# Automated Bridge Staking report

Place a Civil Point on the Feature Definition: Bridge Staking Data



The name of the feature is used to populate the point location in the report. Set it to be the location (i.e. Pier1\_CL)

Select all the points placed with this feature. Then type in the name of the base line chain.

) P	roperties							—	×
1	6 Elements (9)								
Þ	+ Point: E_Abutme	nt_CL							
Þ	+ Point: E Abutme	nt LT							
	- Abutese	at PT							
	+ Poinc E_Abutine	nuki							
Þ	Point: Pier1_CL								
⊳	🔶 🔶 Point: Pier1_LT								
Þ	🔶 🔶 Point: Pier1_RT								
	General		*	Geometry		*	Feature		*
_	Element Description	**Varies**		> Start	**Varies**,**Varies**		Feature Definition	Bridge Staking Data	
	Level	Default ((none))		> End	**Varies**,**Varies**		Feature Name	**Varies**	
	Color	ByLevel (0)		Length	0.0000sf		Description		
	Line Style	ByLevel (0)		Direction	N90°00'00.0"E				
	Weight	😂 ByLevel (0)		Delta X	0.0000sf				
	Class	Primary		Delta Y	0.0000sf				
	Template	(None)		Total Length	0.0000sf				
	Transparency	0							
	Priority	0							
	Extended		*	Bridge Staking Da	ita	*	Geometry Points		~
	Model	Default		Point Location	**Varies**		Х	**Varies**	
	Last Modified	**Varies**		Northing	**Varies**		Y	**Varies**	
	Snappable	Snappable		Easting	**Varies**		Elevation	**Varies**	
	Modified	Modified		Elevation			Rotation	N90°00'00_0"E	
	New	New		Base Line	ML_DOT-Drive		Rotation Reference	None	
	Locked	Unlocked		Base line Station	**Varies**		Absolute Angle	True	
>	Line Style Parameters			Base line Offset	**Varies**				
	Display Style	(From View Display)							



The report finds all elements in the file that have the Item Type Bridge Staking Data.

This is the report preview.

🚽 Bridge Staking 🛛	)ata Report								×
🕄 🗷 Total R	😌 🐼 Total Results: 9								
Drag a column header a	and drop it here to	group by that col	umn						
Point Location <b>T</b>	Northing $\mathbf{T}$	Easting <b>T</b>	Elevation <b>T</b>	Base line Station <b>T</b>	Base line Offset <b>T</b>				
W-Abutment_LT	7645353.155	18525489.436		102+50.00	-20.00				
W_Abutment_RT	7645313.155	18525489.426		102+50.00	20.00				
W_Abutment_CL	7645333.155	18525489.431		102+50.00	.00				
E_Abutment_LT	7645353.080	18525789.436		105+50.00	-20.00				
E_Abutment_CL	7645333.080	18525789.431		105+50.00	.00				
E_Abutment_RT	7645313.080	18525789.426		105+50.00	20.00				
Pier1_RT	7645313.076	18525639.426		104+00.00	20.04				
Pier1_CL	7645333.117	18525639.431		104+00.00	.00				
Pier1_LT	7645353.159	18525639.436		104+00.00	-20.04				

S Reports	-		×
Utilities			
🖙 🖻 🔡 🖬 💁 💁 🖌 👘 🔷 🗸 👘	×		Ŧ
Bridge Reports     Export results	Properties		
Abutment Wing Elevations	Search Location	*	^
Abutment Wing Wall Footing	Location Type Model		
PierCap Report	Location Active file		
PierFooting Elevation Report	Model Active Model		
PierFooting Report	Include Reference Attac No		
D DierPile Report	Include Cell Contents No		
A Didae Station	Objects	*	¥
Bridge Staking Data Report	Summary		
🎯 Untitled	Search in: Active Model in Active file		
	Find all: Bridge Staking Data		
	Where: (Unfiltered)		
	(onneed)		

Save the exported report results to Excel:

AutoSave 💿 🛛 🔓		%ુ ≁ ⇒	Bridge	Staking Data Report	• Saved 🗸	,∕⊃ Se	arch							Hamski,	Thomas	<b>•</b>		□ ×
File Home	nsert Draw	Page Lay	out Fo	rmulas Data	Review View	/ Dev	eloper	Help BL	UEBEAM	ProjectW	/ise					₽ Co	mments	🖻 Share
Paste ✓ ✓ B	i ~ I ⊻ ~   ⊞	11 → A <sup>^</sup> /	A*   Ξ Ξ *   Ξ Ξ		b Wrap Text	~ \$	eral ~ % <b>9</b>		Conditional Formatting \	Format as Table Y	Cell Styles ~	E Insert ~ Delete ~ Format ~	∑ ~ ↓ ~ ♦ ~	AZY / Sort & Fin Filter ~ Sele	d & Sens	itivity	Create PDF Change Se Batch PDF	ttings
Clipboard 🕞	Font		F <u>s</u> i	Alignmen	t	5	Number	F2		Styles		Cells		Editing	Sen	itivity	Bluebean	n ^
B2 • :	×	<i>f</i> ∝ 764535	3.155															^
A A	В	С	D	E	F	G	н	1	J	К	L	М	N	0	P	Q	R	S 🔺
1 Point Location	Northing	Easting	Elevation	Base line Station	Base line Offset													
2 W-Abutment_LT	7645353.155	18525489.44		102+50.00	-20													
3 W_Abutment_RT	7645313.155	18525489.43		102+50.00	20													
4 W_Abutment_CL	7645333.155	18525489.43		102+50.00	0													
5 E_Abutment_LT	7645353.08	18525789.44		105+50.00	-20													
6 E_Abutment_CL	7645333.08	18525789.43		105+50.00	0													
7 E_Abutment_RT	7645313.08	18525789.43		105+50.00	20													
8 Pier1_RT	7645313.076	18525639.43		104+00.00	20.04													
9 Pier1_CL	7645333.117	18525639.43		104+00.00	0													
10 Pier1_LT	7645353.159	18525639.44		104+00.00	-20.04													
11																		
12																		
13																		
14																		
15																		
17																		
10																		
10																		
20																		
21																		U
22																		
Brid	ge Staking Da	ta Report	(+)	1					1	ं वि				1	1		1	
Ready 🐻 🏷 Access	sibility: Good to g	30	0											Ħ	8	<u> </u>	-	+ 100%

Configuration consisted of the following:

Created Point Feature Definition with Item Type for staking data attached.

