



What's New in MicroStation 2025 (25.1)

Tamicca Sellars – MicroStation Product Manager

Dan Eng – MicroStation Product Expert

Bentley®

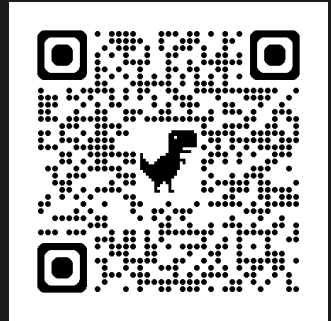
Presenters



Tamicca Sellars
MicroStation Product Manager



Dan Eng
MicroStation Product Expert





MicroStation is the trusted computer-aided design (CAD) platform for infrastructure projects. Professionals like you, use it to design, manage, and deliver infrastructure projects efficiently. Power, flexibility, automation, and 3D geospatial context, enable innovative designs and creative visualizations.



MicroStation

MicroStation is used by engineers, architects, GIS professionals, constructors, and owner-operators to design, model, visualize, document, map, and advance infrastructure projects because it delivers an integrated and proven suite of intuitive, interactive, and highly interoperable design capabilities.

Major Version

2025



Version

25.00.01.62



Language

English



Architecture

x64



Deliverable Type

Installer



Apply

Clear

MicroStation 2025 (English)

 Download

Version:25.00.01.62

Date:10/06/2025

Size:4 MB

[System Requirements](#)

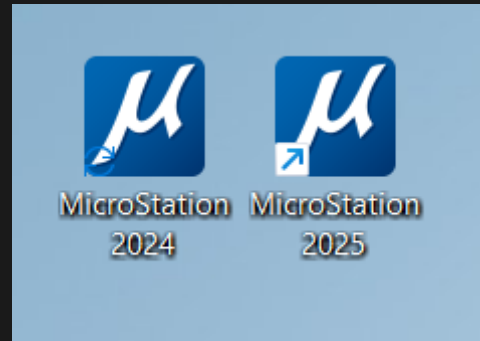
[Support Status](#)



*Clear the Default Filters to view more Downloads





Side by Side installation



<input checked="" type="checkbox"/> 	MicroStation 2024	10/15/2024 3:34 PM	File folder
<input checked="" type="checkbox"/> 	MicroStation 2025	3/10/2025 10:26 AM	File folder



River Bridge Data Set

Drawing

Bridge - Master - Open First.dgn [3D - V8 DGN] - MicroStation

Search Ribbon (F4)

FileHomeViewAnnotateAttachAnalyzeCurvesConstraintsUtilitiesDrawing AidsContentCollaborateHelp

