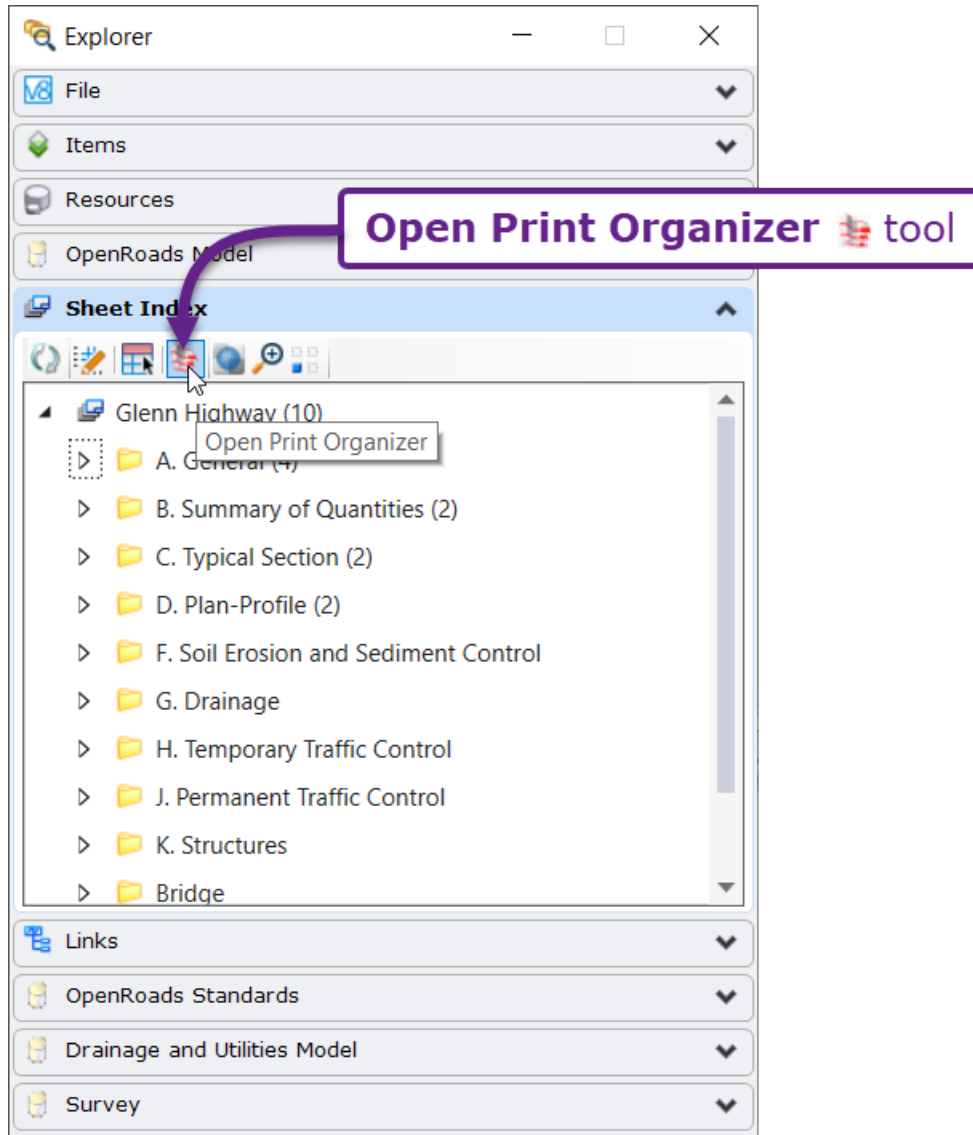
18E – CREATE AN INDEX OF SHEETS TABLE FROM THE SHEET INDEX

Using the *Place Sheet Index as a Table* 🔳 tool, the Sheet Index can be placed as a table in the *2D Design Model* 🔲.