Liement m	civil reporta cinca Arca Form	mouny complex	Lines curves element mouny	iransform Simplify Complex	la
O Selection ↓↓ * 1 Standards *	I Properties (OpenRoads Standards)				di
Primary Selection General	A Calestian (1)				٦.
<pre></pre>	Selection (1)				1
🚾 File	✓ gr Bridge Staking Data				
😝 Items					
🕞 Resources					
🕘 OpenRoads Model					
🚽 Sheet Index					
🗄 Links	Selection			*	1
🕘 OpenRoads Standards	Name	Bridge Staking Data			Т
0 💁 🔎 🔡	Feature Definition			*	í
<ul> <li>Standards</li> </ul>	Name	Bridge Staking Data			Н
> V8 Libraries	Description				
COB ML DOT-Drive don (Default)	Name Seed				4
Easture Definitions	Point			*	I
	Point Feature Symbology	Bridge Staking Data			
Alignment	Items			•	1
1errain	Items Attached	1 - Item			A
Corridor					P
🔄 🖽 Superelevation	Bridge Staking Data			*	ų.
📃 🚄 Linear Template	Northing				
📃 🎘 Surface Template	Elevation				
V 🗹 💕 Linear	Point Location				e
🔺 🗹 🔶 Point					ir
4 🗹 📂 Staking Point					
✓ 🔗 Bridge Staking Data					
Mesh					
🗌 🔀 Survey					
▷ 📃 🗮 Site					
Analysis					1
Drainage and Utilities					
Keature Symbologies					
N / Linear					
v v Linear	-				
A Y Point					

## Corresponding Feature Symbology:

Steeling of the second se	Properties (OpenRoads Standards)     Selection (1)     Ry Bridge Staking Data		
🗄 Links	Selection		*
OpenRoads Standards	Name	Bridge Staking Data	
() S 🖉 🔛	Defaults		*
📃 🖉 Surface Template	Default Element Template	Staking Data\Bridge Staking Data	
V 🐓 Linear	Plan		*
A Y Point	Annotation Group	Bridge Staking Point	
Staking Point		Staking Data (bridge Staking Data	
Bridge Staking Data	Profile		^
✓ Apr Mesh	Element Template	None	
N Survey	30		
Analysis	Element Template	None	
Drainage and Utilities			
Feature Symbologies			
▷ / Linear			
🔺 🄶 Point			
🔺 📂 Staking Data			
🖏 Bridge Staking Data			
▷ <u>\$1</u> } Profile			
Solid Solid			
Surface			
<ul> <li>Annotation Groups</li> </ul>			
🔺 🙉 Plan			
📂 Drawing			
📂 Linear			

# Corresponding Element Template:

💙 🎻 Element Templates	$\sim$		-	×
File Utilities	Properties			
	General Settings			~
⊕-⊃ Surface ⊕-⊃ Modeling ⊕-⊃ Linear ⊕-⊃ Profiles	Levels Colors Line Styles Weights	Default ByLevel ByLevel ByLevel ByLevel		
Bridge Staking Data	Cell Settings			*
B - 108 IowaDOT_DU_Features_Text Favorites_Elem B - 108 IowaDOT ORD Features Elem Temp.dgnlib	Active Cell	calulate point		

# Item Type:

🧊 Item Types	– 🗆 🗙
Libraries Utilities	
🖶 条 🗣 🖼 🗶 🗅 🛍 🗠 🗸 🖻	) × .
🔺 🕪 Staking Data	Properties
<ul> <li>Image: Staking Data</li> </ul>	Item Type 🔦
🕂 🔤 Point Location	Item Name "Bridge Staking Data"
🔀 🔤 Northing	Use Item Name for Elemei <b>No</b>
🔀 🔤 Easting	
🔀 🔤 Elevation	
🔀 🔤 Base Line	
🔀 🔤 Base line Station	
🔀 🔤 Base line Offset	
Abutment	
Approach Slab	
> 🕞 Barrier	
> 😒 Beam	
Bearing	
Cross Frame	
Deck	

# Report:

S Reports	- 0	×
Utilities		
📪 🔮 🚆 🖽 🗞 🗅 🖌 🛍 🔺 🚽	×	Ŧ
<ul> <li>Bridge Reports</li> <li>Abutment Wing Elevations</li> <li>Abutment Wing Wall Footing</li> <li>PierCap Report</li> <li>PierFooting Elevation Report</li> <li>PierFooting Report</li> <li>PierFooting Report</li> <li>PierPile Report</li> <li>Bridge Staking</li> </ul>	Properties           Search Location           Location Type         Model           Location         Active file           Model         Active Model           Include Reference Attach         No           Include Cell Contents         No           Objects         Share	~
🔺 📚 Bridge Staking Data Report	Show Active File Selected Bridge Staking Data	
<ul> <li>Columns</li> </ul>	Filtered By (Unfiltered)	
<ul> <li>Point Location</li> <li>Northing</li> <li>Eacting</li> </ul>	Selection Selection Type All	^
	Summarize	*
<ul> <li>Base line Station</li> <li>Base line Offset</li> </ul>	Summary row Show	
Sorting Rules { Groups & Aggregates Summarize	Summary Search in: Active Model in Active file Find all: Bridge Staking Data	
- Untitled	Where: (Unfiltered)	

## **OpenBridge Designer Version Upgrade Maintenance**

There are two maintenance items recommended after installing a new version of OpenBridge Designer.

To refresh the list of available functional components for modeling the bridge abutments, follow the steps to remove the old versions of the parametric cells that were deleted from the managed workspace. ProjectWise copies to the local computer under your working area all available functional components with the first access to the managed workspace. This process makes only the current abutments available in the list for placing the custom abutments.

- 1. In Windows Explorer, navigate to C:\pw\_work\pwmain\username with username being your personal working directory.
- 2. Search for \*.cel in folders under that location
- 3. Determine the directory the cel files for integral abutments are stored in, if present.



- 4. Navigate to and select that specific folder.
- 5. Right click and select Delete.



6. Next time an OpenBridge Modeler file is opened in ProjectWise the current functional components will be copied locally.

To clean up system files between versions, follow the steps to remove copies of XML files that may cause functional issues. Following a previous version upgrade it was discovered that the Place Custom Abutment tool did not work correctly in the new version until these files were deleted.

1. In Windows Explorer, navigate to C:\Users\username\AppData\Local\Bentley\OpenBridgeModeler\

AppData is a hidden system area. This location can be copied and pasted to the explorer address bar. Modify for your Windows profile.