NoneSeawall and Dock

960000

Attributes

ExplorerAttach ToolsPopSet

Primary

Element SelectionFence Tools

Selection

Place SmartLinePlace LineArc Tools

Placement

MoveCopyRotateModify ElementBreak ElementTrim Multiple

ManipulateModify

Create Region

Groups

Explorer

File

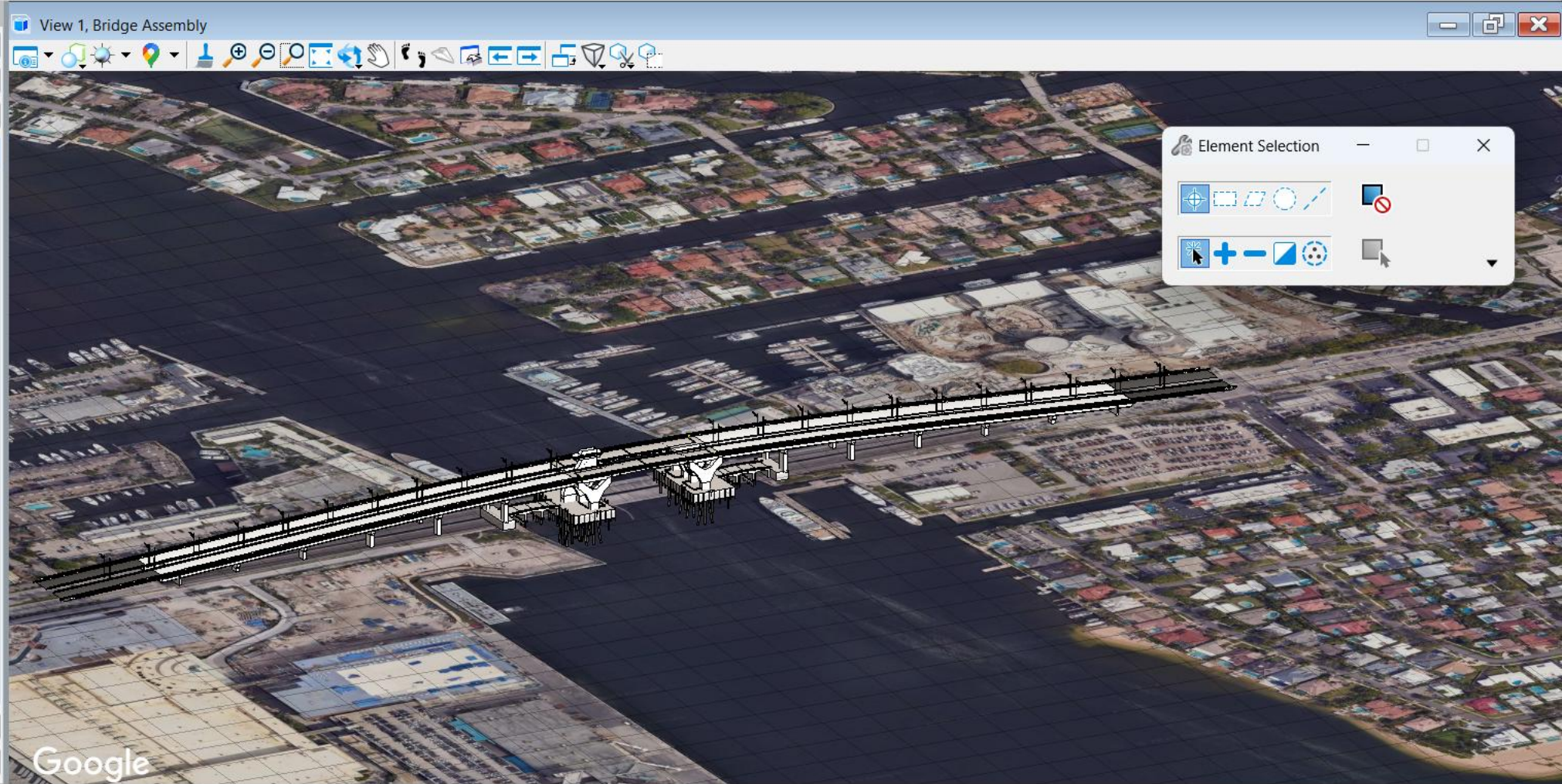
Items

Reports

Sheet Index

Resources

Links



Element Selection

Default

12345678

0.000

0.000°

Z 234.676

287916.857, 196279.251, 234.676

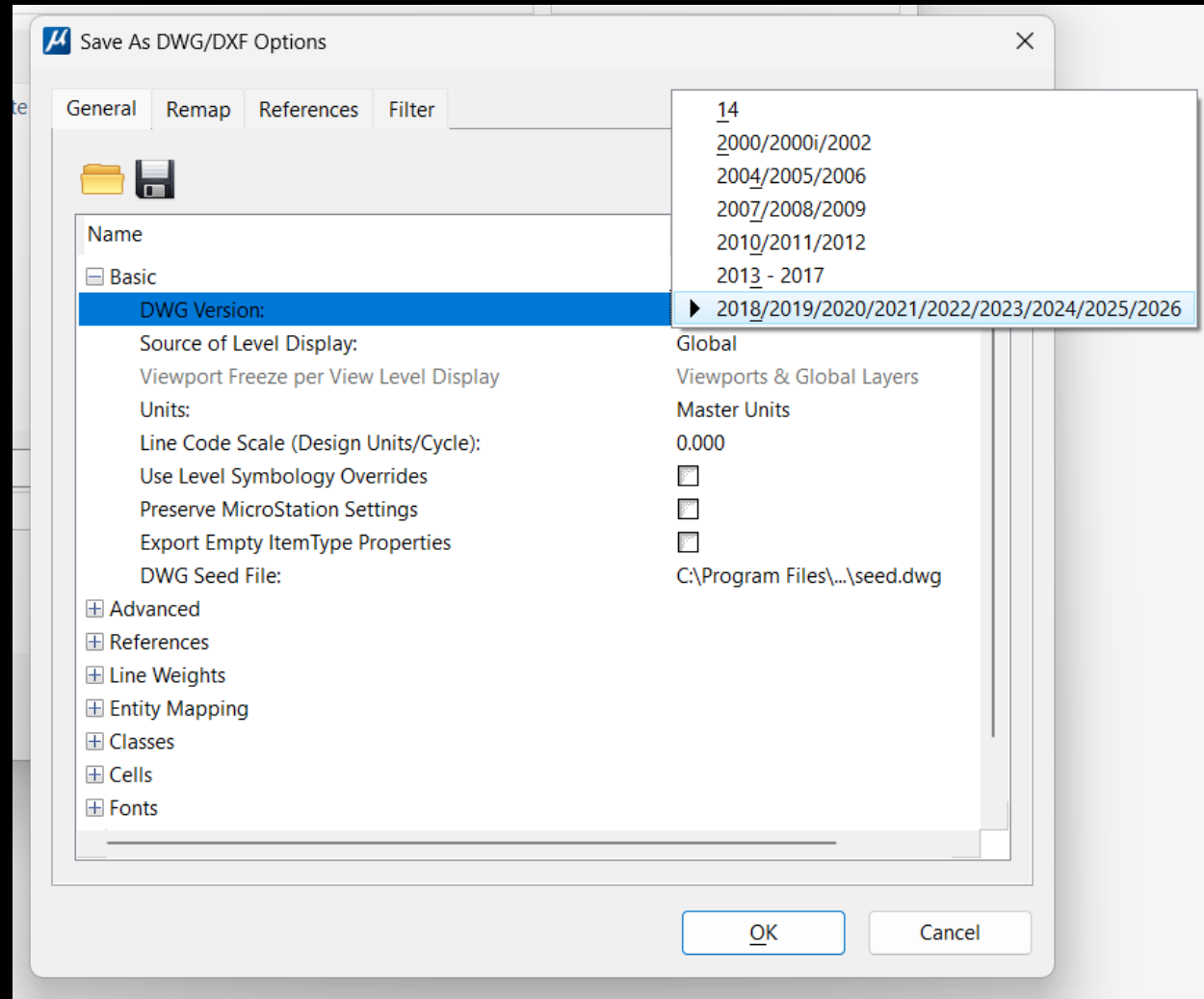
Seawall and Dock

Element Selection > Identify element to add to set

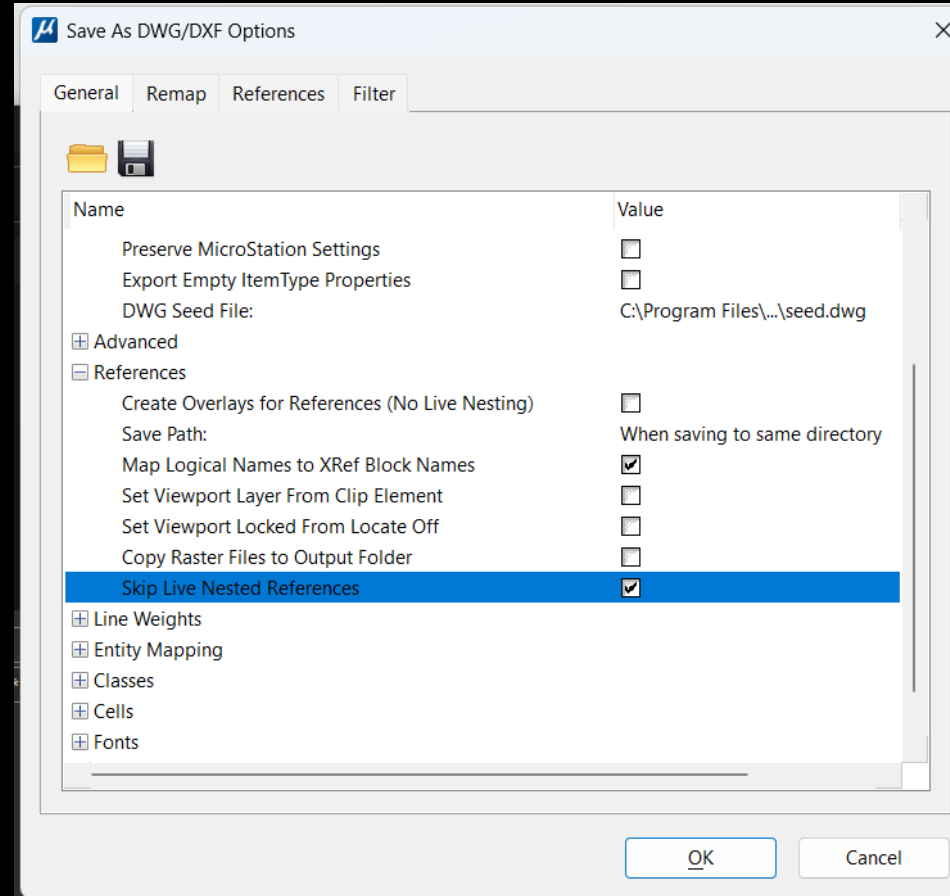


Drawing Production

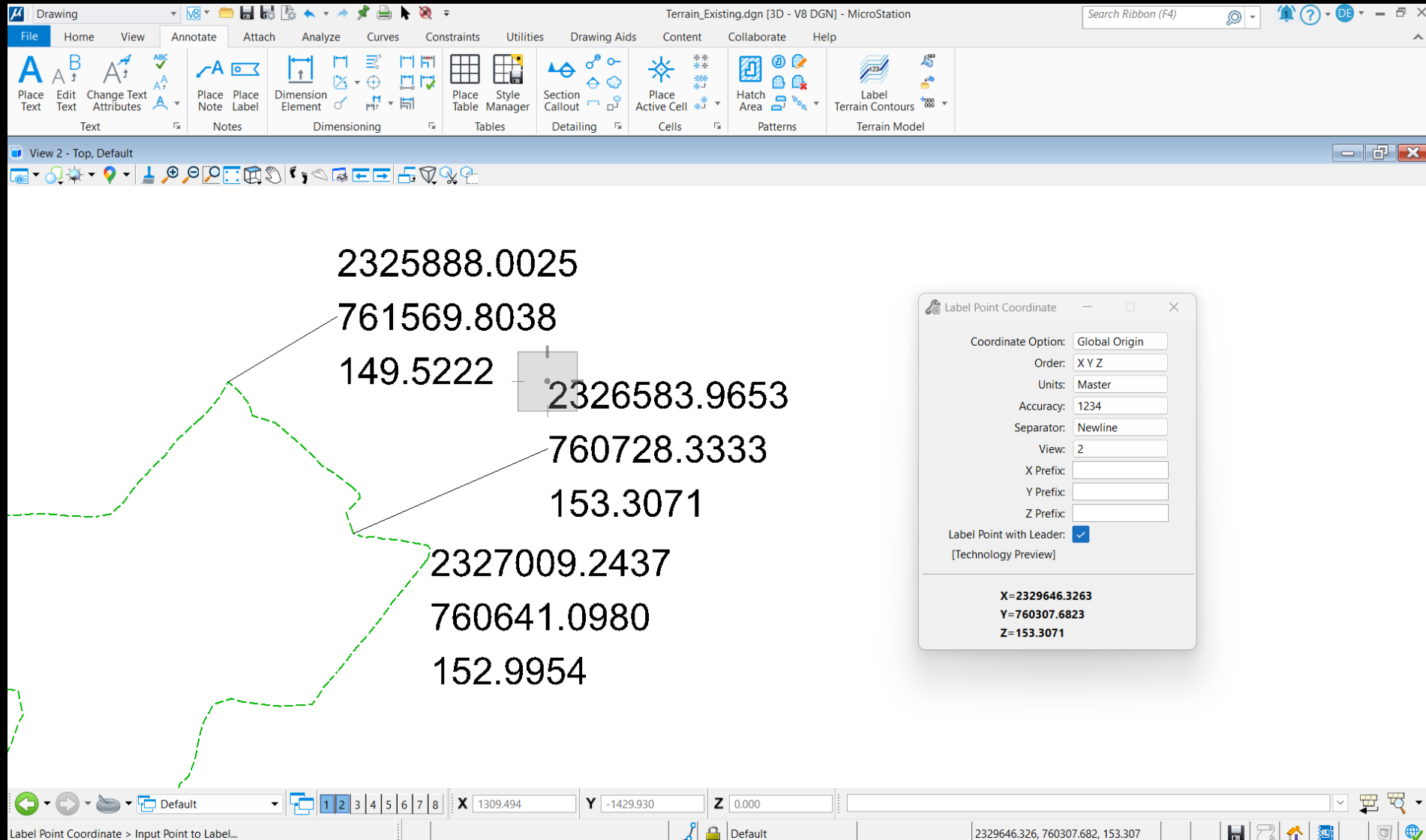
2025 – RealDWG 2026



2025.00.01.62 – RealDWG 2026 – Skip Live Nested References

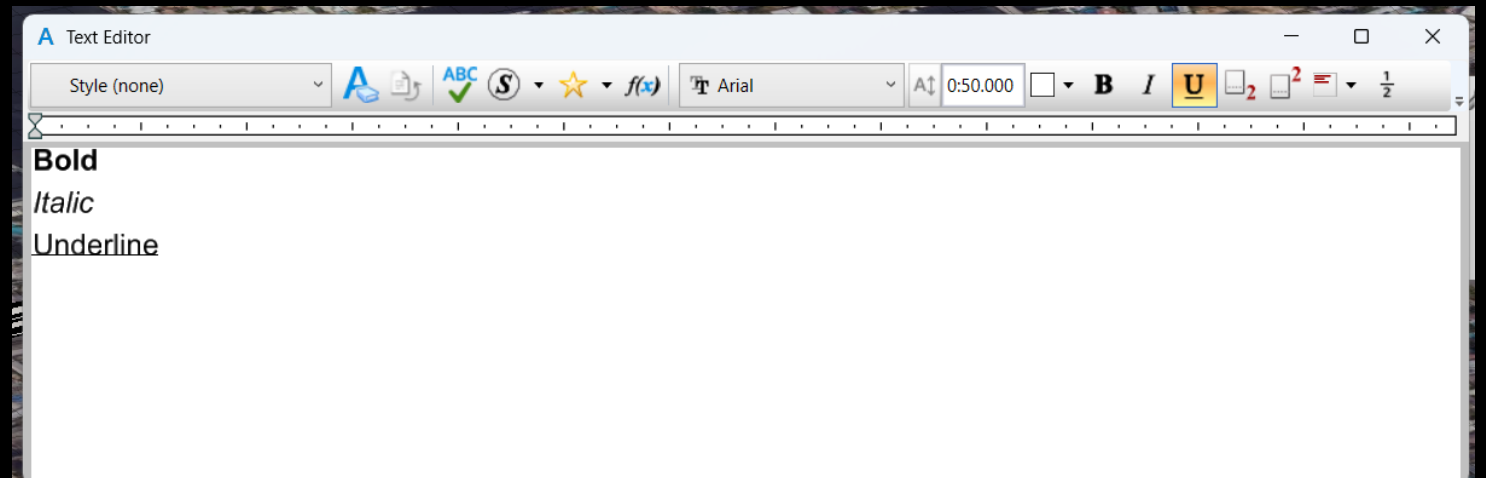


2025 - Label Point Coordinate with Leader

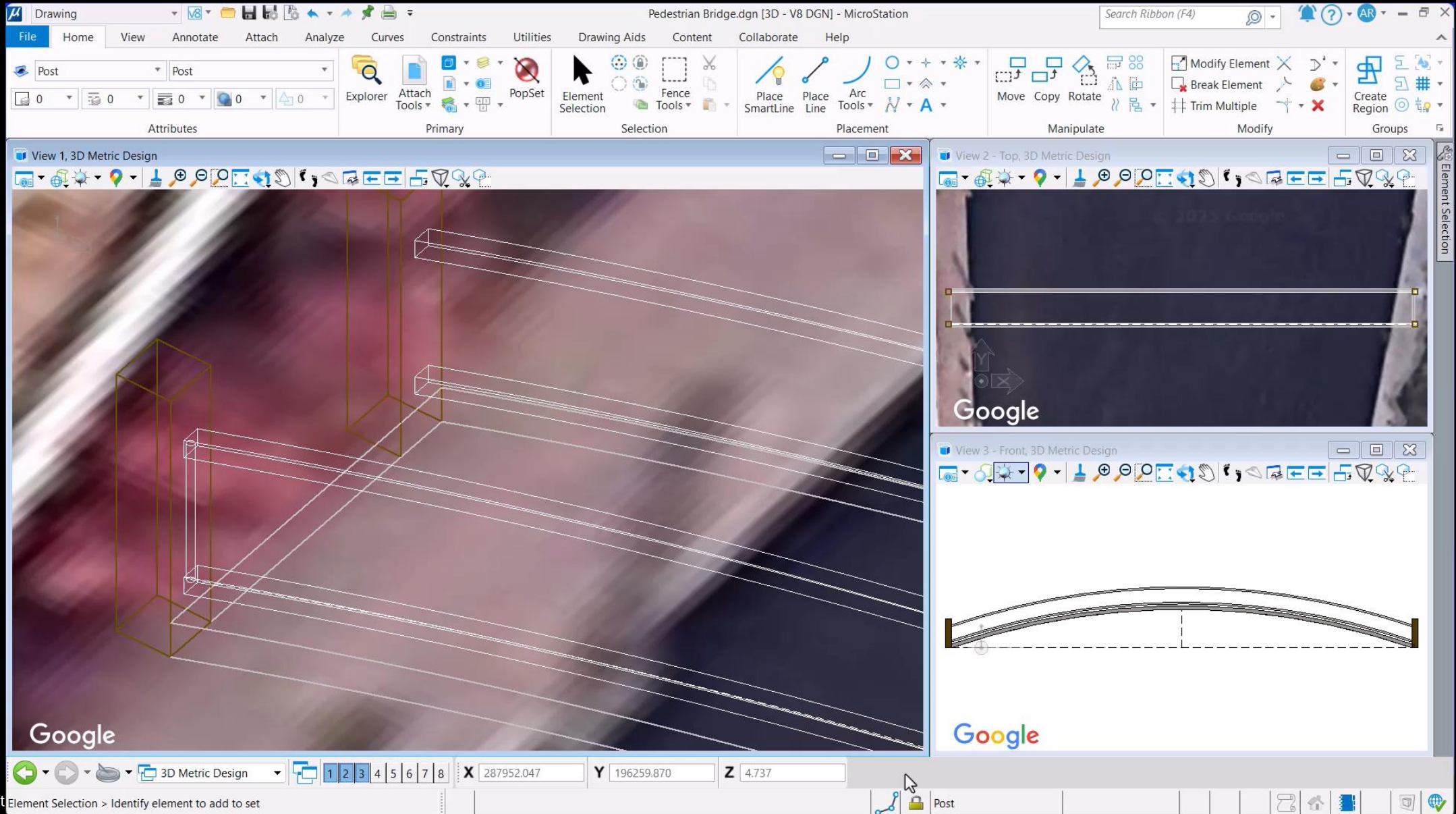


2025 – Text Editor Enhancements

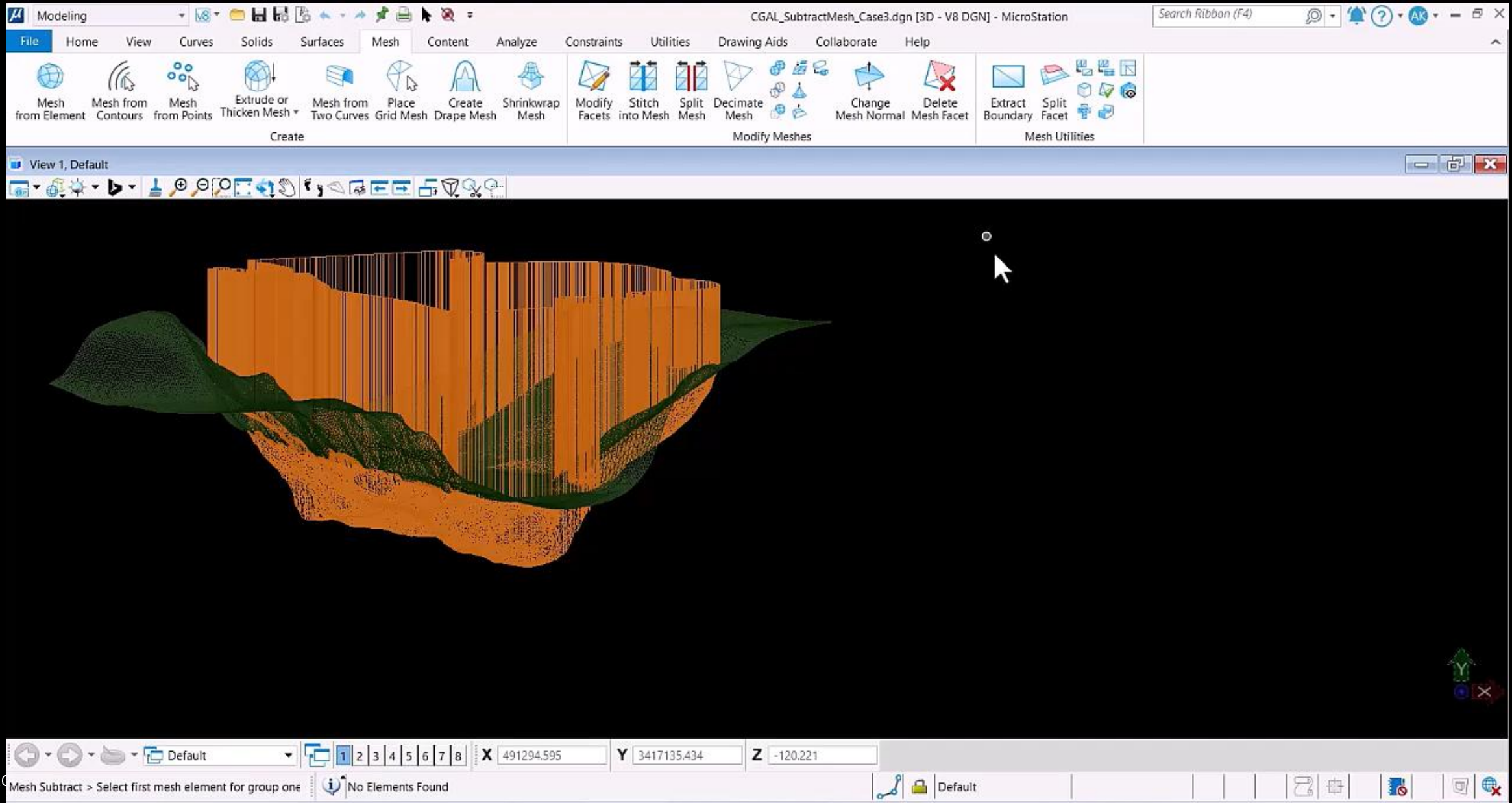
- Undo/Redo works with CTL+Z
- **Bold** – CTRL+B
- *Italic* – CTRL+I
- Underline – CTRL+U