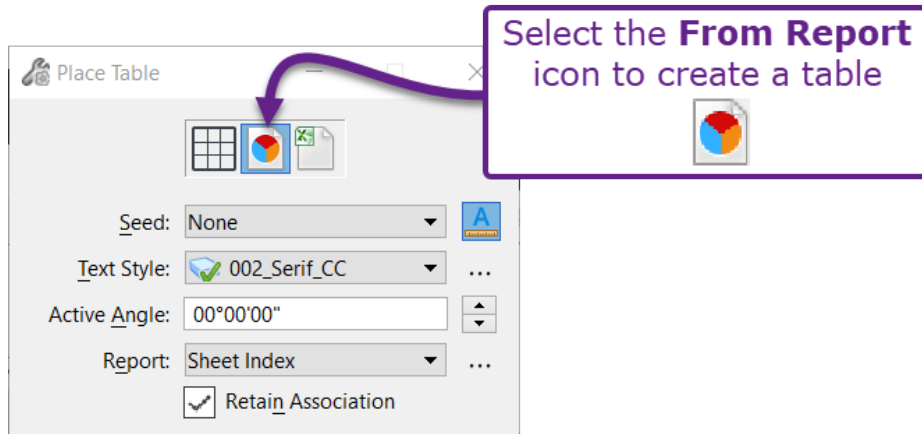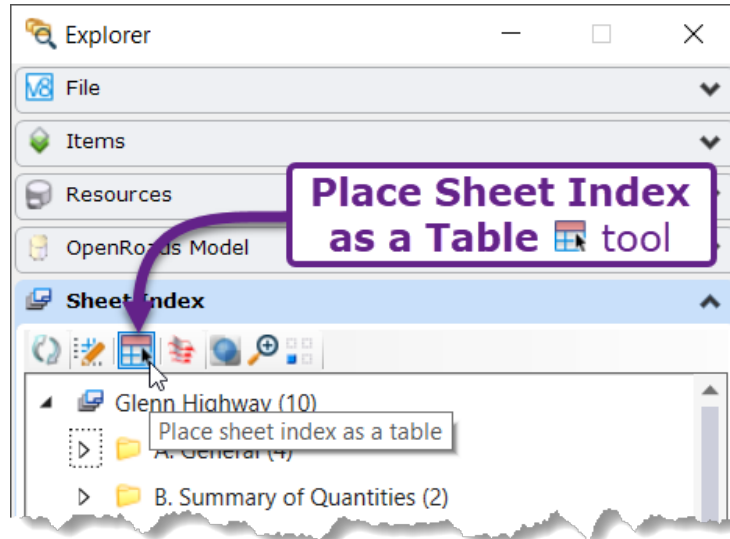**WARNING:** The FLH WorkSpace does NOT contain table format styles that are appropriate for presentation in a FLH plan set. As shown below, the resulting table contains extraneous information and is NOT easily formatted to meet FLH standards.

BEST PRACTICE: Use a Microsoft Excel template when creating the "Index to Sheets" table.

Sheet Index	Folder Name	Sheet Number	Sequence Number	File Name	Exclude From Auto Numbering	Link Type	Full Path
Glenn Highway	A. General	A01	1	glenn_hwy_PLN_GEN_TTL.dgn	Off	Sheet Model	...Glenn Highway\glenn_hwy_PLN_GEN_TTL.dgn
		A02	2	glenn_hwy_PLN_GEN_TTL.dgn	Off	Sheet Model	...Glenn Highway\glenn_hwy_PLN_GEN_TTL.dgn
		A03	3	glen_hwy_PLN_GEN_ABRV.dgn	Off	Sheet Model	...Glenn Highway\glen_hwy_PLN_GEN_ABRV.dgn
		A04	4	glenn_hwy_PLN_GEN_TTL.dgn	Off	Sheet Model	...Glenn Highway\glenn_hwy_PLN_GEN_TTL.dgn
	B. Summary of Quantities	B.1	5	glenn_hwy_PLN_QTAB.dgn	Off	Sheet Model	...Glenn Highway\glenn_hwy_PLN_QTAB.dgn
		B.2	6	glenn_hwy_PLN_QTAB.dgn	Off	Sheet Model	...Glenn Highway\glenn_hwy_PLN_QTAB.dgn
	C. Typical Section	C.1	7	glenn_hwy_PLN_TYP.dgn	Off	Sheet Model	...Glenn Highway\glenn_hwy_PLN_TYP.dgn
		C.2	8	glenn_hwy_PLN_TYP.dgn	Off	Sheet Model	...Glenn Highway\glenn_hwy_PLN_TYP.dgn
	D. Plan-Profile	D.1	9	glen_hwy_PLN_PP.dgn	Off	Sheet Model	...Glenn Highway\glen_hwy_PLN_PP.dgn
		D.2	10	glen_hwy_PLN_PP.dgn	Off	Sheet Model	...Glenn Highway\glen_hwy_PLN_PP.dgn
		D.3	11	glen_hwy_PLN_PP.dgn	Off	Sheet Model	...Glenn Highway\glen_hwy_PLN_PP.dgn
		D.4	12	glen_hwy_PLN_PP.dgn	Off	Sheet Model	G:\Users\brendan\Desktop\NEW ORD CAD