



# MicroStation CONNECT Edition

What's New in the Latest Updates

**Bentley**<sup>®</sup>  
Advancing Infrastructure

# TOP 10 NEW CAPABILITIES OF

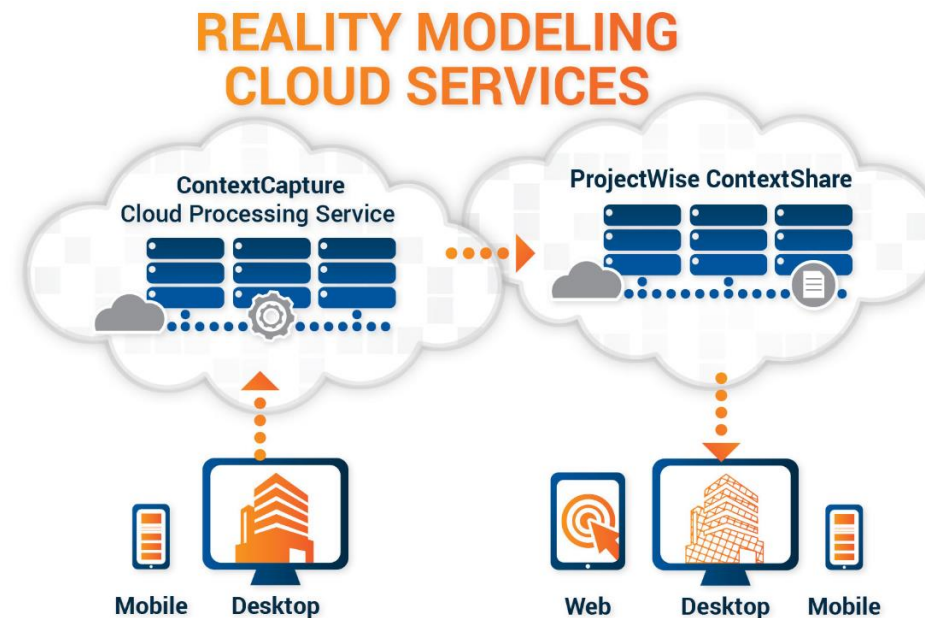
# MicroStation CONNECT Edition

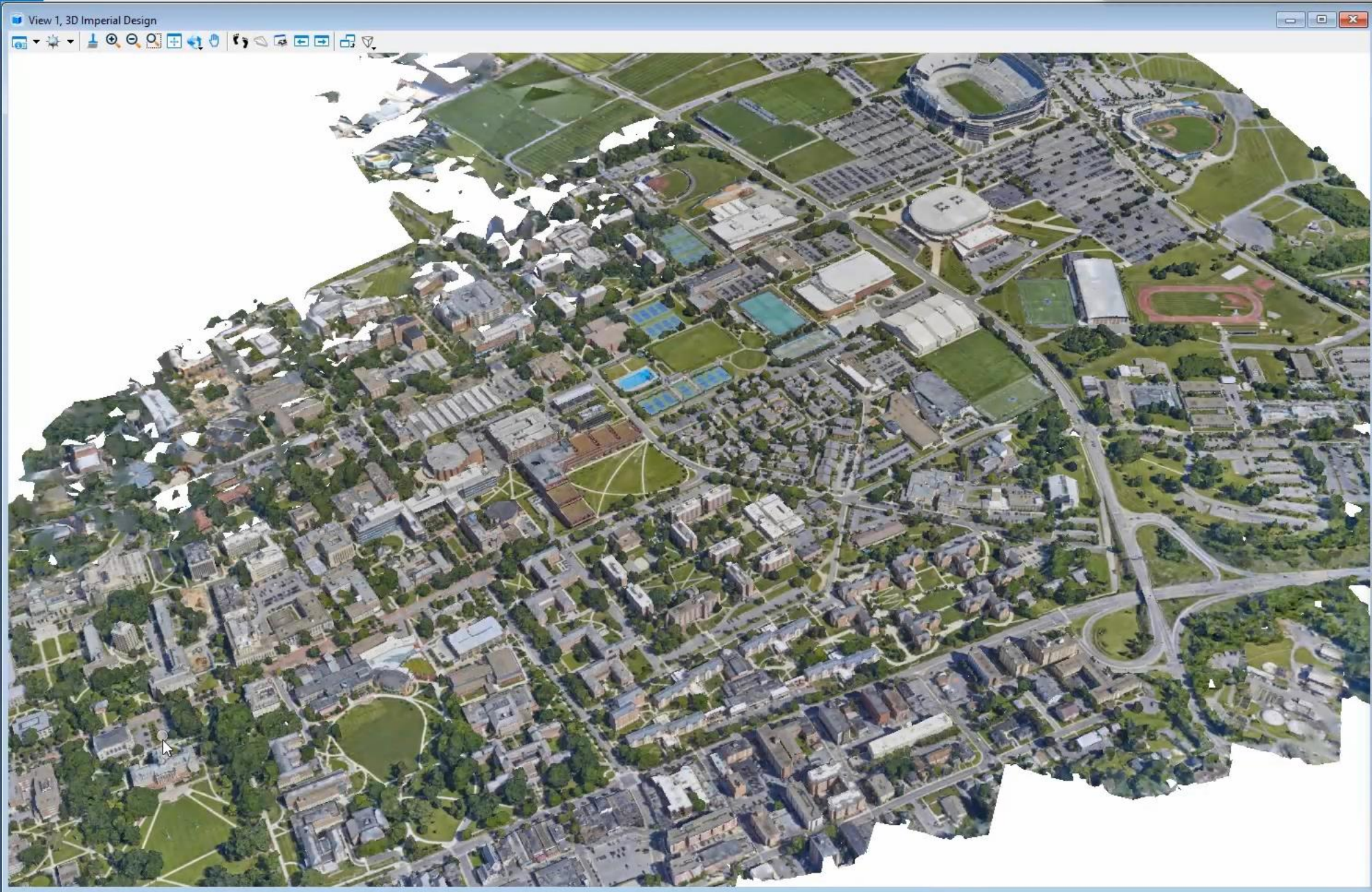
The logo for MicroStation CONNECT Edition features the word "CONNECT" in a large, outlined font. The letter "O" is replaced by a circular icon containing a hand with the index finger pointing upwards, symbolizing connectivity or user interaction. The word "Edition" is written in a smaller, solid font to the right of "CONNECT".



# 10 - Scalable Meshes

- ProjectWise ContextShare Cloud Service
- Scalable Mesh – \*.3SM
- ContextCapture Cloud Processing Service
  - Instantly upload images, define settings and create a 3D reality mesh using the latest cloud technology
  - Easy-to-use reality modeling app that allows you to quickly create 3D models using images taken with your phone or tablet





View 1, 3D Imperial Design

Properties

To see properties something must be selected.