2025 – Associative Arrays



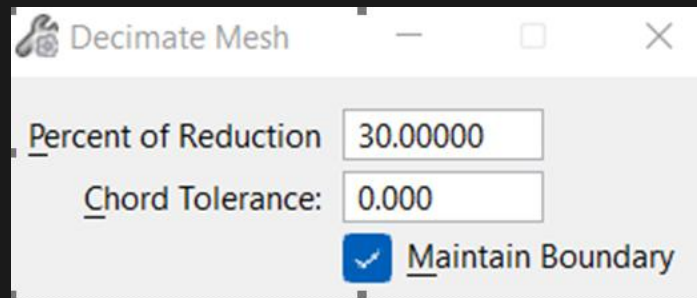
2025 - Mesh Enhancements - CGALMeshOps



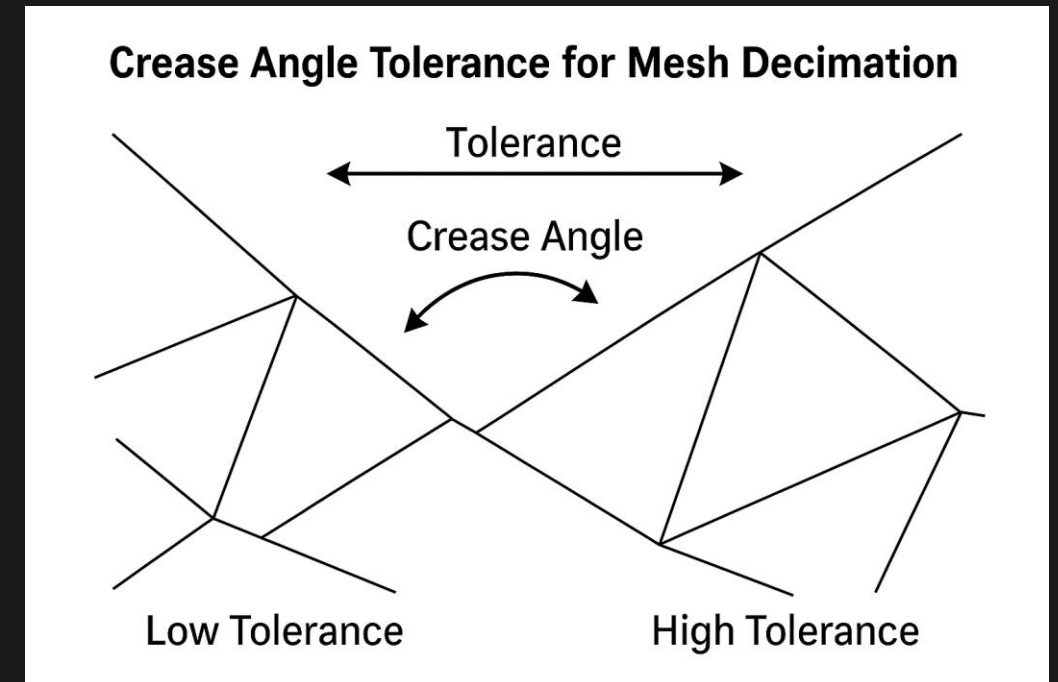
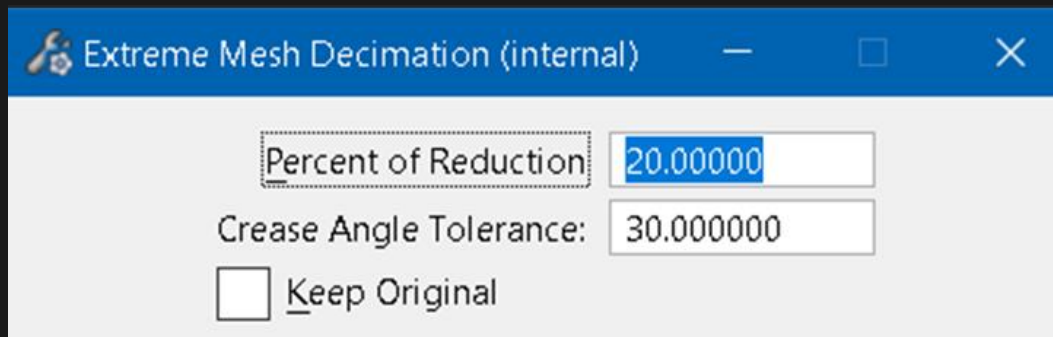
2025 - Mesh Enhancements – Extreme Decimation

- This is an enhanced version of the decimate tool, featuring an angle tolerance setting for better control over mesh simplification.

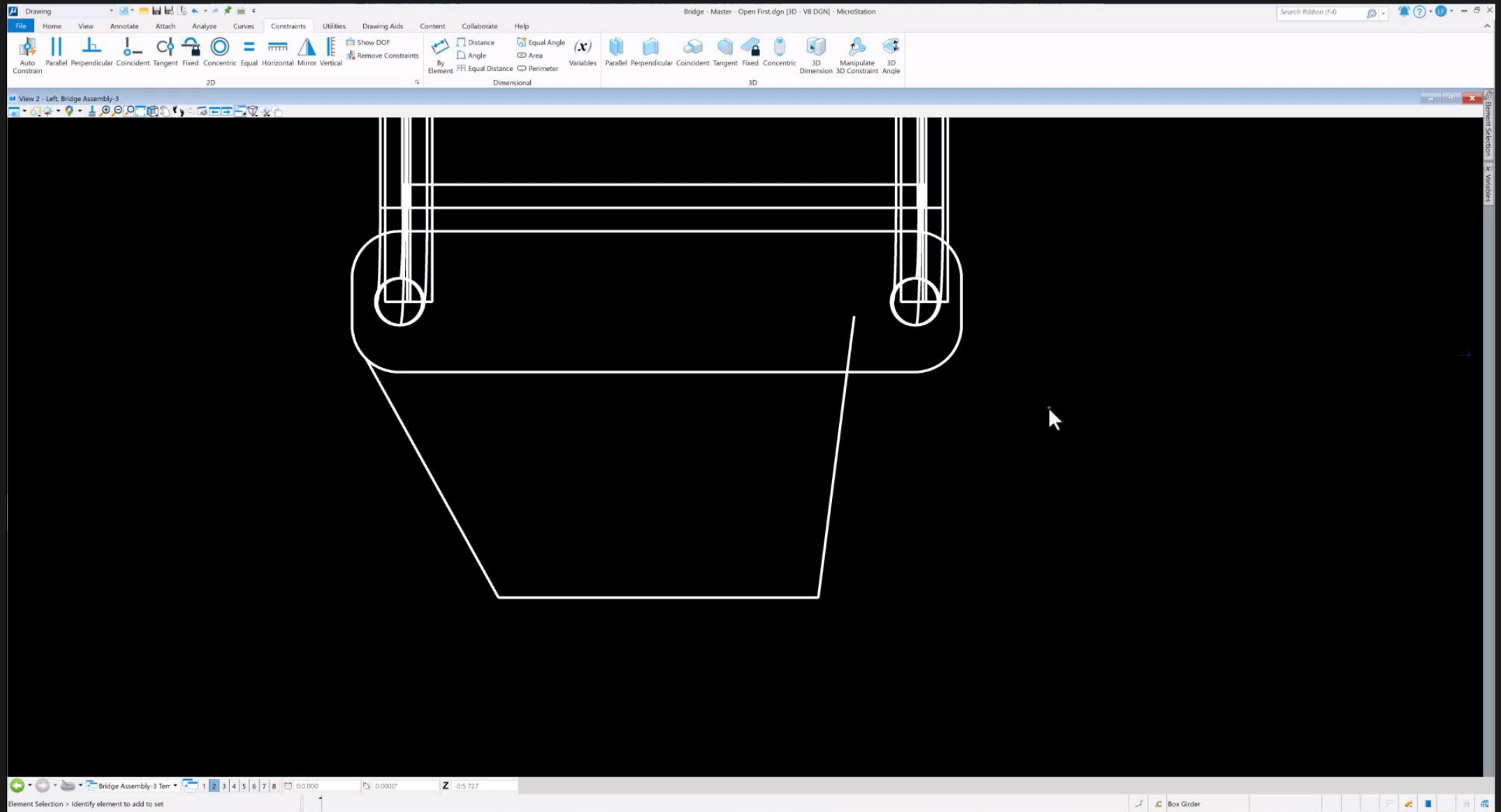
Current Tool :



Tech Preview Extreme Decimation tool :



2025 – Equal Angle Constraint





AI Automation

Bentley's Core Principles for Data and Generative AI



Control

You retain control of your design data, and you get to decide whether to use it to train AI models for your benefit.

Contribute

Where relevant, you can choose to contribute your design data to train those AI models that benefit everyone collectively.

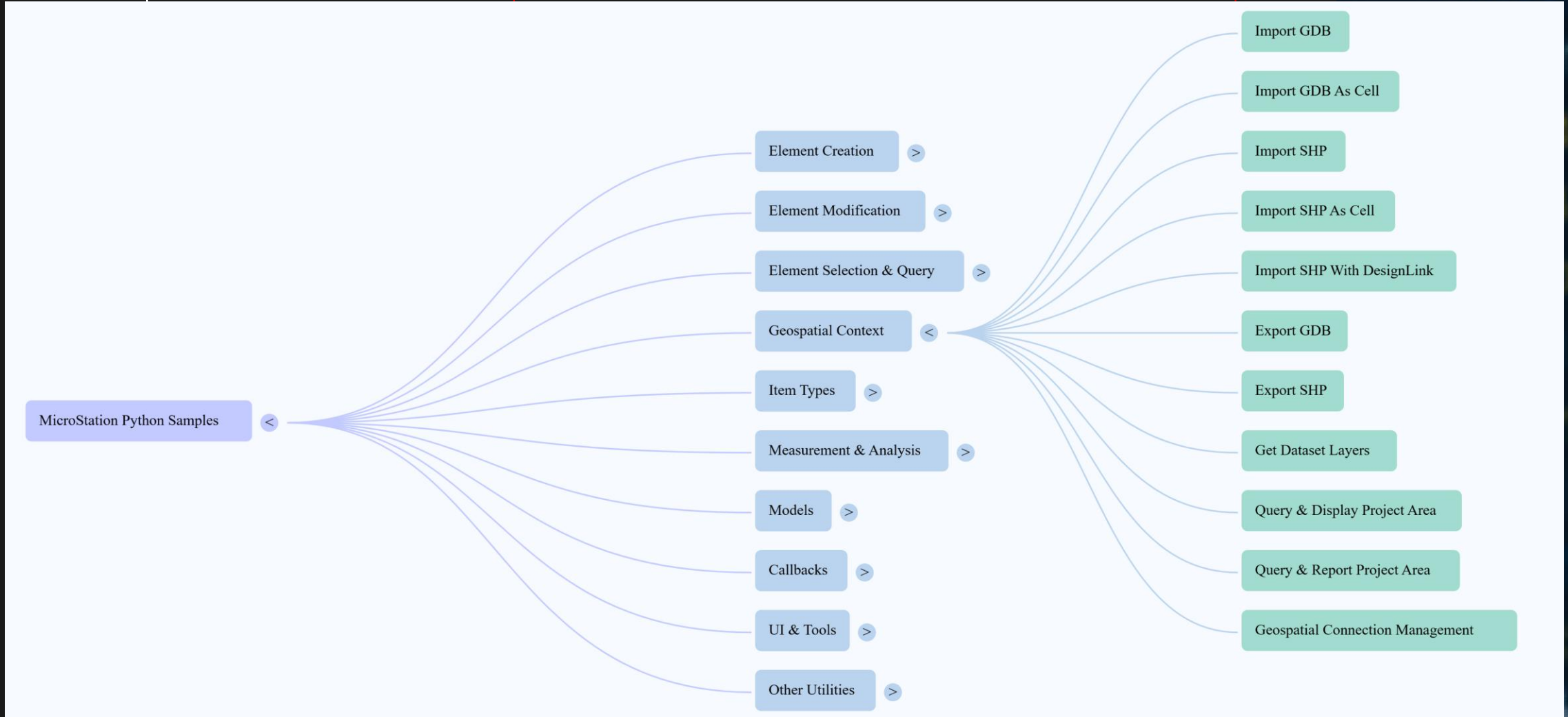
Trust

We will be transparent about how we created an AI model and how we obtained the data used to train it.

Optional Opt-In

Python Samples

- 25.0 - Python Samples (153)
 - Geospatial



Bridge - Master - Open First.dgn [3D - V8 DGN] - MicroStation

Search Ribbon (F4)

File Home View Annotate Attach Analyze Curves Constraints Utilities Drawing Aids Content Collaborate Help

OLE (x) MDL Applications Close Tool Boxes Connect to Browser Utilities

Display Convert Capture Image

Play Record Stop Macros

VBA Manager Python Editor

Commit Initialize Design History

Signatures Signature Cell Security

Coordinate System Geographic

Meters Centimeters

Full Size 1 = 1 Custom ACS Full Size 1 = 1 Drawing Scale

Show Annotation Elements

View 1, Bridge Assembly

Python Editor - C:\ProgramData\Bentley\PowerPlatformPython\Examples\Microstation\GeospatialContext\AddGeographicCoordinateSystemToModel.py

Select Project...

- Examples
 - Microstation
 - 3DModeling
 - ChangeGlassColor
 - COM
 - DgnEC
 - DgnElements
 - DgnModel
 - DgnTool
 - EC
 - GeospatialContext
 - AddGeographicCoordinateSystemToModel**
 - ClearImportedFeatures
 - CreateCustomGCS_StLouisTM96
 - GDBExport
 - GDBImport
 - GDBImportAsCell
 - GeospatialContextConnection
 - GeospatialContextUtilities

```
1 from MSPyBentley import *
2 from MSPyBentleyGeom import *
3 from MSPyECObjects import *
4 from MSPyDgnPlatform import *
5 from MSPyDgnView import *
6 from MSPyMstnPlatform import *
7
8 ...
9 Example adding Geographic Coordinate System (GCS) to the
10
11 1. Delete GCS in active model
12 2. Create a GCS in active model for Fort Lauderdale, Flor
13 3. Delete GCS in active model
14 4. Create a GCS in active model for Fort Lauderdale, Flor
15 5. Delete GCS in active model
16 6. Create a GCS in active model by well-known text (WKT)
17 ...
18
19 def AddGCSByIdToActiveModel(epsCode):
```

100%

Terminal

Python Assistant New chat

Current Chat Chat History

Geometry

Can you write a script which creates a distance constraint between two planar faces in 3D?

Can you write a script which implements a tool to create a polyface mesh (mesh with facets defined by points) based on user-clicked points defining each facet?

Can you write a script which creates a new named group and adds all currently selected elements to it?