122	^	2001	- 11
Name		Date modified	lype
10.0.0		1/26/2021 11:37 A	File folder

- 2. Navigate to the specific subfolders you have available. There may be one or more of these folders.
  - o 10.0.0\prefs\civil\_commands
  - o 10.0.0\_1\prefs\civil\_commands
- 3. Delete all XML extension named files in the folder(s).

## Use of LEAP Analysis with OpenBridge Designer

OpenBridge Designer can be used for analysis without a model created through OpenBridge Modeler. The Standalone File Groups option must be used. If the BIM Workflow option is used, then the model of the bridge is needed and sent to the analysis programs.

The following steps should be followed:

- 1. Launch OpenBridge Designer.
- 2. Create an obdx file.
  - Select New File.
  - Navigate to location to create new file.
  - Enter a name that matches the project directory number or a name that logically indicates the work you are doing.

🌃 Save As						×
$\leftarrow$ $\rightarrow$ $\checkmark$ $\uparrow$ $\square$ $\Rightarrow$ This PC	> Windows (C:) > TEMP > OBD	) Testing	~	ට 🔎 Sea	rch OBD Testing	
Organize 🔻 New folder						?
AutoHotkey_1. ^ Nat BentleyDownlc Documents an ePower Intel Oracle PerfLogs Program Files Program Siles ProgramData pw_work Python27 Recovery System Volume	me	Date modified No items match	Type a your search.	Size		
File <u>n</u> ame: 9999999997	obdx					~
Save as type: OBDX files(* A Hide Folders	.obdx)			<u>S</u> av	e Cancel	~ 

- Click Save button.
- 3. Create Standalone Group.
  - Select Standalone workflow option.
  - Click the Add Group button (folder with green plus).

🖉 0603003092.obd - OpenBridge Designer
File
Standalone File Groups
BIM Workflow     Standalone
Add a group to begin

• Enter the project name for name of the group.



- Click OK button.
- 4. Click on the Analysis icon.

OpenBridge Designe	r CONNECT Edition
Modeling Analysis	Drawings Interop.
Anal	ysis
LEAP Bridge Steel	File Not Created Run application to begin.
LEAP Bridge Steel	File Not Created Run application to begin. File Not Created Run application to begin.

- 5. Launch LEAP Bridge Concrete (or other application) from the shortcut for applications listed in the lower portion.
- 6. Proceed with entry of model and typical analysis steps.
- 7. Click on File > Save or File > Save As to save the model.
- 8. Enter the file name.
- 9. Click OK button.
- 10. The analysis file will be added to the list in the obdx file.
- 11. Reopen the existing analysis files by selecting in the group list in the obdx file and launching the appropriate analysis application.

As a workflow example, to create a Substructure only file:

- Complete steps 1-5.
- Access the Substructure tab and click on Substructure button to launch Substructure (RC Pier) module.

LEAP Bridge Concrete CONNECT Edition - Untitled *
File Edit View Tools 2D Viewer Options Help
1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
<b>1</b>
🔛 Project 🖄 Geometry 🐨 SuperStructure 🎹 SubStructure 📰 Reports 🖊 Drawings
Substructure
Substructure       Abut/Pier List:

- o Build the model.
- Click on File > Save or File > Save As and save the model.
- Enter the file name.
- Click OK button.
- When you exit the substructure module, the analysis file will be added to the list in the obdx file.

🌆 99999999997.obdx - OpenBridge Designer	
File	
Standalone File Groups	
BIM Workflow     Standalone	
▲ Standalone Group : Testing OBD Analysis	
🐴 Pier Cap.lbcx	
	ŀ

 Reopen the saved analysis file by selecting it in the list and Launch LEAP Bridge Concrete. It will open the Substructure module.



## Notes:

- The obdx file is required for managing the analytical files. The location of the file can be on local or network drive or on ProjectWise server.
- The files are saved within the obdx database only and are not available outside the OpenBridge Designer interface.
- If only doing analysis, when you close an analysis module you may see a dialog box indicating to update the model. Make sure to click the No button and exit.

LEAP Bridge Concrete CE V20	×
? Would you like to update the LEAP Bridge C	oncrete model?
Yes No	Cancel

- Existing LEAP Bridge Concrete files created with a previous version can be opened to start a new file.
  - Highlight the Standalone group not a listed file.

     # 99999997.abdx OpenBridge Designer
     Ein

File				
	OpenBri	dge Design	er CONNECT E	dition
Standalone File Groups     Image: Comparison of Comparison o	Modeling	Analysis	Drawings	Interop.
		Ana	lysis	
		LEAP Bridge Steel	File Not Created Run application to	o begin.
		LEAP Bridge Concrete	File Not Created Run application to	o begin.

- Click on the Analysis icon.
- Launch LEAP Bridge Concrete.
- Click Open and navigate to the existing lbcx file.

		ne in en al					V 0.5		
EILE CH	P Bridge Concrete CONNECT Ed	Ontines Use				- 0	^		
File Ed		a l	52 A (0)		a 👬		<b>KA</b> -		
New (	🍟 🔚 🔜 🥪	ABC Preferences	Granhics Reports Helr	Bentlev Site About Far	🦻 🛃	utorials Bentl	ev Cloud St		
		Abe   Hadaace	orapines neports i nep	, benney site About er		atomais   benti	cy cloud 5		
1	🚰 Open File								×
Prc	← → ~ ↑ <mark>-</mark> « (W)E	DataStor (\\ntdfs) (W:)	> Highway > Bridge >	Automation > OBD Testi	ng v	Ö ,P :	Search OBD Testir	g	
0	Organize 🔻 New folder								>
	OneDrive	Name	^	Date modified	Туре	Size			
Desig	This PC	CCS.lbcx		1/2/2020 6:40 AM	LBCX File	9,401 KB			
D Oolg	3D Objects								
	Desktop								
	Documents								
l r	Downloads								
	👌 Music								
L	Pictures								
Ele	😽 Videos								
Colum Lop	🏪 Windows (C:)								
Τœ	🛖 ajeffer (\\ntdfs\ŀ								
 €	🛫 u (\\dot.int.lan\a								
260	🛫 (W)DataStor (\\r								
	🛫 c\$ (\\hlt20272) (.								
	🛫 c\$ (\\hlt23113) (								
	🛫 c\$ (\\hdc22375)								
For Help, p	*								1
	File nan	ne: CCS.Ibcx				~ All LE	AP Bridge Concre	te files (	
						O	pen 🗸	Cancel	
									- 11

- Click Open button.
- The file will be added to the Standalone group once loaded.
- The workflow when working in ProjectWise has slightly different steps to create the obdx file.
  - Select ProjectWise option after launching OpenBridge Designer

	+	*
Browse	New File	ProjectWise
	Browse	Browse New File

- Log in to ProjectWise
- Select New File.
- Navigate through the Select button to the project directory Bridge subfolder in ProjectWise to create the new file.