Explorer

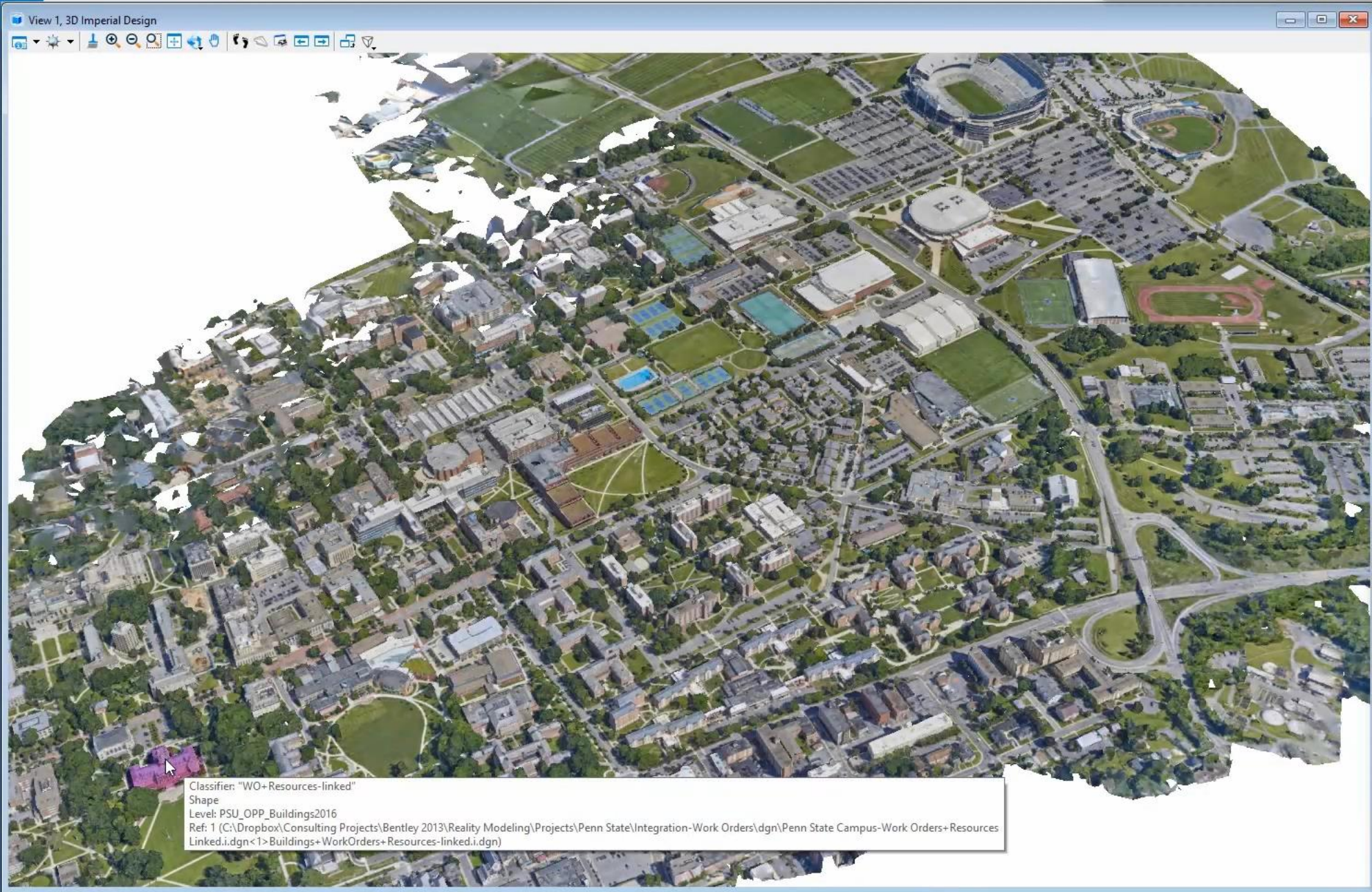
Items

Search

- ▶ MaximoWorkOrders
- ▶ PSU\_OPP\_Buildings2016
- ▶ WorkTypeResource

Sheet Index

Links



Properties

To see properties something must be selected.

Explorer

Items

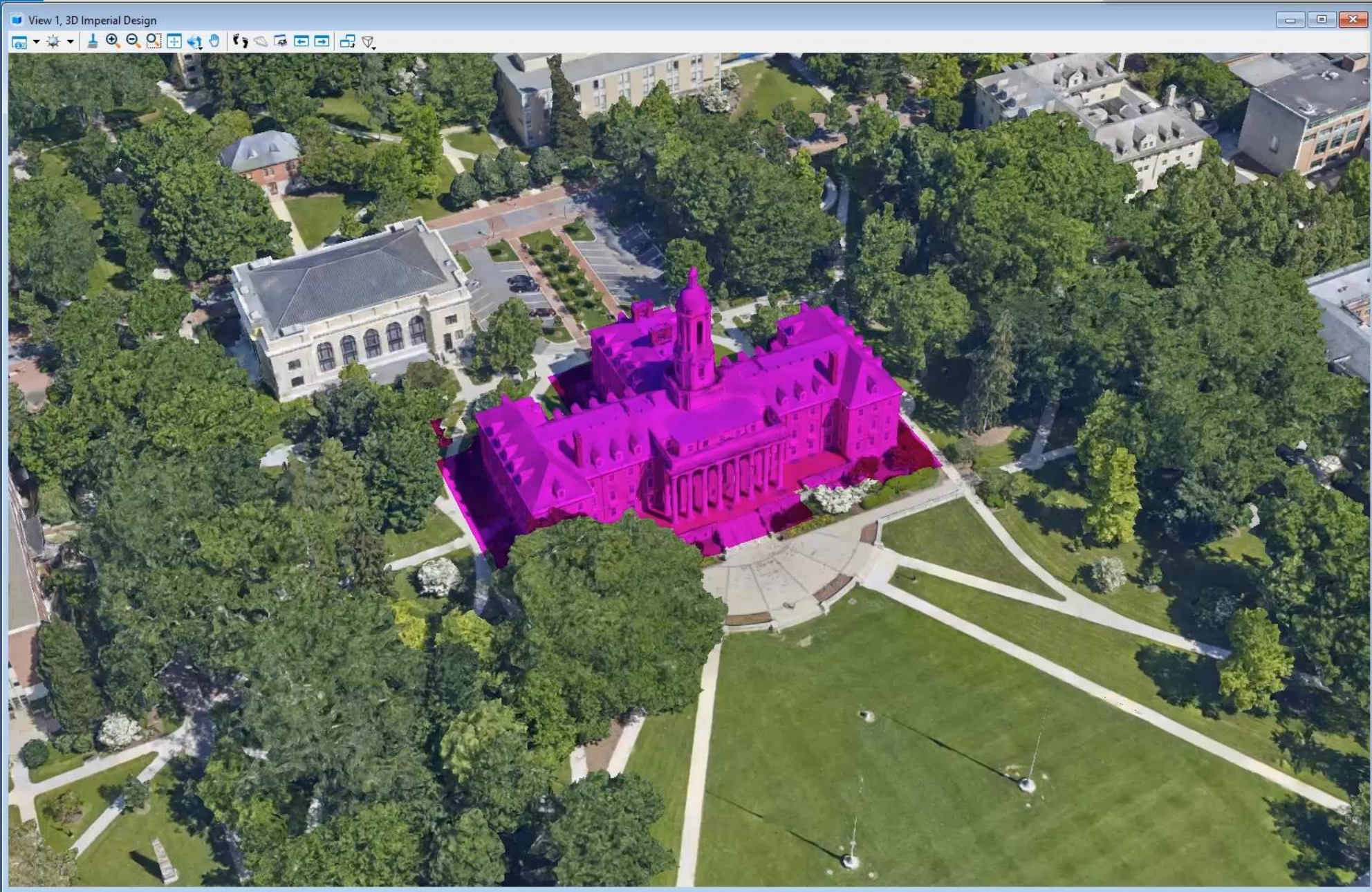
Search

- ▶ MaximoWorkOrders
- ▶ PSU\_OPP\_Buildings2016
- ▶ WorkTypeResource

Sheet Index

Links

Classifier: "WO+Resources-linked"  
 Shape  
 Level: PSU\_OPP\_Buildings2016  
 Ref: 1 (C:\Dropbox\Consulting Projects\Bentley 2013\Reality Modeling\Projects\Penn State\Integration-Work Orders\dgn\Penn State Campus-Work Orders+Resources Linked.i.dgn<1>Buildings+WorkOrders+Resources-linked.i.dgn)