Can you write a script which performs a flood operation from a user-clicked point to identify a closed boundary and create a shape element

Ask Assistant

Send

Use Python Assistant as a guide. Python Assistant can make mistakes.[Technology Preview]

Default 1 2 3 4 5 6 7 8 X 287801:3.609 Y 196296:85.171 Z 157:58.843

Element Selection > Identify element to add to set

Seawall and Dock

MicroStation 2025.00.01.62

The screenshot displays the MicroStation Python Editor interface. The main window shows a Python script in `FLUG.py` with the following code:

```
38 ret, cellname = cellquery.ExtractName(en)
39 # Get origin
40 origin = DPoint3d()
41 cellQuery.ExtractOrigin(origin, eh)
42 x = origin.x / uorPerMast
43 y = origin.y / uorPerMast
44 cell_data.append(("Shared Cell", str(cellName),
45
46 # Tally by (cell_type, cell_name, x, y)
47 tally = {}
48 for cell_type, cell_name, x, y in cell_data:
49     key = (cell_type, cell_name, x, y)
50     tally[key] = tally.get(key, 0) + 1
51
52 # Print table header
53 print("{:<20} {:<30} {:>12} {:>12} {:>8}".format("Cell",
54 print("-" * 90)
55 for (cell_type, cell_name, x, y), count in sorted(tally.items(), key=lambda item: item[1], reverse=True):
```

The terminal window shows the output of the script:

```
Normal Cell      Rectangle      2
Normal Cell      Triangle      1
-----
Total unique cells: 3
-----
```

The Python Assistant chat window is open on the right, showing a chat history and a custom instruction box. The chat history includes a message from the user: `tally_cells_with_coordinates()`. The assistant's response includes an explanation and a confidence level:

Explanation:

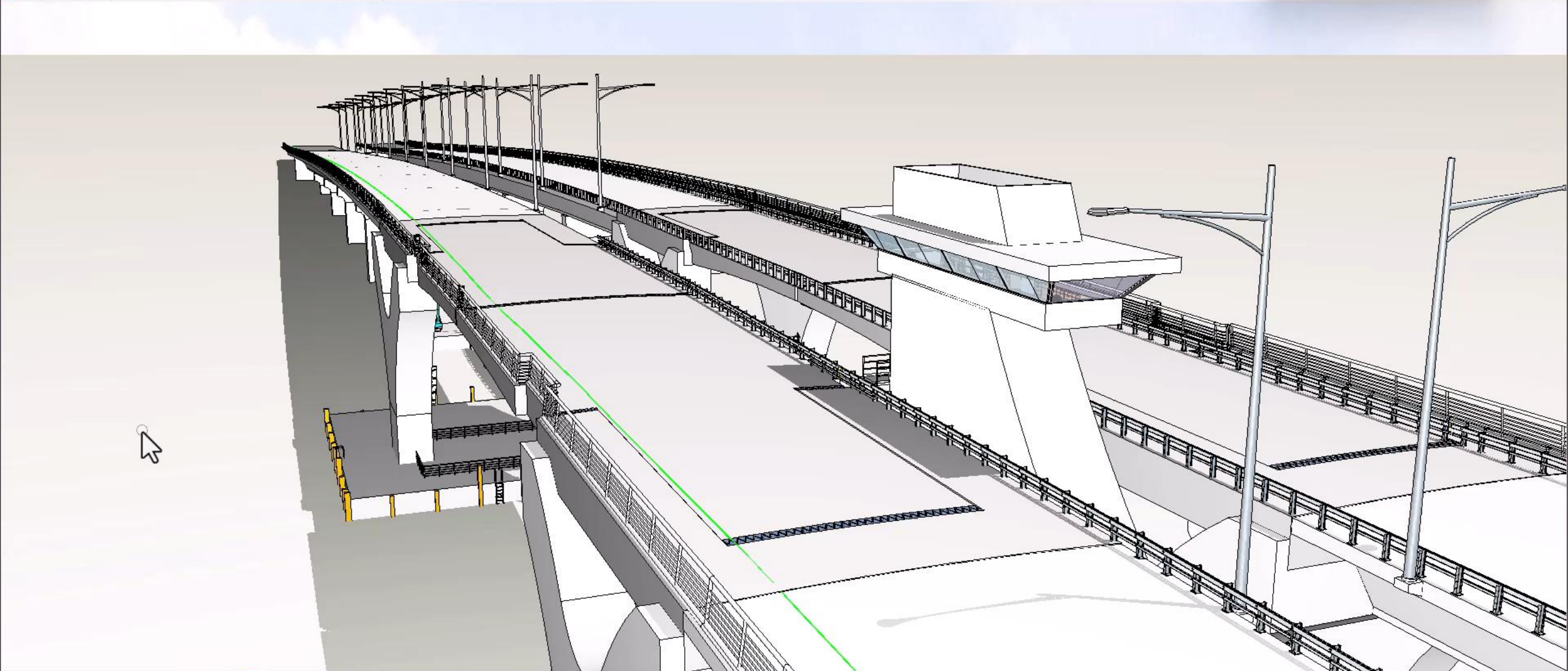
- The script now extracts the X and Y coordinates (in master units) for each cell using `ExtractOrigin`.
- The table includes columns for Cell Type, Cell Name, X, Y, and Count.
- Coordinates are scaled from UORs to master units as per best practice.
- Only verified API methods are used.

Confidence: High. This follows the correct API usage for extracting cell origins and scaling coordinates.

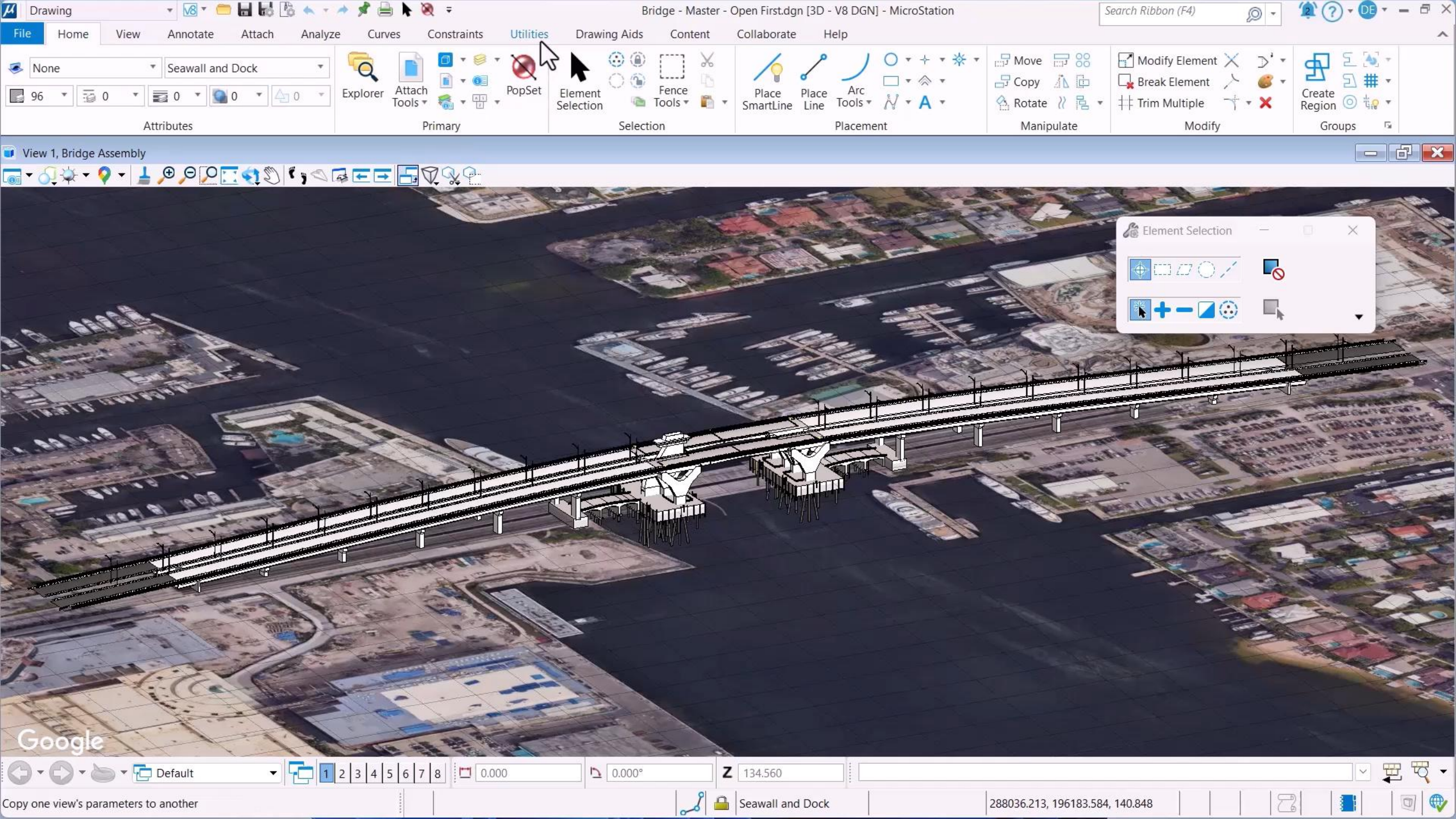
The chat window also features a "Custom Instructions" box with the text: `Include active python file: FLUG.py`. At the bottom of the chat window, there is a "Send" button and a "Solve Error" button.

MicroStation interface showing the ribbon menu with tabs: File, Home, View, Annotate, Attach, Analyze, Curves, Constraints, Utilities, Drawing Aids, Content, Collaborate, Help. The Utilities tab is active, displaying tools like OLE, Named Expressions, MDL Applications, Close Tool Boxes, Connect to Browser, Display, Convert, Capture, AddDeleteAlongPath, VBA Manager, Python Manager, Commit, Initialize, Design History, Signatures, Signature Cell, Coordinate System, and Drawing Scale. A search bar at the top right contains the text "Search Ribbon (F4)".

View 1, Bridge Assembly



MicroStation status bar showing coordinates: X: 291704.26.464, Y: 196508.23.500, Z: -905.80.754. The bottom right corner displays the text "Element Selection > Settings Saved".



Cells in Active DGN					
Element ID Cell Name X Y					
	Element ID	Cell Name	X	Y	
1	5230367	Smart Solid	2881320572.000	1960517963.000	
2	5230433	Smart Solid	2881317205.000	1960519623.000	
3	5235242	Smart Solid	2881699979.000	1960465481.000	
4	5310931	Smart Solid	2881262254.500	1960470171.000	
5	5310958	Smart Solid	2881263022.000	1960470068.500	
6	5311570	Smart Surface	2881475284.000	1960525333.500	

Cell Tally (by Name)		
	Cell Name	Count
1	Smart Solid	158
2	Smart Surface	5
3		238
4	MSL & Tides	1
5	Vent Screens	8
6	Lighting	44

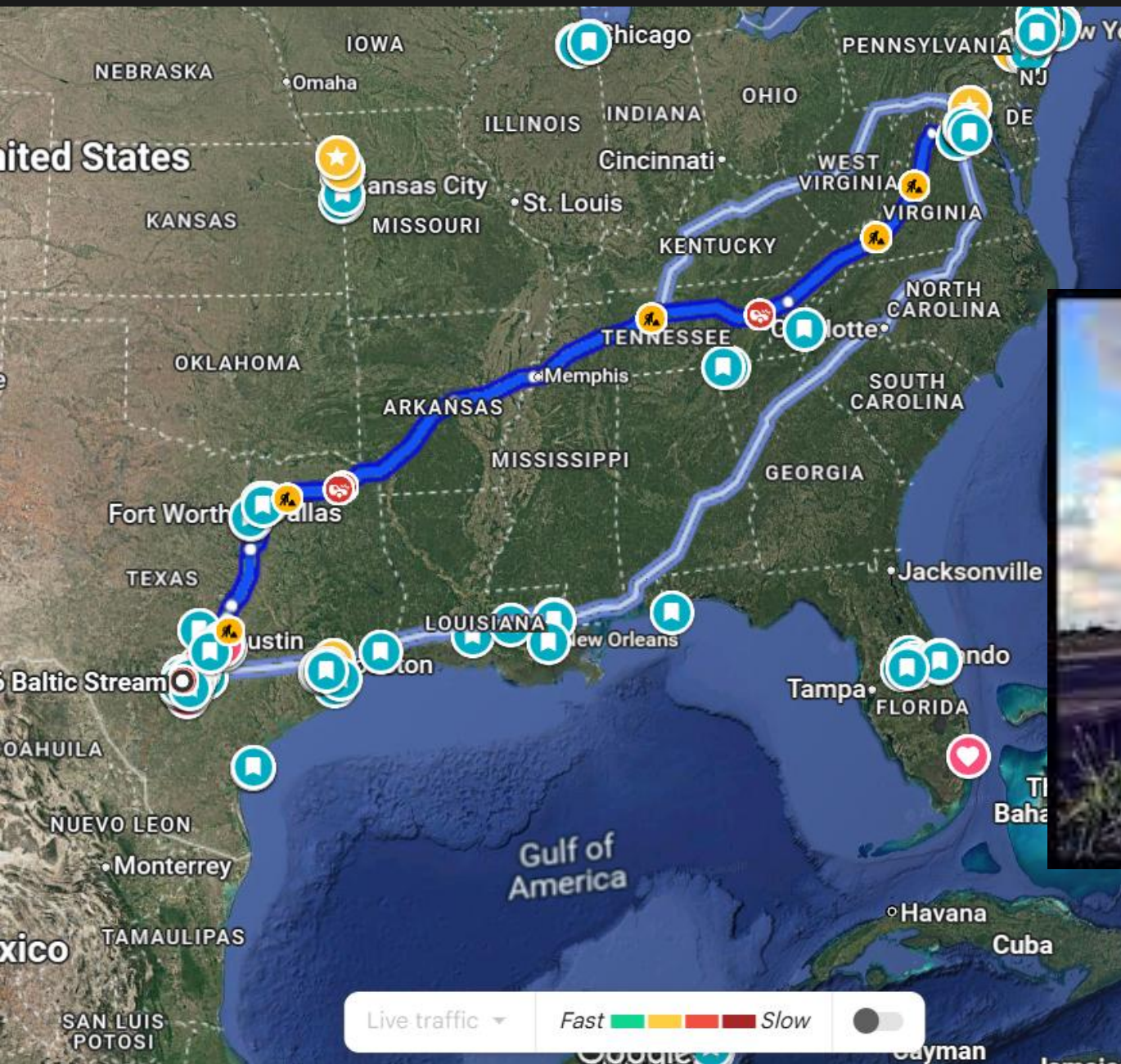
Export to CSV	Open CSV Location	Copy Table to Clipboard	Close
---------------	-------------------	-------------------------	-------