Folder			Save
l		Select	Save to disk
Document —			Cancel
Name:	New File.obd		
Description:			
File Name:	New File.obd		
Format:		Format	

Select Folder	×
Folders Folder	^
Geo Geo Proto Proto PreDesign Comparison Predesign ProjectManagement Comparison Roadside Comparison Com	~
pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Projects\zC	•

- Click OK button
- Enter a name that matches the project directory number.
- Click Save button.
- Steps 3 11 are the same with the files saved to the ProjectWise location.
   When exiting OpenBridge Designer a Check In dialog box for ProjectWise will display.

neral Comment			
Name		Application	Description
<			>
Folder: Proje	ects\zCONNECT_PilotProject_01	\Bridge	
Folder: Proje	ects\zCONNECT_PilotProject_01 ion during Check In	\Bridge	
Folder: Proje	ects\zCONNECT_PilotProject_01	\Bridge	

• Click Check In button.

These instructions were created with:

## OpenBridge Designer CONNECT Edition Version 10.09.00.10

## **OpenBridge Designer for Starting Bridge Model**

OpenBridge Designer (OBD) will be used for creating the model through the OpenBridge Modeler (OBM) module. The Standalone File Groups option should be used. If the BIM Workflow option is used, then the model of the bridge is needed to send analysis data to the analytical module programs.

The following steps should be followed:

1. Launch OpenBridge Designer (OBD).



2. Select ProjectWise in OpenBridge Designer interface.



3. In the ProjectWise Log In window, select the Windows Domain or ProjectWise Authentication option. This is dependent on the version of ProjectWise Client being used. Toggle on Use Windows Single Sign-On for authentication and click Log in button.

🌆 ProjectWise	Log in	×
Datasource:	PWMain 💌	Log in
Authentication:	Windows Domain 💌	Cancel
User Name:	IDOTCENTRAL \ajeffer	
Password:		
	✓ Use Windows Single Sign-On for a	authentication
		//

If this is the first time logging in to this ProjectWise datasource on the computer you are using, respond **Yes** to the warning to create the Working Directory.

)j	ProjectW	ise	×
L	?	Working Directory c:\pw_work\pwmain\dmulho1 does not exist. Do you want to create it? Click No to browse for a different folder.	
l		Yes No Cancel	

4. Create an obdx file by selecting New File.



5. Use Select button and browse to Bridge folder for the correct Project Directory.

ive Document	As			×
General Folder Bridge Document Name: Description: File Name: Format:	New File.obdx		Select	Save Save to disk Cancel
Application:		Department: I		

 Enter a Document Name that matches the project directory number. Add a logical description and location of the project in Document Description field. Providing a good description with a location of the structure will help users in locating the proper file in a project. <u>Name</u> example: 0603003092.obdx <u>Description</u> examples: Polk Co. US 69 or Designs Polk Co. 223, 323 & Story Co. 323, 423, 724

Examples of obdx file Name and Description in ProjectWise:

Name	File Updated	File Size	Description
/ 7703504015.obdx	10/15/2021 9:52:01 AM	21,094 KB	Designs Polk 223, 323 and Story 323, 423, 724
Name	F	ile Updated	Description
🖉 🂯 (117)_Bridge Replacement-PPCB			
N 🖉 BRPrelim			
🖉 💟 Design Events			
NojectResources			
/ 🖉 7706901019.obdx	7/14/2021	7:02:38 AM	Polk Co. US 69
🧷 📇 ОВМ_77069117_DOT_0223_040681_Z08.dgn	10/5/2021 1	11:45:39 AM	Polk Co. Des. 223 Over Fourmile Creek

7. Select Application field and change from <none> to Bentley OpenBridge Designer for future recognition by ProjectWise for the associated application.

The Bentley OpenBridge Designer GenerativeComponents option should only be selected if working with a Generative Component in your model due to performance issues.

Application:		Department:		
<none></none>	-	<none></none>		-
Bentley OpenBridge Design	er		^	
Bentley OpenBridge Design	er Genera	tiveComponents		
1 Bentley OpenPlant PowerPl	D			
Bentley OpenRoads Design	er			
Bentley PondPack			¥	

- 8. Select Department field and change from <none> to Bridge Bridge Design.
- 9. Click Save button.
- 10. Create Standalone Group by selecting the Standalone workflow option. (Standalone workflow is the default selection, *currently Iowa DOT will <u>not</u> be using the BIM Workflow option*.)
- 11. Click the Add Group button (folder with green plus).

🖉 0603003092.obd - OpenBridge Designer	
File	
Standalone File Groups	
BIM Workflow     Standalone	
Add a group to begin	

12. Enter project name into following dialog when prompted.

🌆 Standalone Name	_		×
Benton US 30			
	OK	Ca	ncel
			-

- 13. Click OK button.
- 14. Check that the Modeling module icon is highlighted.
- 15. Launch OpenBridge Modeler (OBM) from the shortcut for applications listed in the lower portion.



16. When OpenBridge Modeler window opens, select New File.

The CONNECT workspace will load after creation of the new file.

# **OpenBridge Modeler CONNECT Edition**

Imperial Standards 🔹 Tutorial 1 🔹

## **Recent Files**

You haven't opened any files recently. To browse for a file, start by clicking on Browse.



- 17. Select No Wizard in the New file dialog box.
- 18. Click OK button.

🖉 New		X
Document Creation Wizards	01/	÷
No Wizard Advanced Wizard	Cancel	
Make this wizard the default.		