Properties

- Elements (1)
  - Old Main
    - Items
      - Old Main
        - F306531
        - F345024**
        - F360972

MaximoWorkOrders

Building	0001000
Description	Old Main Chimes Laptop Needs Upd
Location Description	OLD MAIN
Name	F345024
Priority	3
Reported Date	4/7/2015 5:10:00 PM
Site	UP-OPP
Status	APPR
Work Group	CCS
Work Type	SVC

Explorer

Items

Search

- MaximoWorkOrders
- PSU\_OPP\_Buildings2016
- WorkTypeResource

Sheet Index

Links



# ProjectWise® Web Server

  
[Advanced search options](#)

Reality Modeling

Folder Document View Tools Help

- Documents
  - General Information
  - Presentations
  - Projects
    - Coatesville
    - Comcast
    - Papal Visit
    - 3MXPublish
    - City Hall
    - Construction Timelapse
    - DewBerry
    - Fuel Depot
    - Glendale
    - Helsinki
    - Misc
    - Penn State
      - FIS Data
      - GIS Data
      - Integration Demo

Icons for file operations: New Folder, New Document, New Document with Lock, Find, and Refresh.

<input type="checkbox"/>	Name	Description	File Name	Application
<input type="checkbox"/>	 <a href="#">Create Follow Up WO Video</a>	Maximo - Create Follow Up Work Order in Quick Reporting - YouTube	Maximo - Create Follow Up Work Order in Qu...	Videos
<input type="checkbox"/>	 <a href="#">PSU WRC Training Manual.pdf</a>	PSU WRC Training Manual	PSU WRC Training Manual.pdf	Acrobat P...

---

# Penn State University (PSU)

## FAMS - Work Reception Center Training Manual

Prepared By



View 1, 3D Imperial Design

Create Where Clause

Enter criteria below and add them to the Summary:

Search For:

Where ...

equal to

Add to Search Clear

Search Summary (click an underlined value to edit)

Group Ungroup Edit

Search for items of type "MaximoWorkOrders"

OK Cancel

Advanced Search

File Tools

New Open Save

Search For:

Where ...

Where...

Add to Search Clear

Search Summary (click an underlined value to edit)

Group Ungroup Edit

Search for items of type "PSU\_OPP\_Buildings2016" (including these properties) (

OK Cancel

Rotate View

Method:

To see properties something must be selected.

Explorer

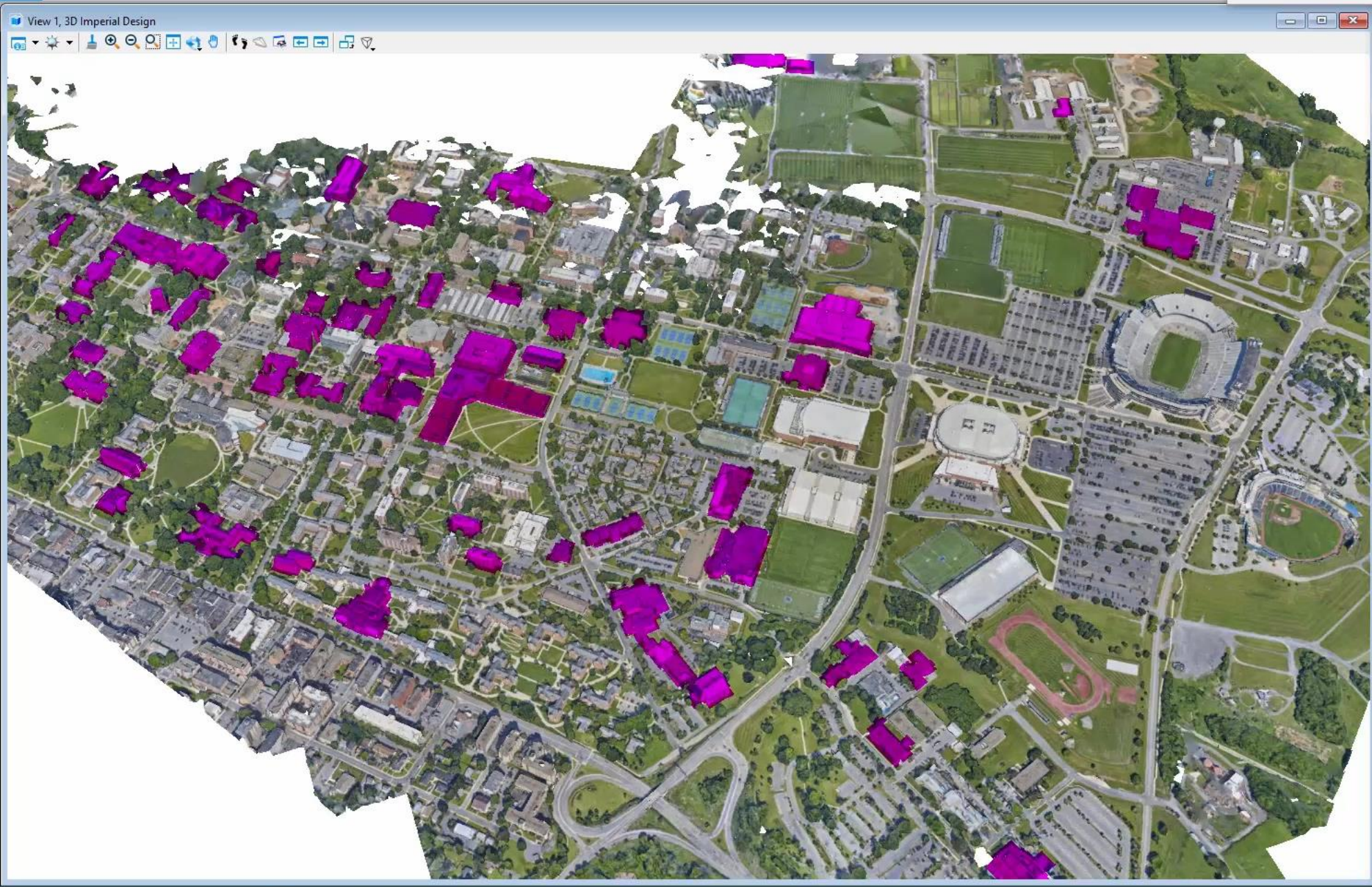
Items

Search

- MaximoWorkOrders
- PSU\_OPP\_Buildings2016
- WorkTypeResource

Sheet Index

Links



Properties (Items)