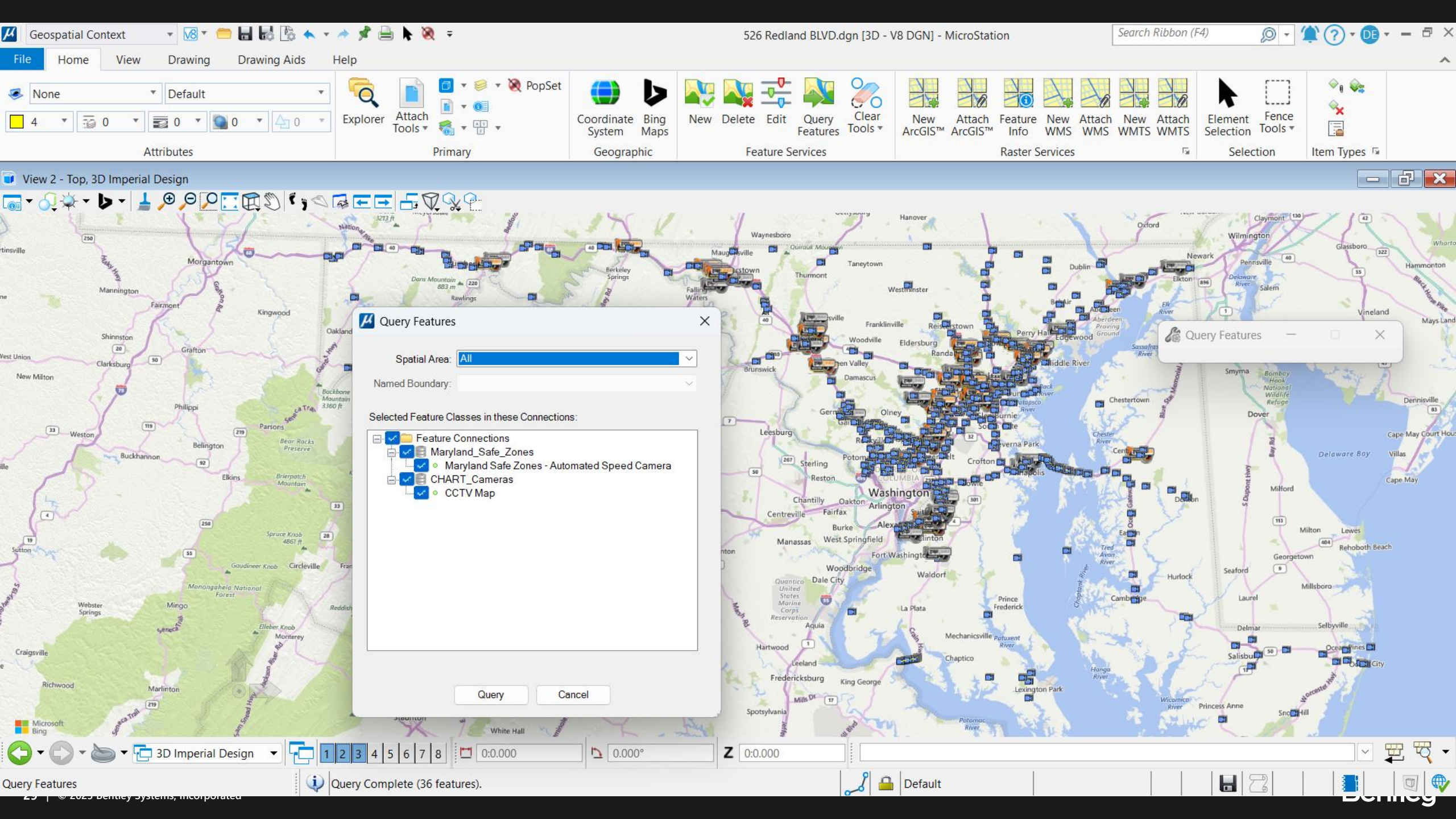


Design in Context

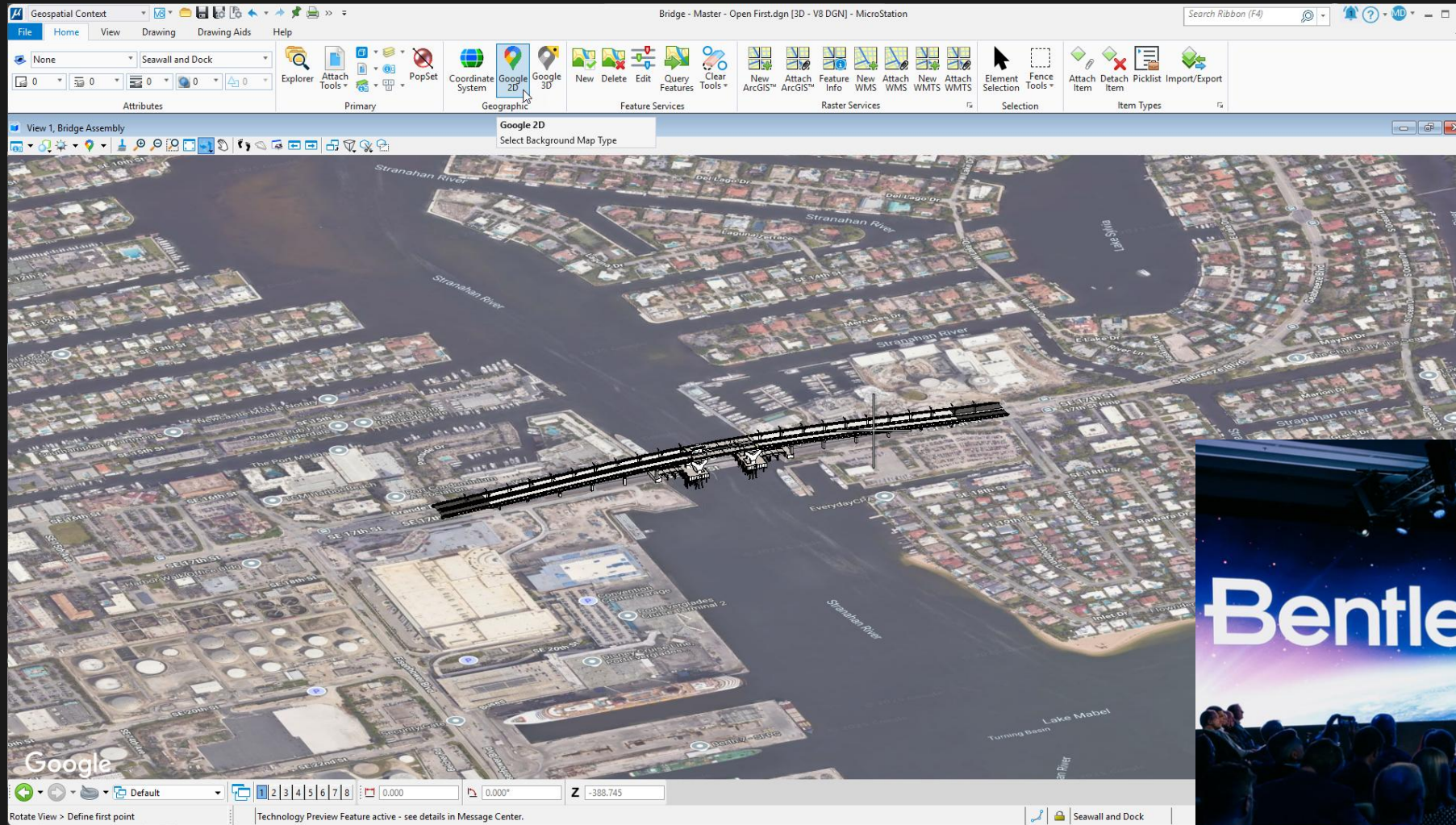
MicroStation's Geospatial Foundation

- MicroStation 2023
 - Map and Feature Services
- MicroStation 2024
 - Query and Clear Features
 - Shp import/export





Google Maps Integration (replacement of Bing Maps)



File Home View Drawing Drawing Aids Help

None Seawall and Dock

96 0 0 0 0

Attributes

Explorer Attach Tools PopSet

Primary

Coordinate System Google 2D Google 3D

Geographic

New Delete Edit Query Features Clear Tools

Feature Services

New ArcGIS™ Attach ArcGIS™ Feature Info New WMS Attach WMS New WMTS Attach WMTS

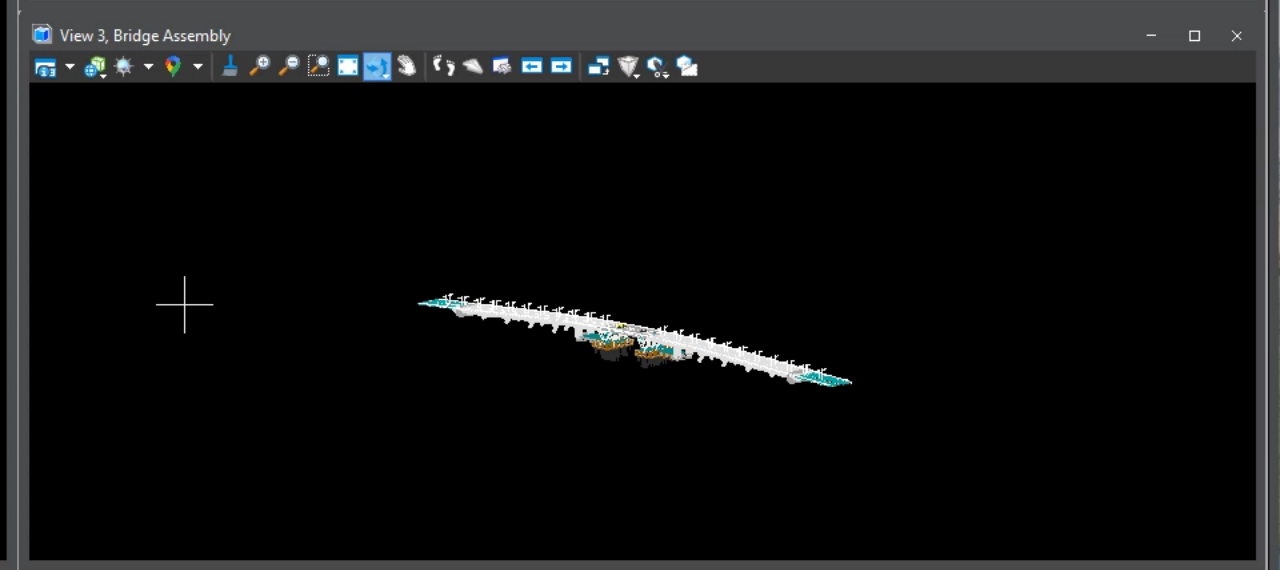
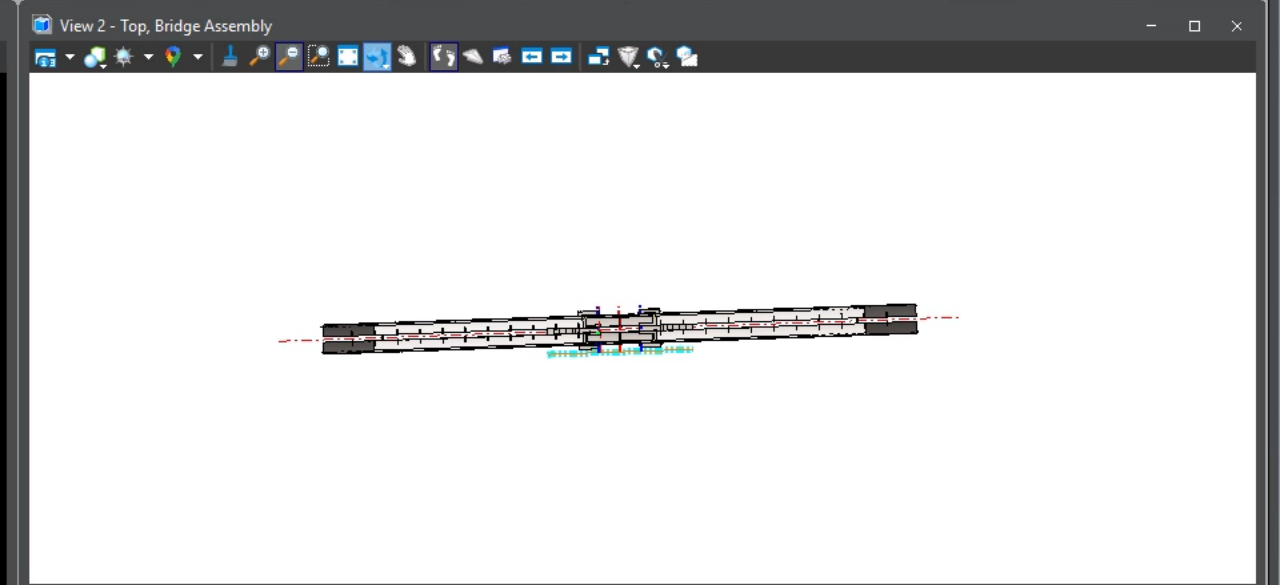
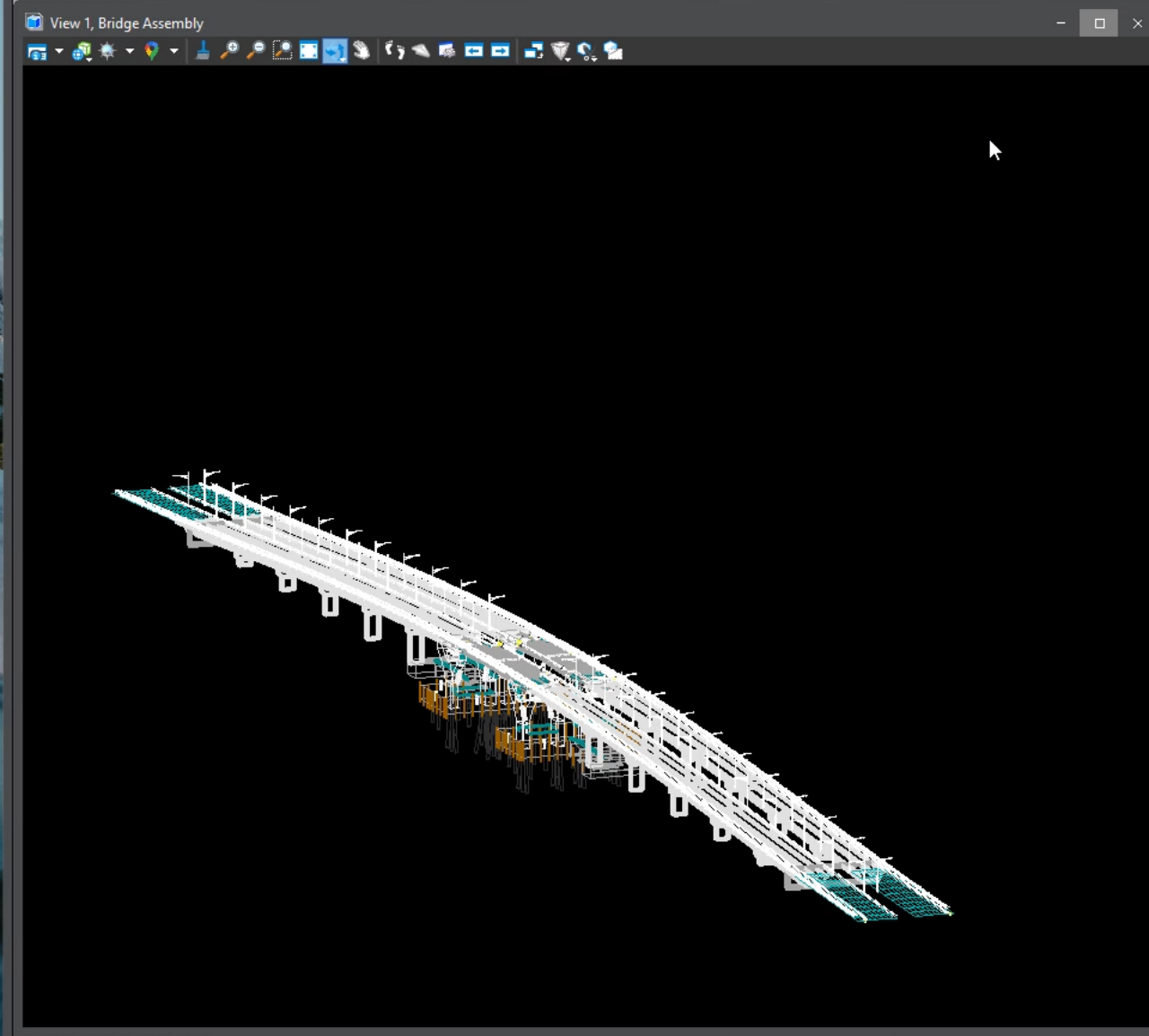
Raster Services