19. The new dialog box displays.

lew		×
General		
Folder	Change	OK Cancel
Document Name: Description: File Name:	OBM-seed3d-Imperial	Apply
Application: MicroStation	Department:	
Source File:	ata\Bentley\OpenBridge Designer CONNECT Edition\OpenBri Seed Import	

20. Select Change... button in Folder and locate Project Directory in ProjectWise and select the Bridge folder to place the OBD/OBM files in.

lew		>
General		
Folder		OK
Bridge -	Change	Cancel
Document		Apply
Name:	OBM_06030209_DOT_216_700495_SPN	
Description:	OBM-seed3d-Imperial	
File Name:	OBM_06030209_DOT_216_700495_SPN.dgn	
Application:	Department:	
MicroStation	<pre> &lt; <none> </none></pre>	
Source File:		
ntley\OpenB	idge Designer CONNECT Edition\OpenBridgeModeler\Configi	
	Seed Import	

21. Select Seed... button to locate the proper Seed File to use with the set Geographic Coordinate System/Zone (Iowa Regional Coordinate System IaRCS).

older						
💯 Seed						✓ ◆ ▶   □ □ □
ocument						
Name	^	File Updated	File Size Folder Id	Status (	Out to Desc	ription
Access			1013842			
Sheets			1013842			
			1010012			
c						>
ddress:						
escription:						
ile Name:						
pplication:	MicroStation					
Open document as	read-only					

22. Select Application field and change from MicroStation to Bentley OpenBridge Modeler.

ect	
older	
Cood	
U JEEU	
ocument	
Name	^
Name	
Access	
2 🖉 Excel	
/ Sheets	
OBM-see	d3d.dan
Ma OPM CC	REPORT DOT DENI# ELIMANO SON das
OBW_CC	
OBM_CC	RRRPPP_DOI_DSN#_FHWANO_SPS.dgn
OBM_CC	RRRPPP_DOT_DSN#_FHWANO_UD.dgn
OBM_CC	RRRP AutoCAD
OBM CC	RRRP Batchplot
DEM ORM CC	BCM MicroStation
OBM_CC	Bentley Architecture
OBW_CC	RRRP Bentley Building Electrical Systems (US)
OBM_CC	RRRP Bentley Building Mechanical Systems
OBM_CC	RRRP Bentley CivilStorm
OBM_CC	RRRP Bentley CulvertMaster
OBM CC	RRRP Bentley Digital Print Format(DPR)
	Bentley Electrical
UBM_CC	Bentley FlowMaster
OBM_CC	RRRP Bentley HAMMER
OBM_CC	RRRP Bentley Map
OBM_CC	RRRP Bentley Mechanical
OBM CC	RRRP Bentley OpenBridge Designer
Manue	Bentley OpenBridge Designer GenerativeComponents
<	Bentley OpenBridge Modeler
	Bentley OpenPlant PowerPID
	Bentley PondPack
AUULESS:	Bentley PondPack V8i
escription:	Bentley PowerCivil
read poor i	Bentley PowerMap
ile Name:	Bentley PowerMap Held
ing i ranne i	Bentley SewerCAD
oplication	

23. Browse to the proper Seed File to use with the set Geographic Coordinate System/Zone (Iowa Regional Coordinate System, IaRCS).

The Seed files are located at: PWMain\Documents\IowaDOTStandardsConnect\Configuration\Organization-Civil\IowaDOT\_Standards\Seed\

ect								
older								
2 Seed							~ 🔶	
ocument	~							_
Name		File Updated	File Size	Folder Id	Status	Out to	Description	
Access				1013842				
Excel				1013842				
Sheets				1013842				
OBM-seed3	d.dgn	3/13/2020 2:23:09 PM	96 KB	1013842	Checked In		OBM-see	
	RPPP_DOT_DSN#_FHWANO_SPN.dgn	10/7/2021 1:35:02 PM	106 KB	1013842	Checked In		OBM_CC	
OBM_CCRR	RPPP_DOT_DSN#_FHWANO_SPS.dgn	10/7/2021 1:35:01 PM	106 KB	1013842	Checked In		OBM_CC	
OBM_CCRR	RPPP_DOT_DSN#_FHWANO_UD.dgn	10/7/2021 1:34:49 PM	105 KB	1013842	Checked In		OBM_CC	
OBM_CCRR	RPPP_DOT_DSN#_FHWANO_Z01.dgn	10/7/2021 1:35:00 PM	108 KB	1013842	Checked In		OBM_CC	
OBM_CCRR	RPPP_DOT_DSN#_FHWANO_Z02.dgn	10/7/2021 1:34:59 PM	108 KB	1013842	Checked In		OBM_CC	
OBM_CCRR	RPPP_DOT_DSN#_FHWANO_Z03.dgn	10/7/2021 1:34:59 PM	108 KB	1013842	Checked In		OBM_CC	
OBM_CCRR	RPPP_DOT_DSN#_FHWANO_Z04.dgn	10/7/2021 1:34:58 PM	108 KB	1013842	Checked In		OBM_CC	
OBM_CCRR	RPPP_DOT_DSN#_FHWANO_Z05.dgn	10/7/2021 1:34:57 PM	108 KB	1013842	Checked In		OBM_CC	
OBM_CCRR	RPPP_DOT_DSN#_FHWANO_Z06.dgn	10/7/2021 1:34:56 PM	108 KB	1013842	Checked In		OBM_CC	
OBM_CCRR	RPPP_DOI_DSN#_FHWANO_Z07.dgn	10/7/2021 1:34:55 PM	108 KB	1013842	Checked In		OBM_CC	
OBM_CCRR	RPPP_DOI_DSN#_FHWANO_Z08.dgn	10/7/2021 1:34:54 PM	108 KB	1013842	Checked In		OBM_CC	
OBM_CCRR	RPPP_DOI_DSN#_FHWANO_Z09.dgn	10/7/2021 1:34:53 PM	108 KB	1013842	Checked In		OBM_CC	
OBM_CCRR	RPPP_DOT_DSN#_FHWANO_Z10.dgn	10/7/2021 1:34:52 PM	108 KB	1013842	Checked In		OBM_CC	
OBM_CCRR	RPPP_DOT_DSN#_FHWANO_Z11.dgn	10/7/2021 1:34:51 PM	108 KB	1013842	Checked In		OBM_CC	
OBM_CCRR	RPPP_DOT_DSN#_FHWANO_Z12.dgn	10/7/2021 1:34:50 PM	108 KB	1013842	Checked In		OBM_CC	
OBM_CCRR	RPPP_DOT_DSN#_FHWANO_Z13.dgn	10/7/2021 1:34:49 PM	108 KB	1013842	Checked In		OBM_CC	
<		10/2/0001 / 00/001	100.00		a		~ ~	
	nw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Tr	owaDOTStandardsConnect\Configurat	tion\Organiza	tion-Civil\Tov	aDOT Standard	Is\Seed\OBN	1 CCRRRPPP DOT	DSN# FHWANC
ddress:								
ddress: escription:	OBM_CCRRRPPP_DOT_DSN#_FHWANO_SPN.dg	jn						
ddress: escription: ile Name:	OBM_CCRRRPPP_DOT_DSN#_FHWANO_SPN.dg OBM_CCRRRPPP_DOT_DSN#_FHWANO_SPN.dg	gn						