- PSU\_OPP\_Buildings2016 (87)
  - 2185 Sandy Drive Building
  - Academic Activities
  - Academic Projects Building

**PSU\_OPP\_Buildings2016**

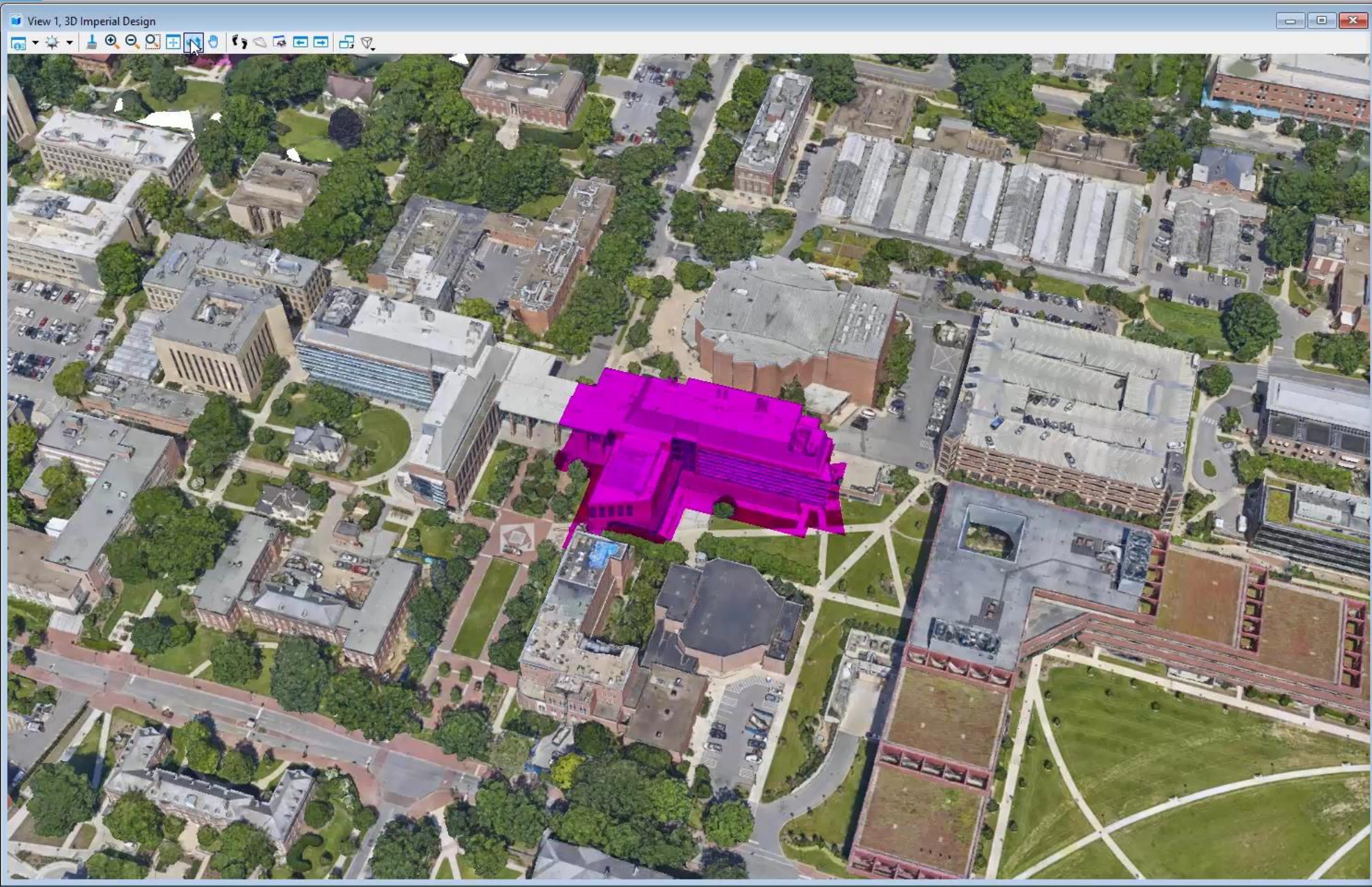
Abbreviation	**Varies**
Name	**Varies**
Number	**Varies**

Explorer

Items

Search

- MaximoWorkOrders
- PSU\_OPP\_Buildings2016
- WorkTypeResource
- Searches
  - PSU\_OPP\_Buildings2016 Search Results (87)
    - PSU\_OPP\_Buildings2016 (87)**



Properties (Items)

- PSU\_OPP\_Buildings2016 (1)
  - Life Sciences Building
    - Parent

**PSU\_OPP\_Buildings2016**

Abbreviation	LFS
Name	Life Sciences Building
Number	0038000

Explorer

Items

Search

- MaximoWorkOrders
- PSU\_OPP\_Buildings2016
- WorkTypeResource
- Searches
  - MaximoWorkOrders Search Results (478)
    - MaximoWorkOrders (478)
      - F633559
      - F633574
      - F633749
      - F633765
        - Life Sciences Building**
        - Service Work Resources
      - F633800
      - F633831