Element Selection Fence Tools

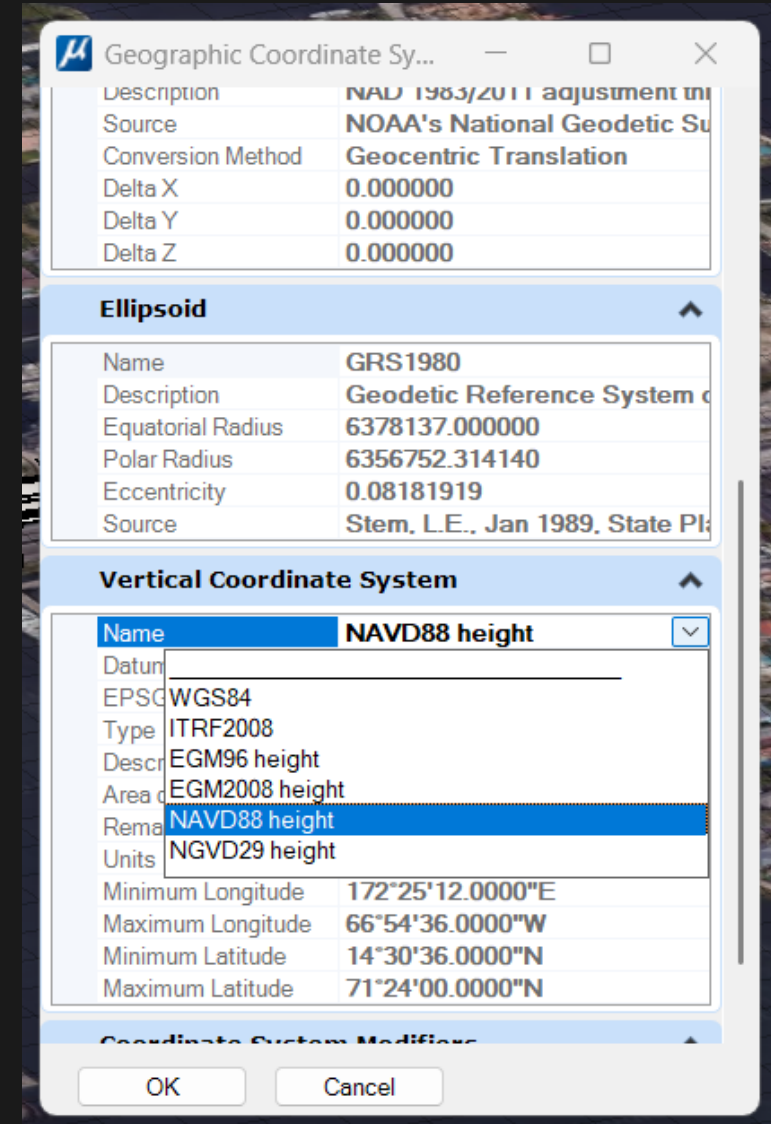
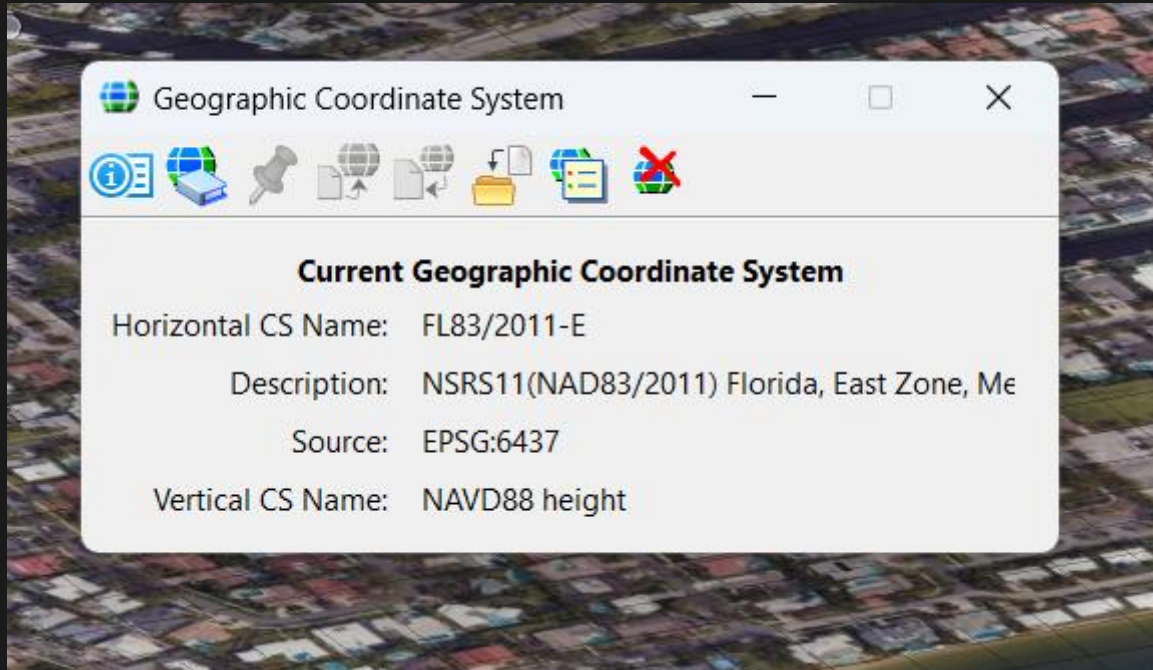
Selection

Attach Item Detach Item Picklist Import/Export

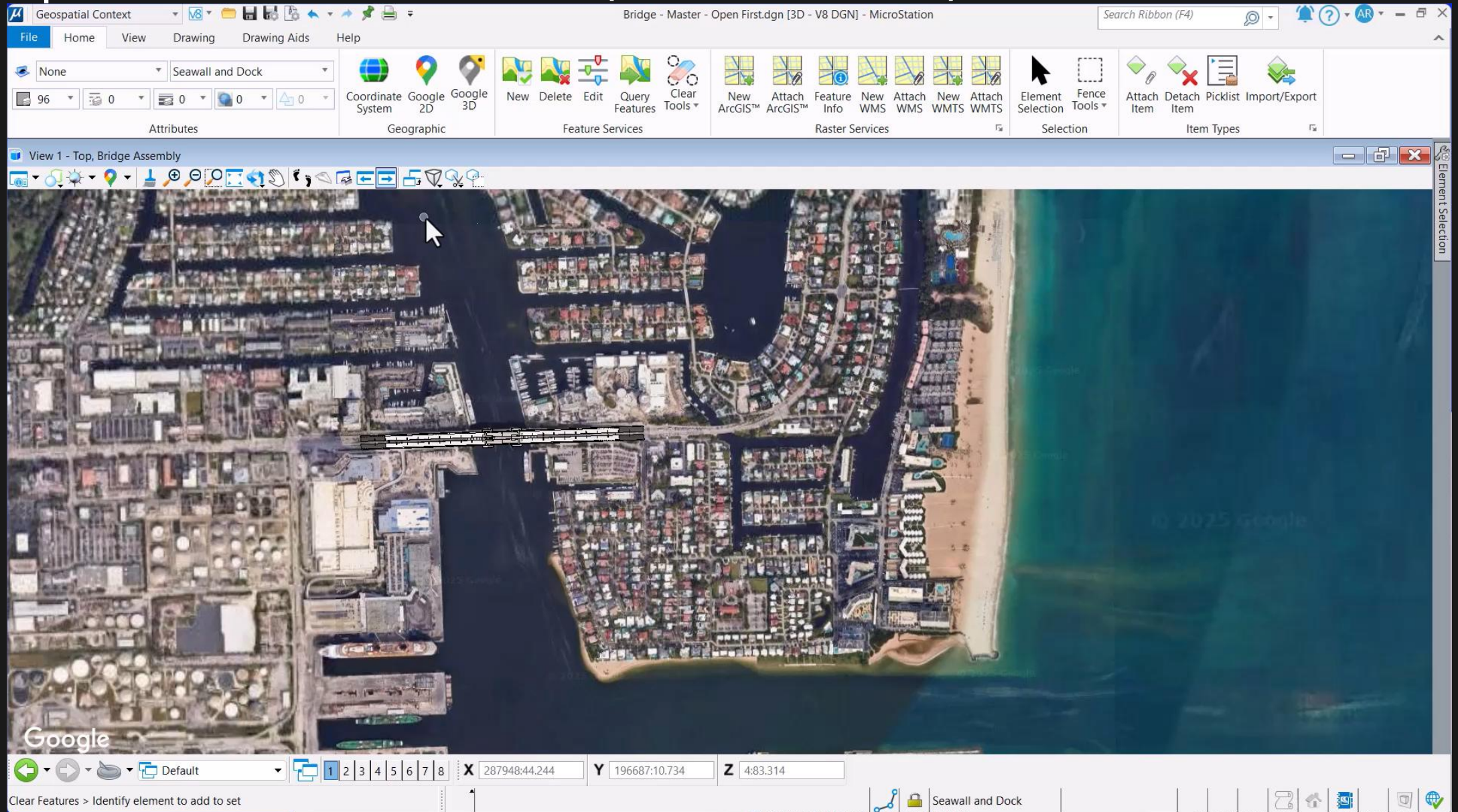
Item Types



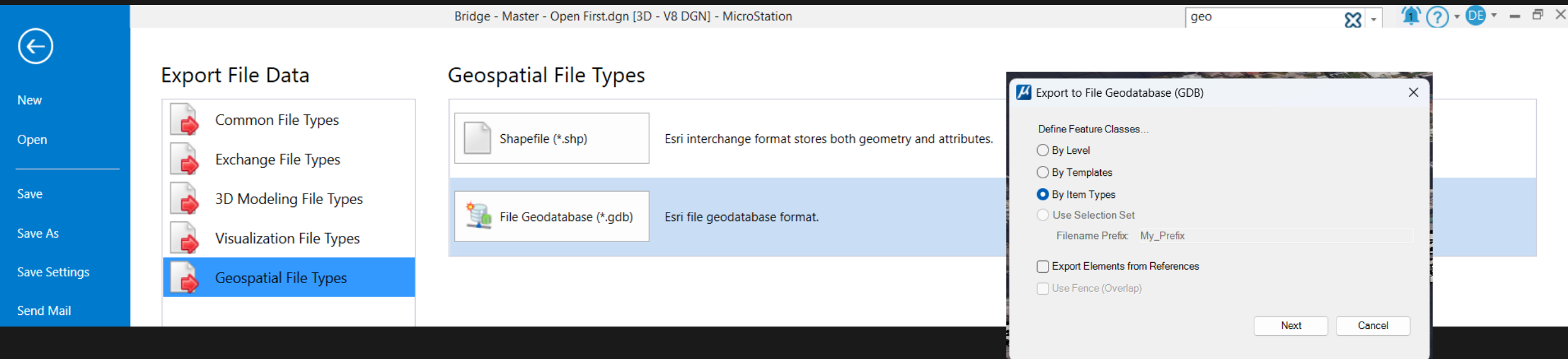
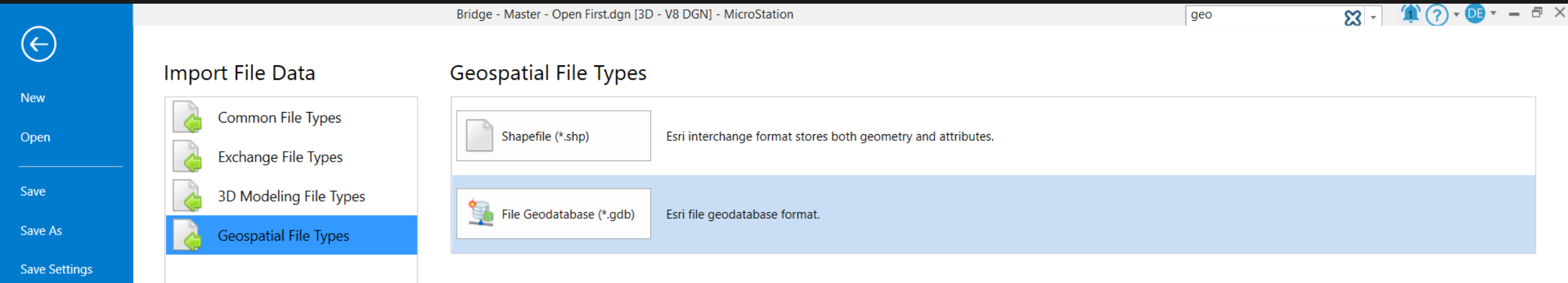
2025 - Vertical Datum Information