## 24. Select Open button.

	PPP_DOT_DSN#_FHWANO_Z03.dgn	10/7/2021 1:34:59 PM 108	KB 1013842	Checked In	OBM_CC
OBM_CCRRR	PPP_DOT_DSN#_FHWANO_Z04.dgn	10/7/2021 1:34:58 PM 108	KB 1013842	Checked In	OBM_CC
CCRRR OBM_CCRRR	PPP_DOT_DSN#_EHWANO_705.dan	10/7/2021 1:34:57 PM 108	KB 1013842	Checked In	OBM_CC
CCRRR OBM_CCRRR	PPP_DOT_DSN#_ ProjectWise		× 1013842	Checked In	OBM_CC
CCRRR OBM_CCRRR	PPP_DOT_DSN#		1013842	Checked In	OBM_CC
CCRRR OBM_CCRRR	PPP_DOT_DSN#	PROPER DOT DOWN FURMANO 700 days in	1013842	Checked In	OBM_CC
CCRRR OBM_CCRRR	PPP_DOT_DSN# read only. Would y	ou like to open it anyway?	1013842	Checked In	OBM_CC
OBM_CCRRR	PPP_DOT_DSN#		1013842	Checked In	OBM_CC
OBM_CCRRR	PPP_DOT_DSN#		1013842	Checked In	OBM_CC
OBM_CCRRR	PPP_DOT_DSN#	Yes No	1013842	Checked In	OBM_CC
OBM CCRRR	PPP_DOT_DSN#		1013842	Checked In	OBM_CC
					>
iss:	pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\/	waDOTStandardsConnect\Configuration\Orga	ization-Civil\Iow	aDOT_Standards\See	Alobm_ccrrrppp_dot_dsn#_fhwan
iption:	pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\G OBM_CCRRRPPP_DOT_DSN#_FHWANO_208.dg	waDOTStandardsConnect\Configuration\Organ	iization-Civil\Iow	aDOT_Standards\See	<pre>d\obm_ccrrRPPP_Dot_Dsn#_FHWAN</pre>
ess: ption: ame:	pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\I OBM_CCRRRPPP_DOT_DSN#_FHWANO_Z08.dg OBM_CCRRRPPP_DOT_DSN#_FHWANO_Z08.dg	waDOTStandardsConnect\Configuration\Organ n	ization-Civil\Iow	aDOT_Standards\See	d\OBM_CCRRRPPP_DOT_DSN#_FHWAN
iption: ame: ation:	pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\I OBM_CCRRRPPP_DOT_DSN#_FHWANO_Z08.dg OBM_CCRRRPPP_DOT_DSN#_FHWANO_Z08.dg Bentley OpenBridge Modeler	waDOTStandardsConnect\Configuration\Orga n n	iization-Civil\Iow	aDOT_Standards\See	> dlobm_ccrrrppp_dot_dsn#_fHwan
iption: ame: ation:	pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\I OBM_CCRRRPPP_DOT_DSN#_FHWANO_Z08.dg OBM_CCRRRPPP_DOT_DSN#_FHWANO_Z08.dg Bentley OpenBridge Modeler	waDOTStandardsConnect\Configuration\Orga n n	ization-Civil\Iow	aDOT_Standards\See	>
iption: ame: ation:	pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\I OBM_CCRRRPPP_DOT_DSN#_FHWANO_Z08.dg OBM_CCRRRPPP_DOT_DSN#_FHWANO_Z08.dg Bentley OpenBridge Modeler	waDOTStandardsConnect\Configuration\Orga n n	iization-Civil\Iow	aDOT_Standards\See	>
ss: iption: ame: ation: xen document as m	pw:\\ntPwInt1.dot.int.lan:PWMain\Documents\Ic OBM_CCRRRPPP_DOT_DSN#_FHWANO_Z08.dc OBM_CCRRRPPP_DOT_DSN#_FHWANO_Z08.dc Bentley OpenBridge Modeler ead-only	waDOTStandardsConnect\Configuration\Organ n n	iization-Civil\Iow	aDOT_Standards\See	>

25. Select Yes button.

26. The new dialog box displays.

lew		×
General		
Folder		ОК
Bridge -	Change	Cancel
Document		Apply
Name:	OBM_CCRRRPPP_DOT_DSN#_FHWANO_Z08.dgr	]
Description:	OBM_CCRRRPPP_DOT_DSN#_FHWANO_Z08.dgn	
File Name:	OBM_CCRRRPPP_DOT_DSN#_FHWANO_Z08.dgn	
Application:	Department:	
Bentley Open	Bridge Modeler V <none> V</none>	/
Source Docum	ent:	
OBM_CCRRR	PPP_DOT_DSN#_FHWANO_Z08.dgn - OBM_CCRRRPPP_DC	D
	Seed Import	

27. Change the name of the file in Name field and add a proper description in Description field. Providing a good description with a location of the structure will help users in locating the proper file in a project.

### Name: OBM\_CCRRRPPP\_DOT\_DSN#\_FHWANO\_Z08.dgn

**OBM** = Designates this as an OpenBridge Modeler file.

**CCRRRPPP** = County (CCC) Route (RRR) Paren (PPP) from the Project Number.

**DOT** = Signifies entity responsible for creation of model (DOT = Iowa DOT). If the project is created by a Consultant, then DOT would be replaced with the Consultants abbreviated name.

**DSN#** = Four-digit Design Number of structure.

**FHWANO** = The six-digit FHWA Number.

Name Example: OBM\_77069117\_DOT\_0223\_040681\_Z08.dgn Description Example: Polk Co. Des. 223 Over Fourmile Creek Example listing of files.

Name	File Updated	Description
ℤ <sup>™</sup> (245)_Bridge-Unspecified		
ℤ <sup>™</sup> BRPrelim		
🖉 💟 Design Events		
NojectResources		
208.dgn 🖉 🖉 🖉 🖉	10/6/2021 2:22:19 PM	Project Overview Polk-Story
/ 1703504015.obdx	10/15/2021 9:52:01 AM	Designs Polk 223, 323 and Story 323, 423, 724
208.dgn 277035245_DOT_0423_040791_Z08.dgn	10/15/2021 9:51:40 AM	NE 126TH AVE (ELKHART INTERCHANGE) BRIDGE
208.dgn 27035246_DOT_0323_041871_Z08.dgn	6/23/2021 1:19:19 PM	NE 142ND AVE OVER I-35
208.dgn 277035305_DOT_0724_041891_Z08.dgn	6/23/2021 1:04:45 PM	NE 158TH AVE OVER I-35
2010 OBM_85035269_DOT_0323_049141_Z08.dgn	6/23/2021 12:41:40 PM	315TH ST BRIDGE OVER I-35
OBM_85035284_DOT_0223_049011_Z08.dgn	6/23/2021 1:10:56 PM	IA 210 OVER I-35

- 28. Select Application field and change from MicroStation to Bentley OpenBridge Modeler.
- 29. Select Department field and change from <none> to Bridge Bridge Design.
- 30. Click OK button.
- 31. Click Yes button for the configuration Alert and restart.