Sheet Index

Links

# TOP 10 NEW CAPABILITIES OF

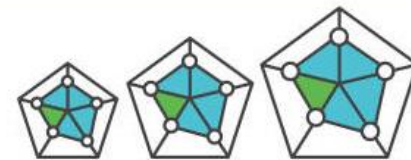
# MicroStation CONNECT Edition



10

## Scalable Meshes

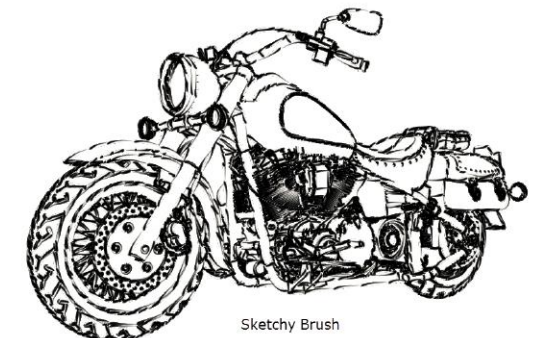
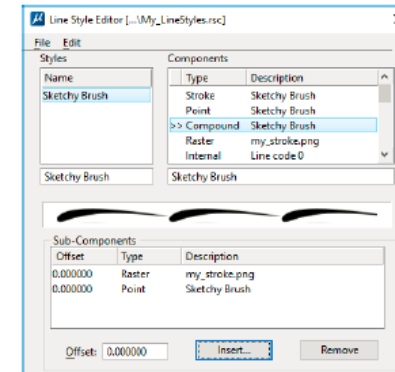
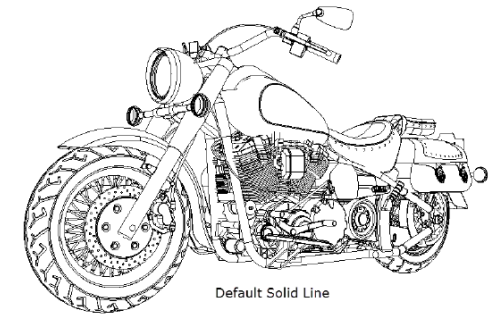
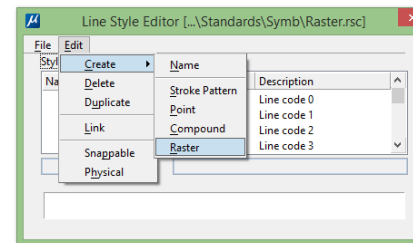
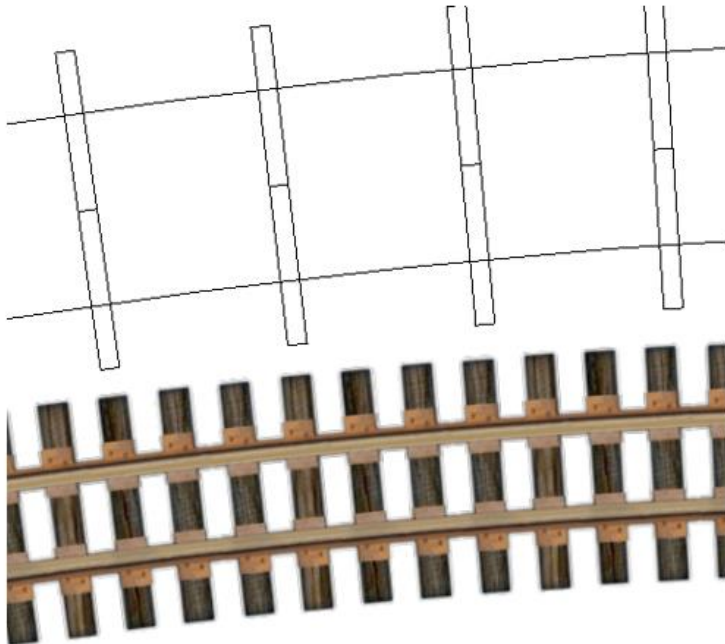
Integrate real-world  
context with reality meshes





# 9 - Raster Line Styles

- Allows for Rasters to be included in Custom Linestyles
- Shows more realistic representation of graphics
- Can have a corresponding non-raster line style



# TOP 10 NEW CAPABILITIES OF

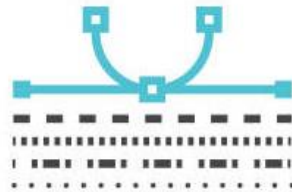
# MicroStation CONNECT Edition



9

## 2D/3D Line Styles

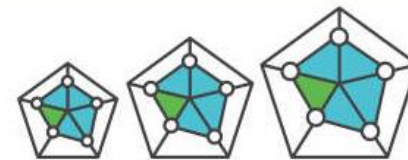
Customize 2D/3D line styles for design detail and clarity



10

## Scalable Meshes

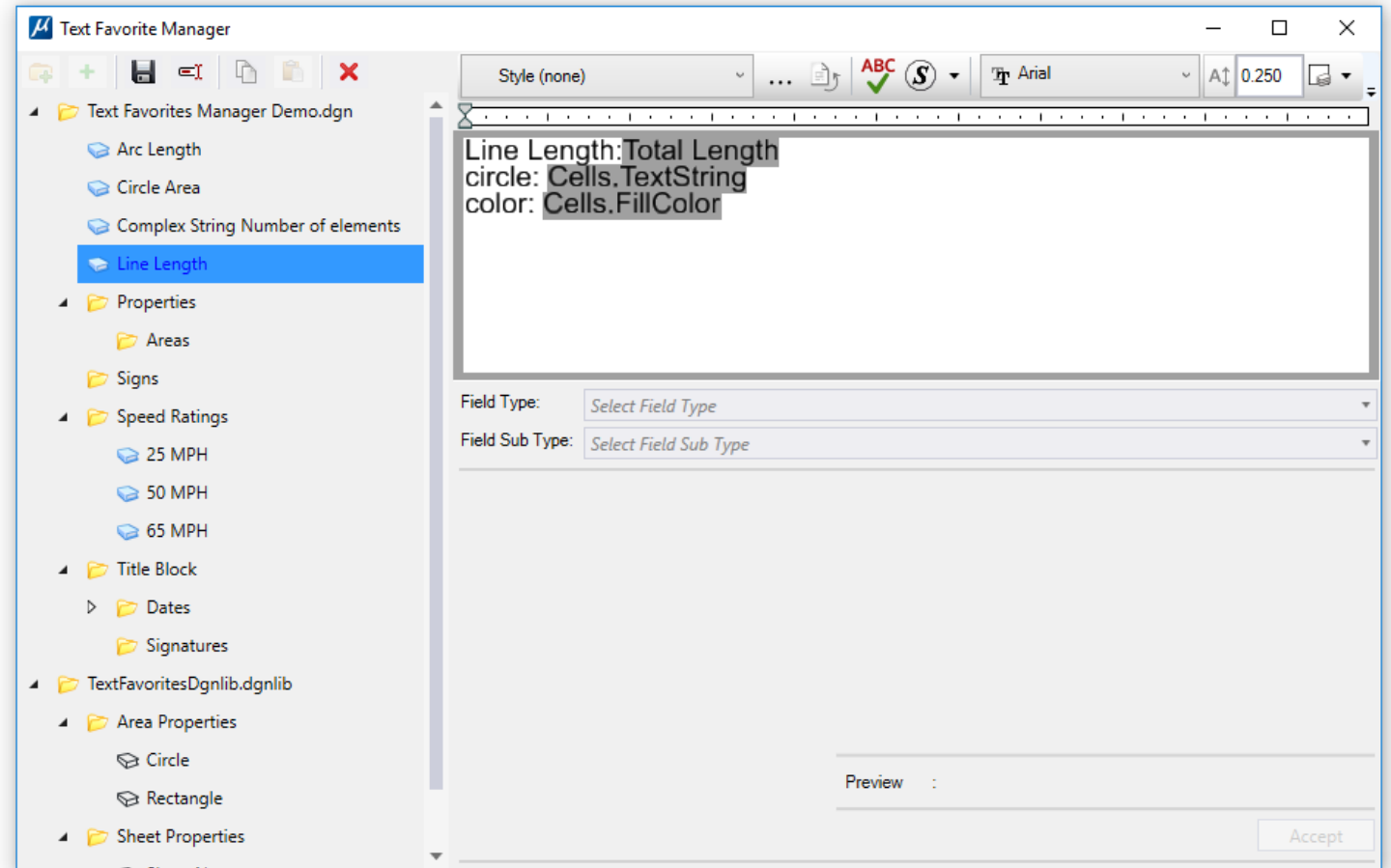
Integrate real-world context with reality meshes





## 8 - Text Favorite Manager

- Collaborated with the Civil and Plant Teams
- Manage Text Favorites
  - Create
  - Edit
  - Delete
- Improved productivity
- Entry into Property Driven Annotation
  - Text Fields



# TOP 10 NEW CAPABILITIES OF

# MicroStation CONNECT Edition

8

## Text Favorite Manager

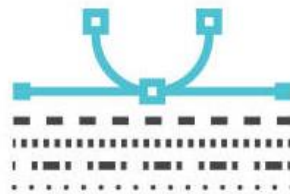
Standardize text fields and update properties as elements are modified