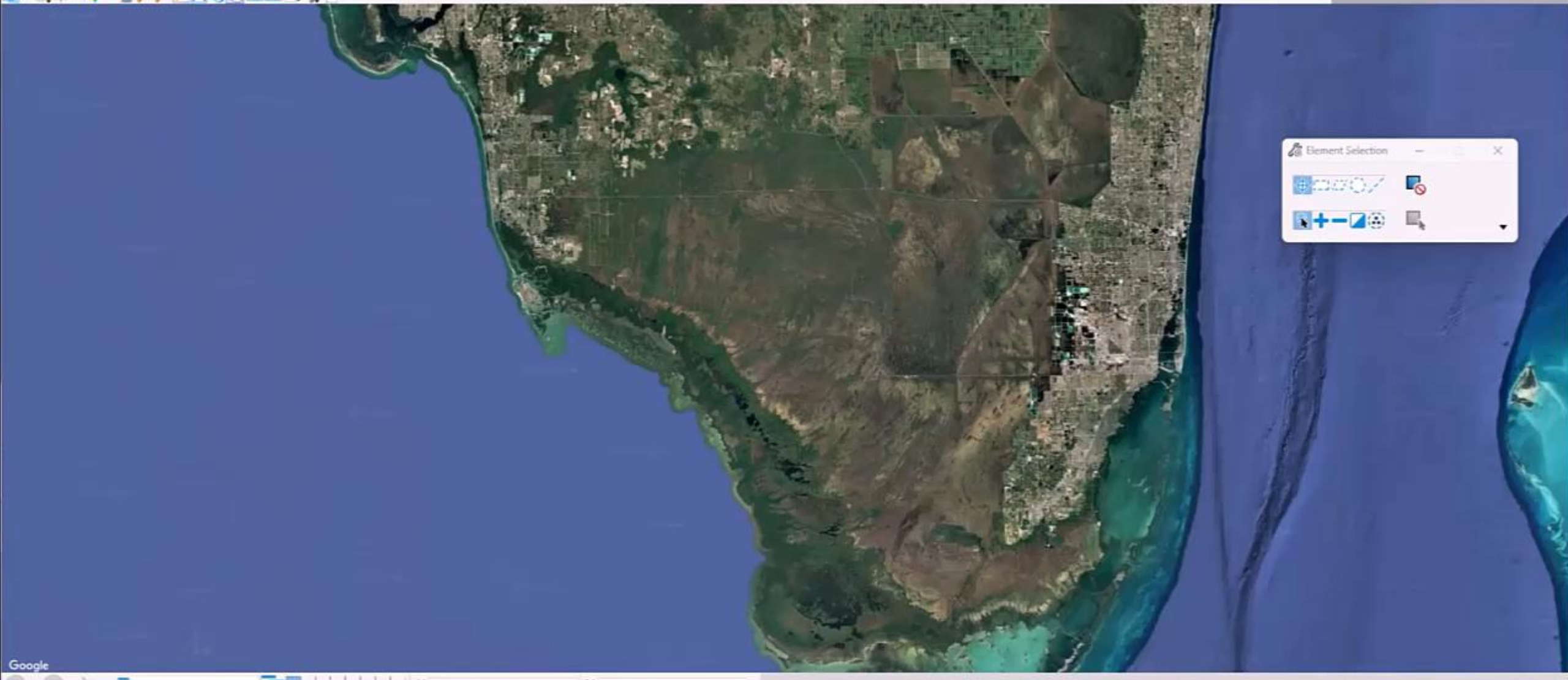
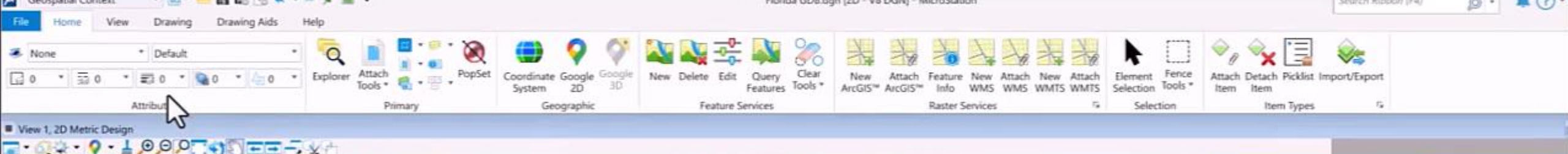


Independent zoom for cells (Cell Fixed Size)

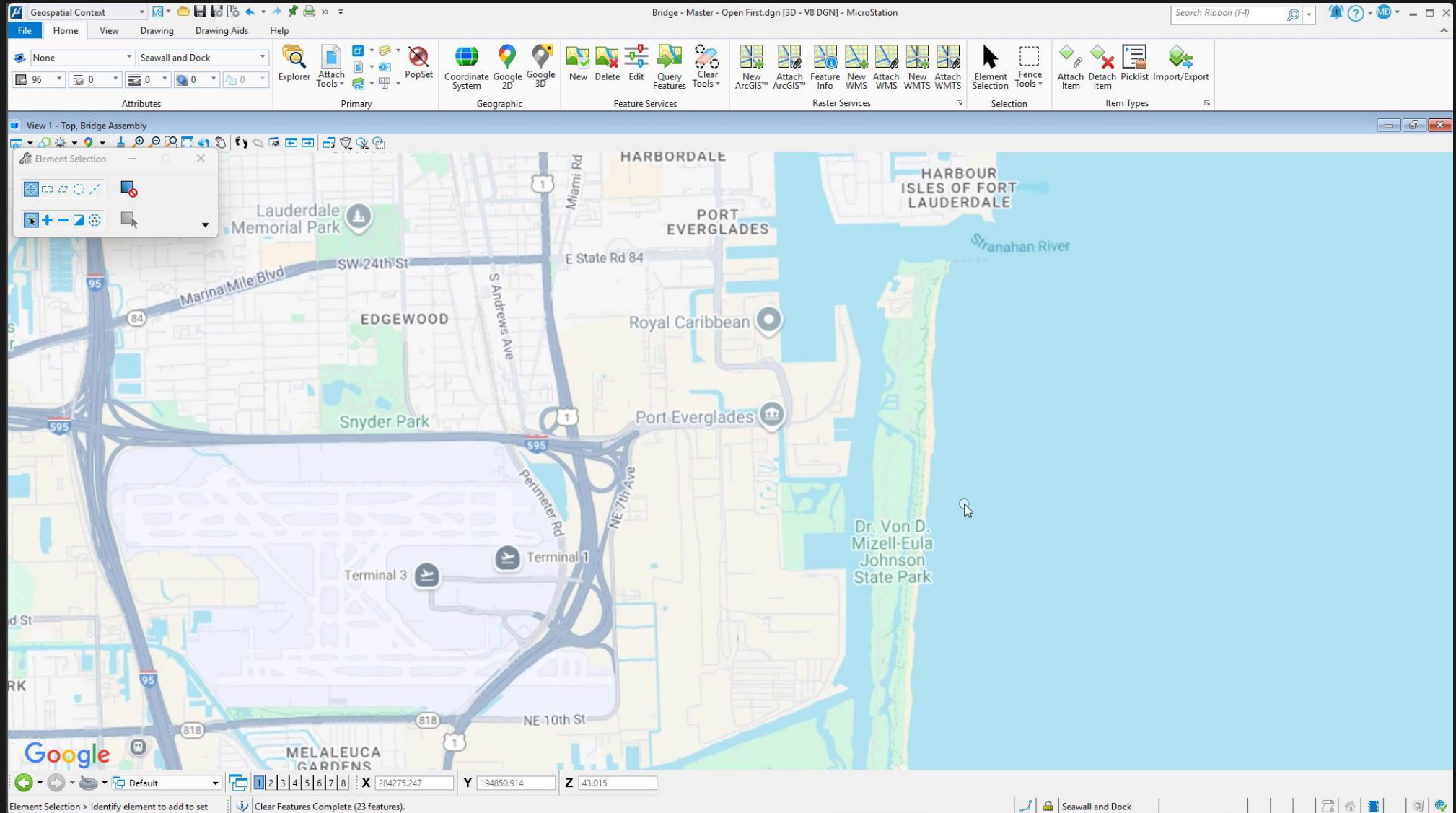


Esri File Geodatabase Support – Import/Export





2025.00.01.62 - WFS Blyncsy integration





Interoperability & Collaboration

2025 – IFC Export and workflow










Bridge - Master - Open First.dgn [3D - V8 DGN] - MicroStation

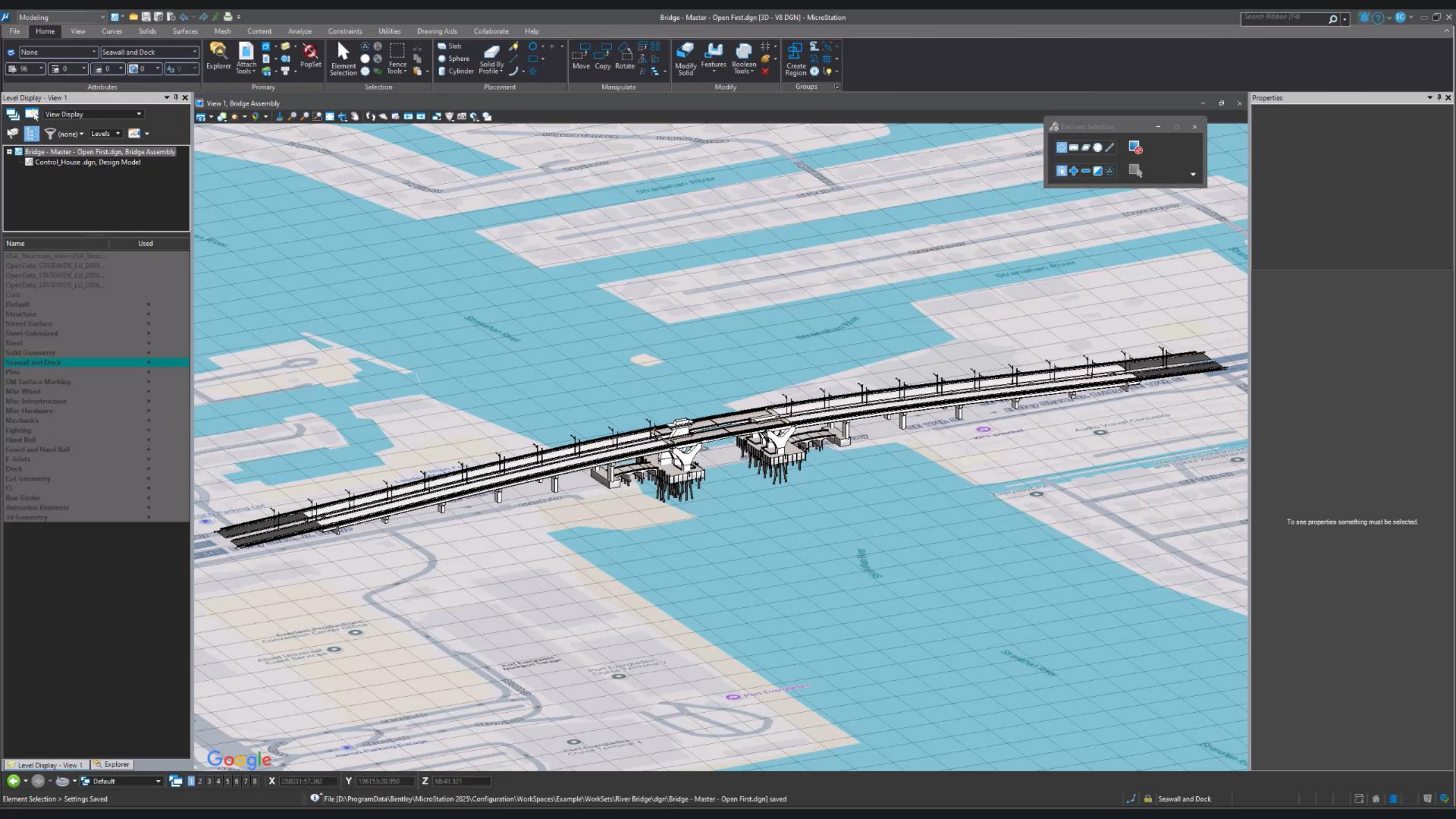
Search Ribbon (F4)