📶 Ale	t ×
?	OpenBridge Modeler must be restarted to load the new configuration. Do you want to restart now?
	<u>Y</u> es <u>N</u> o

**Note:** Steps 16 -30 can be skipped if the file is created using Copy Seed. Refer to <u>CONNECT Seed Files and Naming Convention</u>

- 32. When OpenBridge Modeler completes loading, activate the OpenBridge Modeling workflow from the pick list in the upper left corner if it is not already active.
- 33. Reference the geometry and terrain files needed for the location of the bridge. Always use Coincident World orientation when referencing models.

GEO\_ prefix named files are located at Design/CADD\_Files/Geometry. This contains alignments and profiles for the project.

TRN\_ prefix named files are located at Design/CADD\_Files/Terrains. This contains any terrain models for the project.

Documents					
Folder 💯 Geometry				~ 🔶 🚺	8-8- 8-8- 8-8- 8-8- 8-8-
A R					~
Name			Folder Id	File Size Status	
🖉 💟 GPK			1020475		
GEO_ML030_06	030087.dgn		1020475	637 KB Check	
GEO_MLREV_06	030087.dgn		1020475	220 KB Check	
GEO_RMPA021_	_06030087.dgn		1020475	192 KB Check	
GEO_RMPB021_	_06030087.dgn		1020475	192 KB Check	
GEO_RMPC021	_06030087.dgn		1020475	192 KB Check	
GEO_RMPD021	_06030087.dgn		1020475	192 KB Check	
GEO_SUR021_06	5030087.dgn		1020475	192 KB Check	
GEO_SUR030_00	3030087.dgn		1020475	407 KB Check	
<				>	
Application:	All Applications				
Extension:	*.dgn;*.dwg;*.dxf				
elected Documents		Add	temove		
Name			Folder Id	File Size Status	Out to
ML030 06	030087.dgn		1020475	637 KB Checked In	
< Attachment method:	Interactive	_			
۲ معالم م معالم معالم معال	Interactive				

Polder   Folder   Trains     Folder   Image: Status   Image: Status     Folder   Image: Status   Folder   Image: Status   Folder   Image: Status   Folder   Image: Status   Folder   Image: Status   Folder   Image: Status   Folder   Image: Status   Folder   Image: Status   Folder   Image: Status   Folder   Image: Status   Folder   Image: Status   Folder   Image: Status   Folder   Folder <t< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th></t<>							
Folder Terrains   Folder Terrains   Image: Status   Image: Status	ect						
Nome       Folder Id       File Size       Status         Image: Status       1020465       29,653 KB       Check         Application:       Al Applications         Extension:       *.dgn;*.dwg;*.dwf         Selected Documents       Folder Id       File Size       Status         Name       Folder Id       File Size       Status         Add       Remove         Selected Documents       Folder Id       File Size       Status         Name       Folder Id       File Size       Status       Out to         Selected Documents       1020465       29,653 KB       Checked In         Atachment method:       Interactive       Interactive       Status       Out to	Folder Terrains					. 🔺 🛤 🛙 🕯	:: ::::  P
Ame       Folder Id       File Size       Status         Interactive       1020465       29,653 KB       Check         Application:       All Applications							··· []
Name     Folder Id     File Size     Status       Image: Status     1020465     29,653 KB     Check       Image: Status     Image: Status     Image: Status     Image: Status	Ma   ,Q2						~
A TRN_SS2_ML030_06030087SPN.dgn     1020465     29,653 KB     Check       Application:     All Applications       Extension:     *.dgn;*.dwg;*.dwf       Selected Documents     Add       Name     Folder Id     File Size       Status     Out to       1020465     29,653 KB       Checked In     Add	Name			Folder Id	File Size	Status	
Application:     All Applications       Extension:     *.dgn;*.dwg;*.dwg       Add     Remove       Selected Documents	TRN_SS2_ML	030_06030087SPN.dgn		1020465	29,653 KB	Check	
Application:     All Applications       Extension:     *.dgn;*.dwg;*.dwf       Add     Remove       Selected Documents     Add       Name     Folder Id     File Size       Status     Out to       Image: Selected Documents     1020465       29,653 KB     Checked In       C     Attachment method:       Interactive							
x     Applications       Application:     All Applications       Extension:     *.dgn/*.dwg/*.dwg/*.dwf       Add     Remove       Selected Documents     Add       Name     Folder Id     File Size       Status     Out to       1020465     29,653 KB       C     Attachment method:							
x     All Applications       Application:     All Applications       Extension:     *.dgn;*.dwg;*.dwf       Add     Remove       Selected Documents     Add       Name     Folder Id     File Size       Status     Out to       Image: Selected Documents     1020465       29,653 KB     Checked In       C     Attachment method:							
Application:     All Applications       Extension:     "dgny".dwg;".dwf       Add     Remove       Selected Documents     Add       Name     Folder Id     File Size       Status     Out to       1020465     29,653 KB       C     Attachment method:							
Application:     All Applications       Extension:     *.dgn;*.dwg;*.dwf       Add     Remove       Selected Documents     Add       Name     Folder Id     File Size       Status     Out to       1020465     29,653 KB       C     Attachment method:							
Applications  Applications  Extension:  Add Remove  Selected Documents  Name Folder Id File Size Status Out to 1020465 29,653 KB Checked In  Attachment method: Interactive							
Applications Extension: Al Applications Extension: Add Remove Selected Documents Name Folder Id File Size Status Out to 1020465 29,653 KB Checked In Attachment method: Interactive	<b>`</b>					,	
Extension: *.dgn;*.dwg;*.dxf  Add Remove  Selected Documents  Name Folder Id File Size Status Out to 1020465 29,653 KB Checked In  Attachment method: Interactive	Application:	All Applications					`
Add     Remove       Selected Documents     Folder Id     File Size     Status     Out to       Market     1020465     29,653 KB     Checked In     Out to       C     Attachment method:     Interactive     Interactive	Extension:	*.dgn;*.dwg;*.dxf					`
Selected Documents       Name     Folder Id     File Size     Status     Out to       Market     1020465     29,653 KB     Checked In			Add Remove				
Name     Folder Id     File Size     Status     Out to       Image: Status     1020465     29,653 KB     Checked In       Image: Status     1020465     29,653 KB     Checked In	Selected Documents		Kellove				
TRN_SS2_ML030_06030087SPN.dgn      1020465 29,653 KB Checked In      Attachment method: Interactive	Name			Folder Id	File Size	Status	Out to
<attachment interactive<="" method:="" td=""><td>TRN_SS2_ML</td><td>030_06030087SPN.dgn</td><td></td><td>1020465</td><td>29,653 KB</td><td>Checked In</td><td> </td></attachment>	TRN_SS2_ML	030_06030087SPN.dgn		1020465	29,653 KB	Checked In	
Attachment method: Interactive							
Attachment method: Interactive							
Attachment method: Interactive							
C Attachment method: Interactive							
Attachment method: Interactive							
Attachment method: Interactive	<						>
	Attachment method:	Interactive					```