9

## 2D/3D Line Styles

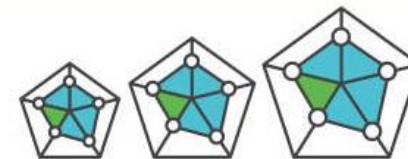
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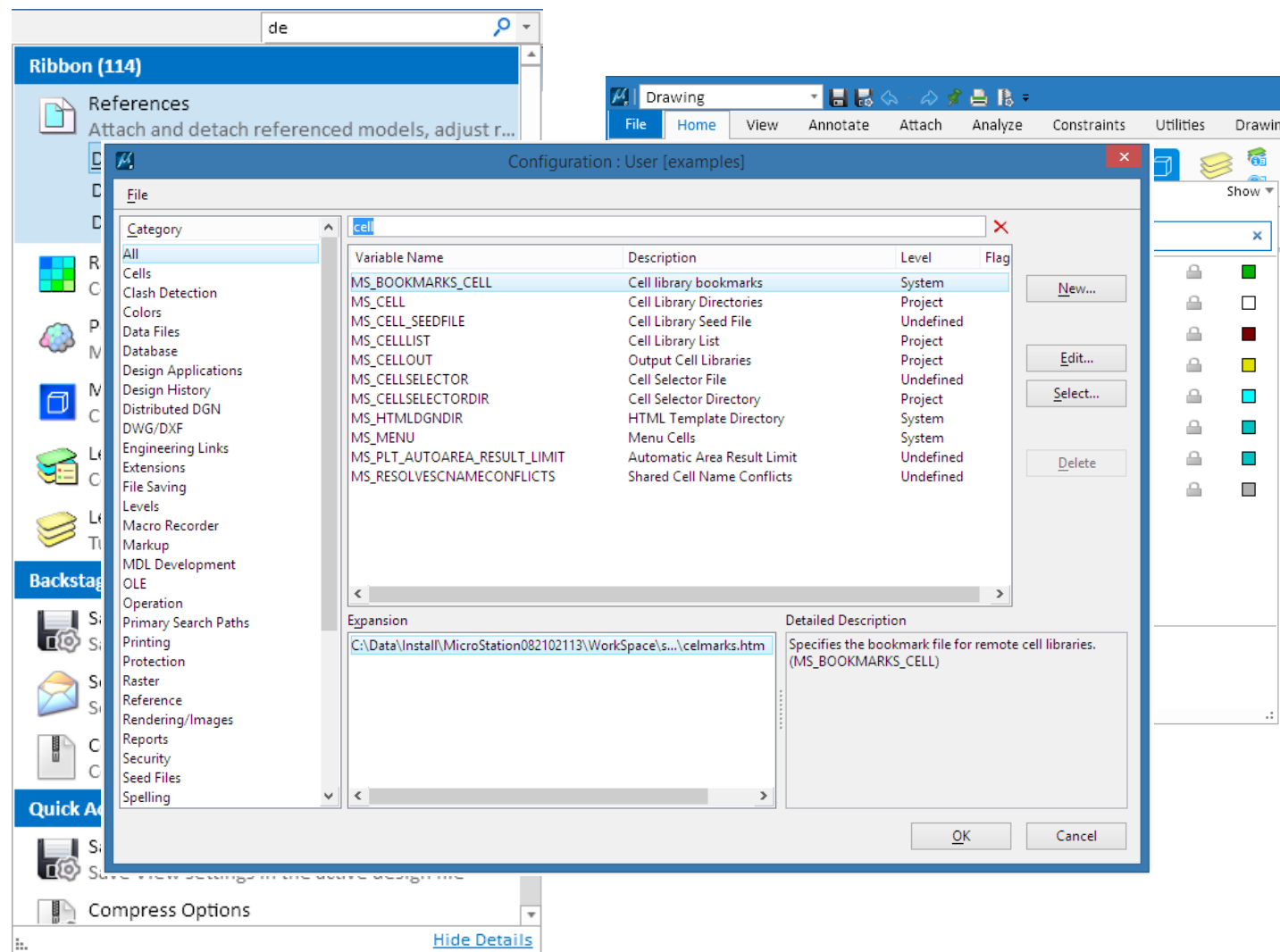
Integrate real-world context with reality meshes





# 7 - Connected User Experience: Search and Filter

- Search for commands and help topics
- Dynamically filter to compress lists
- Integrated in many locations