Export File Data

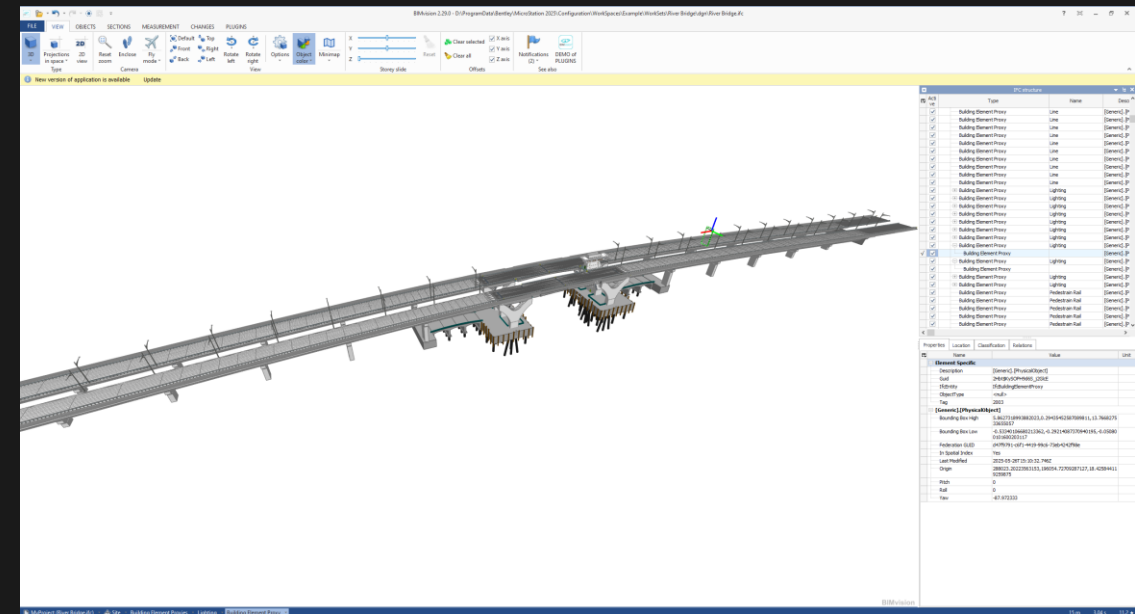
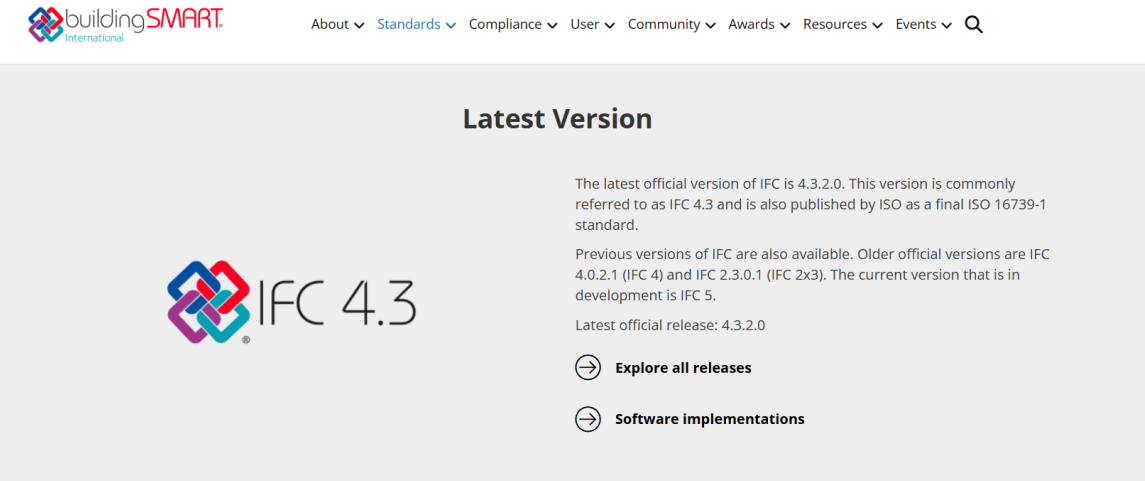
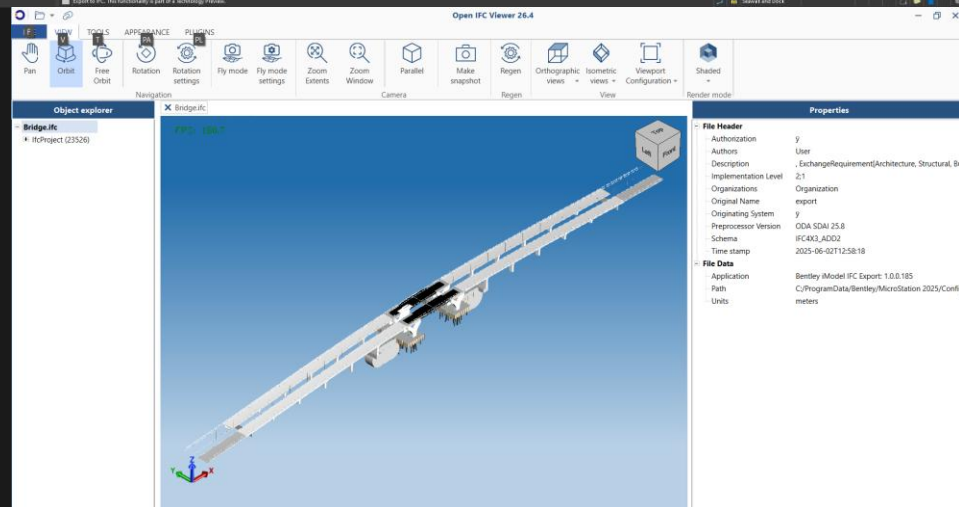
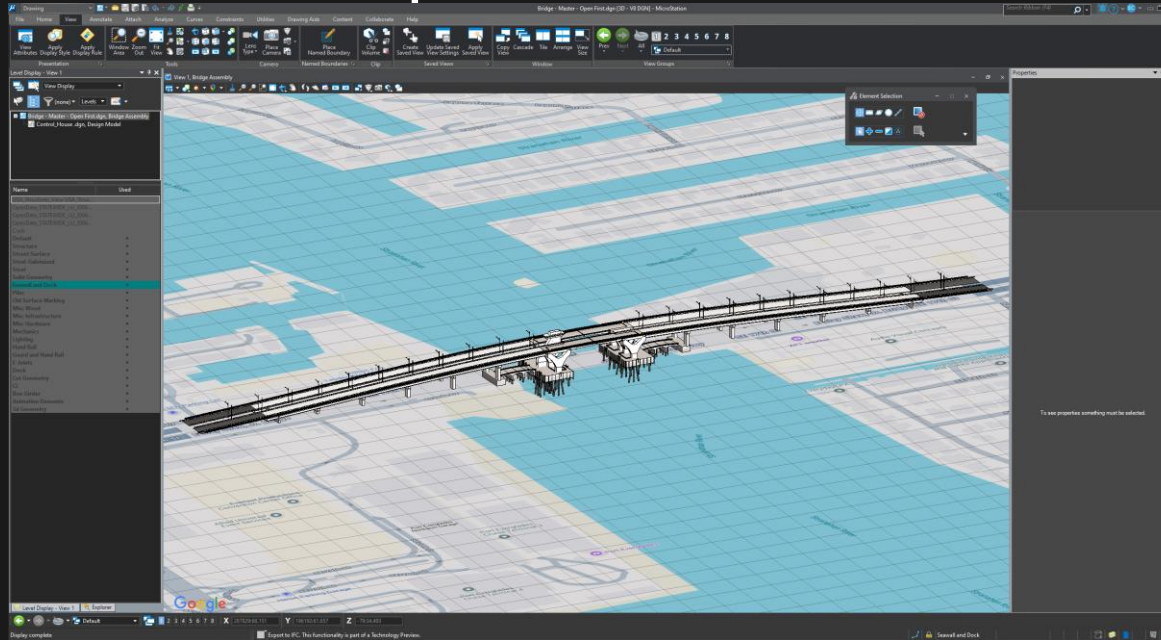
- Common File Types
- Exchange File Types**
- 3D Modeling File Types
- Visualization File Types
- Geospatial File Types

Exchange File Types

 PDF (*.pdf)	Adobe PDF.
 CGM (*.cgm)	Computer Graphics Metafile.
 Collada (*.dae)	Collaborative Design Activity. An interchange file format for interactive 3D applications.
 DXF (*.dxf)	Drawing Exchange Format. A drawing exchange file format supported by most CAD packages.
 FBX (*.fbx)	Filmbox format. A proprietary format owned by Autodesk (r).
 IGES (*.igs)	Initial Graphics Exchange Specification.
 JT Format (*.jt)	A 3D data format developed by Siemens PLM Software (formerly UGS Corp.).
 STEP (*.stp)	Standard for the Exchange of Product model data (AP203/AP214).
 IFC (*.ifc)	Industry Foundation Classes. A data model intended to describe building and construction industry data.



2025 – IFC Export



MicroStation Ideas Portal

Communities ▾ Forums Knowledge Base Login Resources ▾ Events Engage ▾

MicroStation

Resource Center



MicroStation



Knowledge Base
Articles



Release Announcements



MicroStation Forum



MicroStation Forum (日
本語)



MicroStation Forum
(Deutsch)



MicroStation Forum
(Español)



Announcements Forum



MicroStation Files



[Bentley Library]
Examples



[Bentley Library]
Utilities



[Bentley Library]
Standards ColorBooks



Coffee Corners



Events & Webinars



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MicroStation on
LinkedIn



Learn MicroStation



MicroStation Ideas

Accreditation



Dan Eng
Product Expert, MicroStation

Bentley Systems, Incorporated
685 Stockton Drive, Exton, PA 19341, United States
<https://www.bentley.com>

Bentley®

Why Bentley Accreditation?

<p>Bentley's Official Credential</p> <p>Get endorsed by Bentley for latest professional skills.</p>	<p>Account Advantage</p> <p>Enhance employee skills required for AEC Projects to increase productivity.</p>	<p>Skills That Matter</p> <p>Learn best practices and Bentley recommended workflows.</p>
<p>Industry Recognition</p> <p>Get recognition in the industry with official credential from Bentley.</p>	<p>Digital Badges</p> <p>Earn publicly verifiable digital badges which are easily shareable across your network.</p>	<p>Career Advancement</p> <p>Advance your career with right skills set.</p>

Search

Home My Network

Dan Eng
MicroStation Product Expert

Licenses & certifications

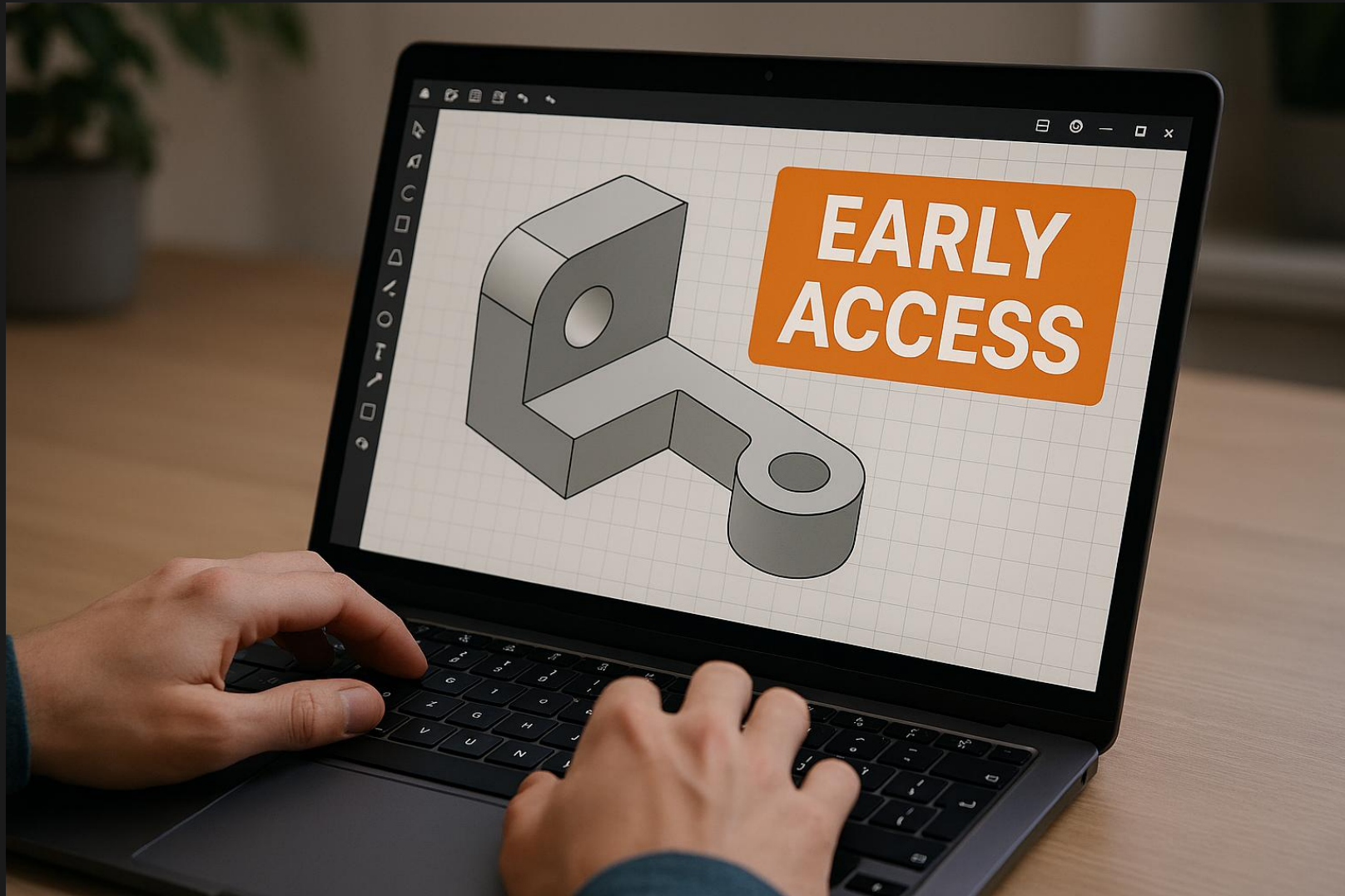
Bentley Accredited ProjectWise Fundamentals Administrator
Bentley Systems
Issued Mar 2025
[Show credential](#)

Bentley Accredited Road Modeler: OpenRoads Modeling Core Skills
Bentley Systems
Issued Feb 2025
[Show credential](#)

[Show all 17 licenses & certifications](#)

Ways to Participate and interact with the MicroStation Team

- Early Access Program
 - Non-disclosure Agreement (NDA)
 - Must have a MicroStation license
 - Able to access Nutanix environment



Product Research

[Home](#) / [Product Research](#)

Join The Product Research Program!

Help Shape The Experience Of The Bentley Products You Use

Join Now

Why Product Research?

The challenges of infrastructure can be complex, but its software doesn't have to be. You are the expert in your field, and we need your help to stress-test our solutions against YOUR reality.

How Does It All Work?

The first step is to simply [tell us you're willing to participate](#). If there is a match between your expertise and an upcoming product research activity, we'll contact you and arrange a time to meet with a researcher. You'll attend the online session, try out the product, and provide your feedback. Our product teams then use your input to improve the experience of the product you use.



What Will We Do?

Product Research sessions are virtual 1-on-1 sessions between a user and a researcher. A typical session lasts ~45 minutes and might include testing a prototype or exploring workflows. No preparation required!



What Is In It For You?

Your voice influences what gets built into the products you use. Be heard, share your feedback with the product team and get a glimpse of potential solutions.

Interested? Join Us In A Lab.

Join Now



Questions/Comments

Presenters



Tamicca Sellars
MicroStation Product Manager
Tamicca.sellars@bentley.com



Dan Eng
MicroStation Product Expert
Dan.eng@bentley.com