Reference At	ttachme	ent Properties for\GEO_ML030_0603	30087.dgn	×		
File Name:	PW W	ORKDIR:d1020475\GEO_ML030_06030	087.dgn			
Full Path:	\pwr	main\bkloss\d1020475\GEO_ML030_0	6030087.dan			
Model:	Default	t		-		
Logical Name:						
Description:	Master	r Model				
Orientation						
View		Description				
Coincident		Aligned with Master Fi	le			
Coincident	- World	Global Origin aligned	with Master Fil	e		
🗄 Standard Vie	ews					
Saved Views	s (none)					
Named Bou	indaries	(none)				
Detail	l Scale:	Full Size 1 = 1	•			
Scale (Maste	er:Ref):	1.000000000 : 1.000000000	-			
Named	Group:		•			
Re	vision:		•			
	Level:		•			
Nested Attach	ments:	Live Nesting	<ul> <li>Nesting D</li> </ul>	epth: 0		
Display Ove	errides:	Allow	•	-		
New Level D	)isplay:	Use MS REF NEWLEVELDISPLAY Co	<b>Y</b>			
Global LineStyle	Scale:	Master	• •			
Synchronize	e View:	Volume Only	v			
		· - · - · · · · · · · · · · · · · · · ·				
Toggles						
	<u>.</u>	2 <b>k</b> (= :::: r % X == e F				
		<u>O</u> K		Cancel		
References (2 of	f 2 unique	e, 2 displayed)				
Tools Properties						
E • 🏠 🔊		*****	P 0 x	Hilite Mode: Bour	ndaries 🔻	
Slot 🏴 🗋 F	ile Name		Model	Description	Logical	Orientation

		1.1	1.2.1									
<u>T</u> ools	<u>P</u> roperti	es										
•	隆 👂	< 👌 🛒 🏟	le 🖻 🗗 🕯	) 🕞 🐔 🛱	🗄 🛈 🛪 E	lilite Mode: Boundaries	-					
Slot	🖻	File Name			Model	Description	Logical	Orientation	Presentation	• 🎜	k	<u>(</u>
1		PW_WORKDIR:d	1020475\GEO_ML03	_06030087.dgn	Default	Master Model		Coincident - World	Wireframe	$\checkmark$	×.	
2		PW_WORKDIR:d	I\TRN_SS2_ML030_	06030087SPN.dgn	Default	Master Model		Coincident - World	Wireframe	* *	*	
Scale	1.0000000	00	: 1.00000000	Rotation	1	Offset X		Y	Z			
• ~	/ 🕨 🖪	1:1 x x x 1	16 9 0 <u>A</u> 9	🔒 Nested Atta	chments:	▼ Nesting	Depth:	Display Overrides:	~			
New L	evel Displ	ay:	▼ Georeference	ed:	*							

The referenced GEO file should always have Display on for bridge modeling. Turning this reference off may cause problems with the function of the model.

- 34. Fit the views to see the resulting geometry and terrain.
- 35. To begin modeling the bridge, select Bridge Wizard in the Bridge Setup tab of the ribbon.



36.	Enter fields for the	specifics of th	ne bridge to	place within	the model.
•••		op 000.000 01 0			

🌈 Bridge Wizard		×
Geometry Materials		
Bridge Name	Br 1	
Bridge Type	Beam Slab (P/S or RC Concrete Girders)	~
Alignment	Create new alignment	~
Bridge Start Station	1+00.0000	
Alignment Advanced C	Options	
Alignment Start Station	0+00.0000	
Start X	0.000	
Start Y	0.000	
Elevation (Z)	100.000	
Start Tangent Direction	0.0000°	
Radius	0.000	
Hand	Clockwise	~
<ul> <li>Deck Template</li> </ul>	Slab w/ constraints	
O Custom Deck		
Spans	80 2@100 70	
Support Skew Angles	0°	
Beam Spacing	5@8	
Beam Template	Type IV	
Abutment Template	3 Lane - 40ft	
Pier Template	Pile_Bent_Batter	
<ul> <li>Left Barrier Template</li> </ul>	32" F SHAPE L	
Right Barrier Template	32" F SHAPE R	

- Enter Bridge Name with County and Design Number. Example Polk Des. 223.
- Select Bridge Type for the specific bridge.

Bridge Type	Beam Slab (P/S or RC Concrete Girders)
Alignment Bridge Start Station	Beam Slab (P/S or RC Concrete Girders)
	Beam Slab (Steel Girders)
	CIP Concrete Box
<ul> <li>Alignment Advanced C</li> </ul>	RC Slab

• Select Alignment from the available alignments in the attached referenced GEO file.

• Set advanced options, if needed.

$(\frown)$	Alignment Advance	ed Optio	ons
\ <i>J</i>			

-	
Alignment Start Station	0+00.0000
Start X	0.000
Start Y	0.000
Elevation (Z)	100.000
Start Tangent Direction	0.0000°
Radius	0.000
Hand	Clockwise

- Select Deck Template from the template library.
- Enter Span lengths.
- Enter Skew Angle for support lines.
- Enter Beam Spacing.
- Select Beam Template from the template library.
- Select Abutment Template from the template library. Abutments available are not Iowa specific. The model will be modified to use a Custom Abutment.
- Select Pier Template from the template library.
- Select Barrier Template from the template library for both left and right barriers.

### 37. Click OK button.

The model will be placed at the appropriate location. Proceed with any modifications of various components.

Additional information on modifications will be added in the future.