# TOP 10 NEW CAPABILITIES OF

# MicroStation CONNECT Edition

7

## Powerful Search

Use the new search bar to find *anything* or get help



8

## Text Favorite Manager

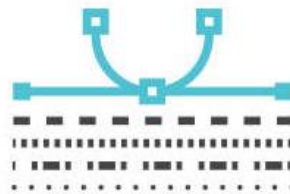
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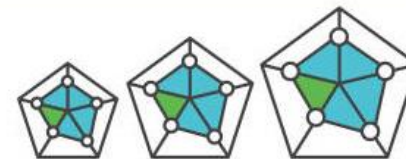
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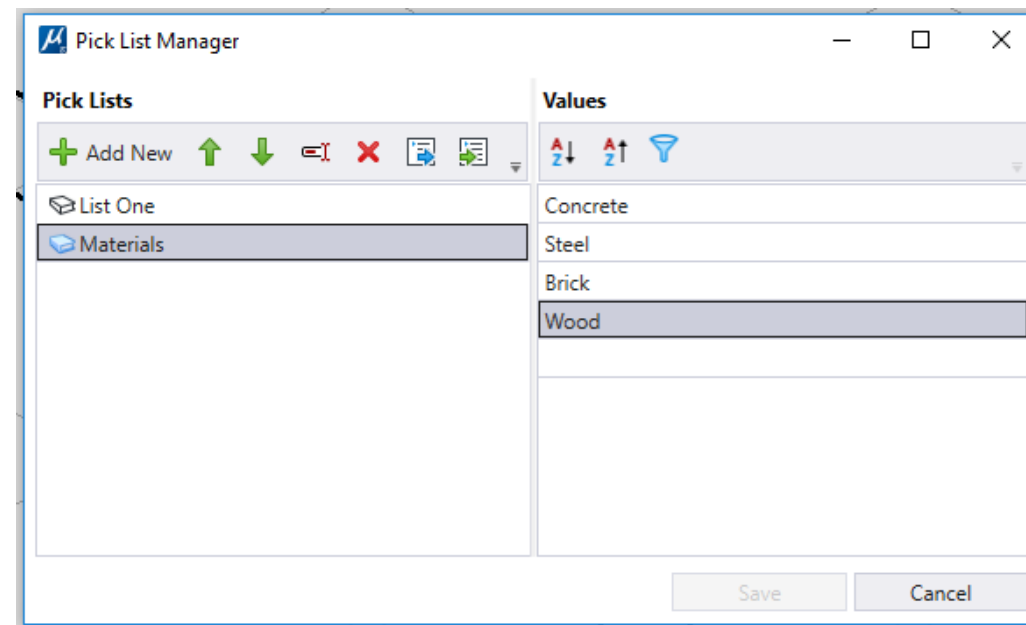
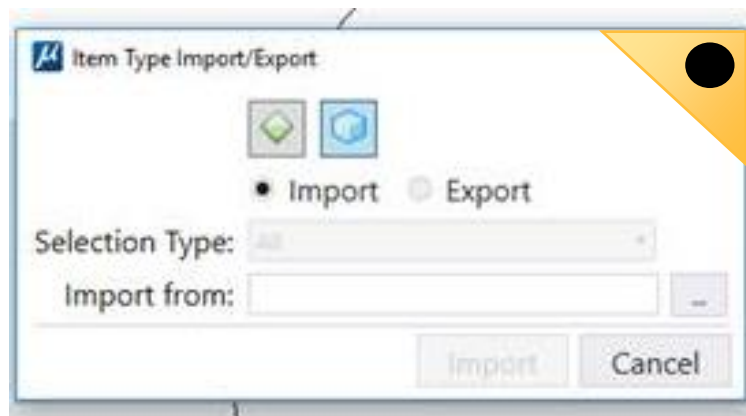
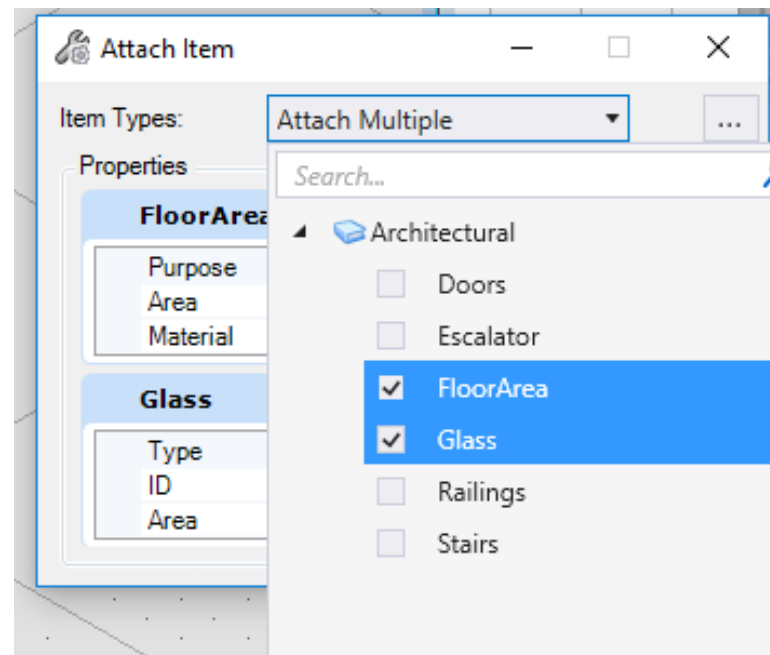
Integrate real-world context with reality meshes





## 6 - Item Types

- Easy, powerful way to tag models, files or geometry with custom properties
- Supports custom picklists and import/export/update Excel workflows



# TOP 10 NEW CAPABILITIES OF

# MicroStation CONNECT Edition

6

## Item Types

Create, manage, and share picklists for item properties



7

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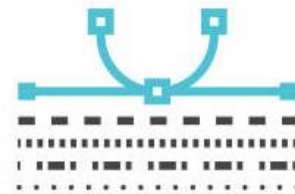
Standardize text fields and update properties as elements are modified



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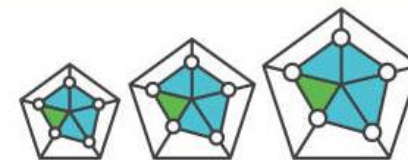
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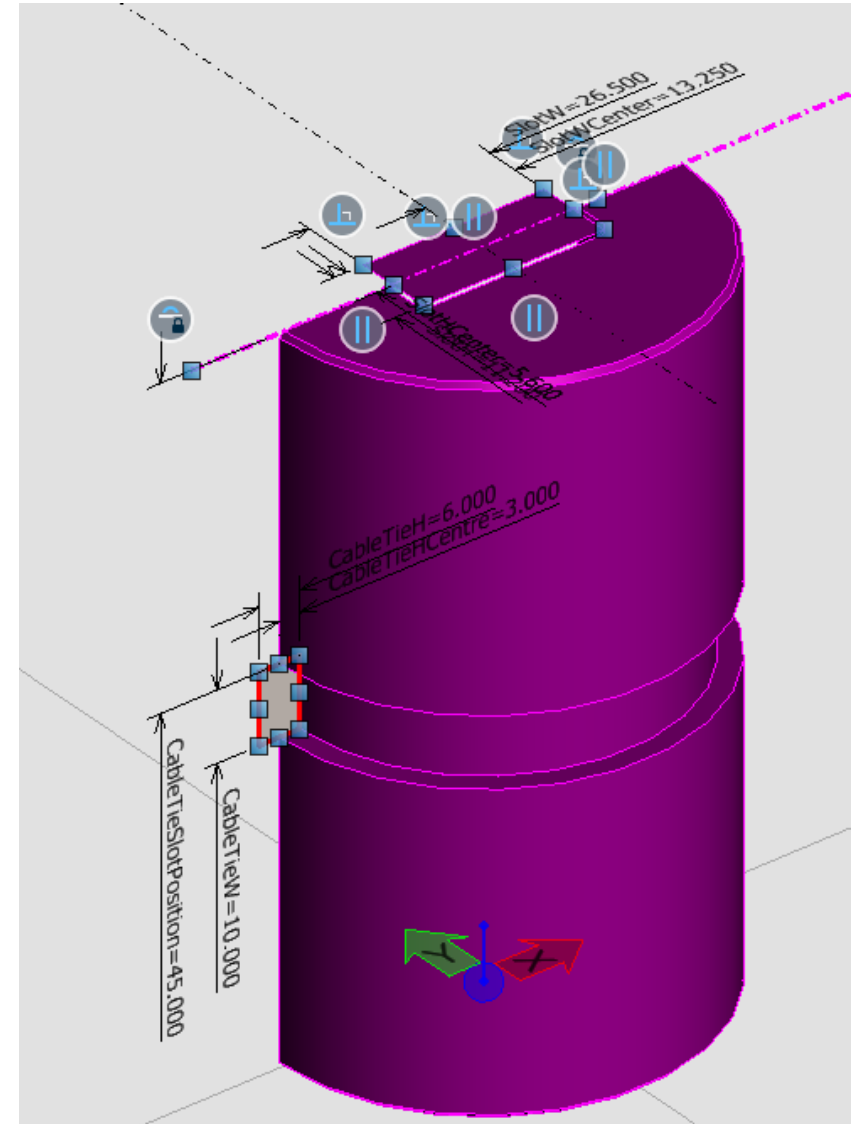
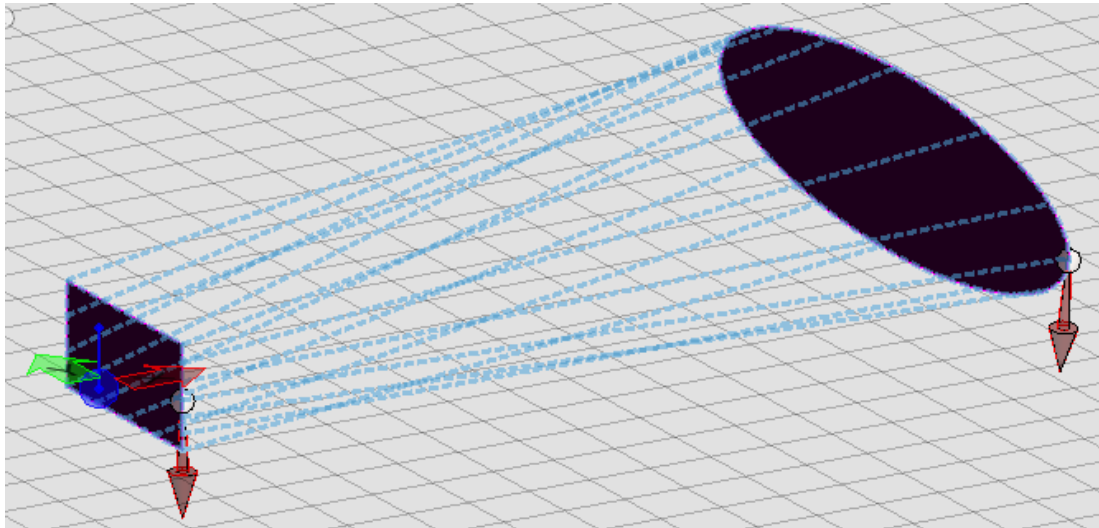
Integrate real-world context with reality meshes





## 5 - Parametric Solids and Surfaces

- Full range of native, parametric feature solid tools
- Use 3D constraints to define relationships between parametric solids



# TOP 10 NEW CAPABILITIES OF

# MicroStation CONNECT Edition

5

## Parametric Solids and Surfaces

Speed modeling tasks with integrated parametric modeling workflows



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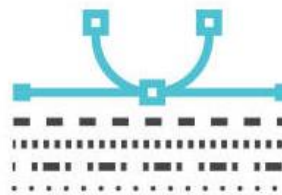
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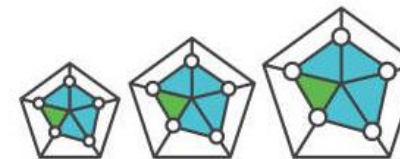
Customize 2D/3D line styles for design detail and clarity



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## Scalable Meshes

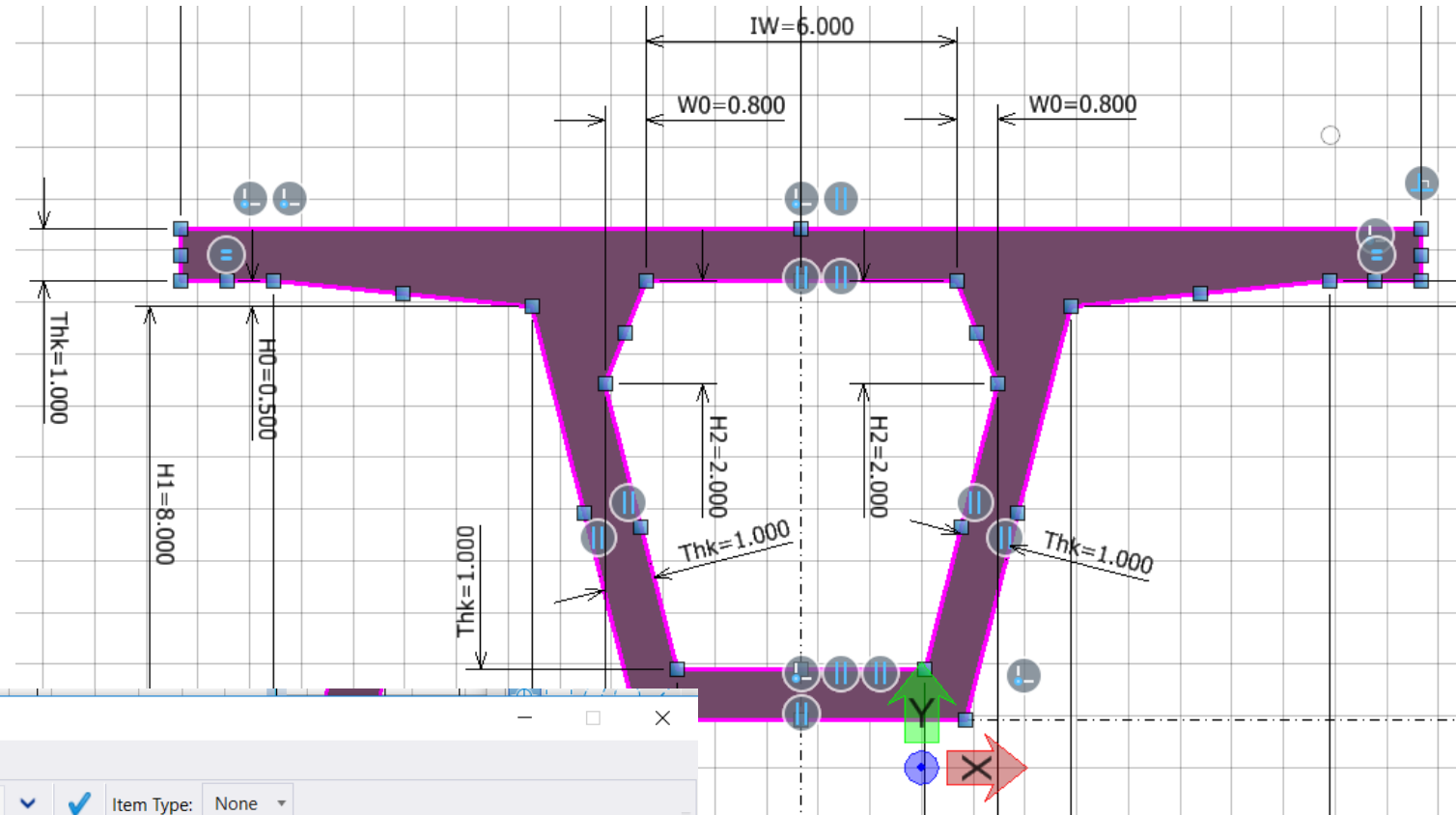
Integrate real-world context with reality meshes





# 4 - Constraints-based Modeling

- New 2D and 3D constraint tools
- Drive your models with parametric variables
- Powerful expressions system



Variables dialog box showing a list of variables and their properties.

Variables	
Thk	1.000m
W2	12.000m
D1	2.500m
D2	5.000m
D3	1.500m

# TOP 10 NEW CAPABILITIES OF

# MicroStation CONNECT Edition



4

## Constraint-based Modeling

Use persistent constraints to ensure design intent



5

## Parametric Solids and Surfaces

Speed modeling tasks with integrated parametric modeling workflows



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## Item Types

Create, manage, and share picklists for item properties



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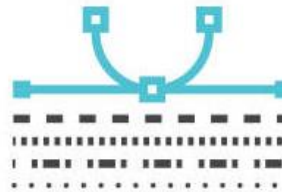
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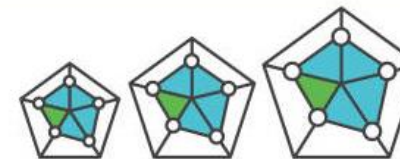
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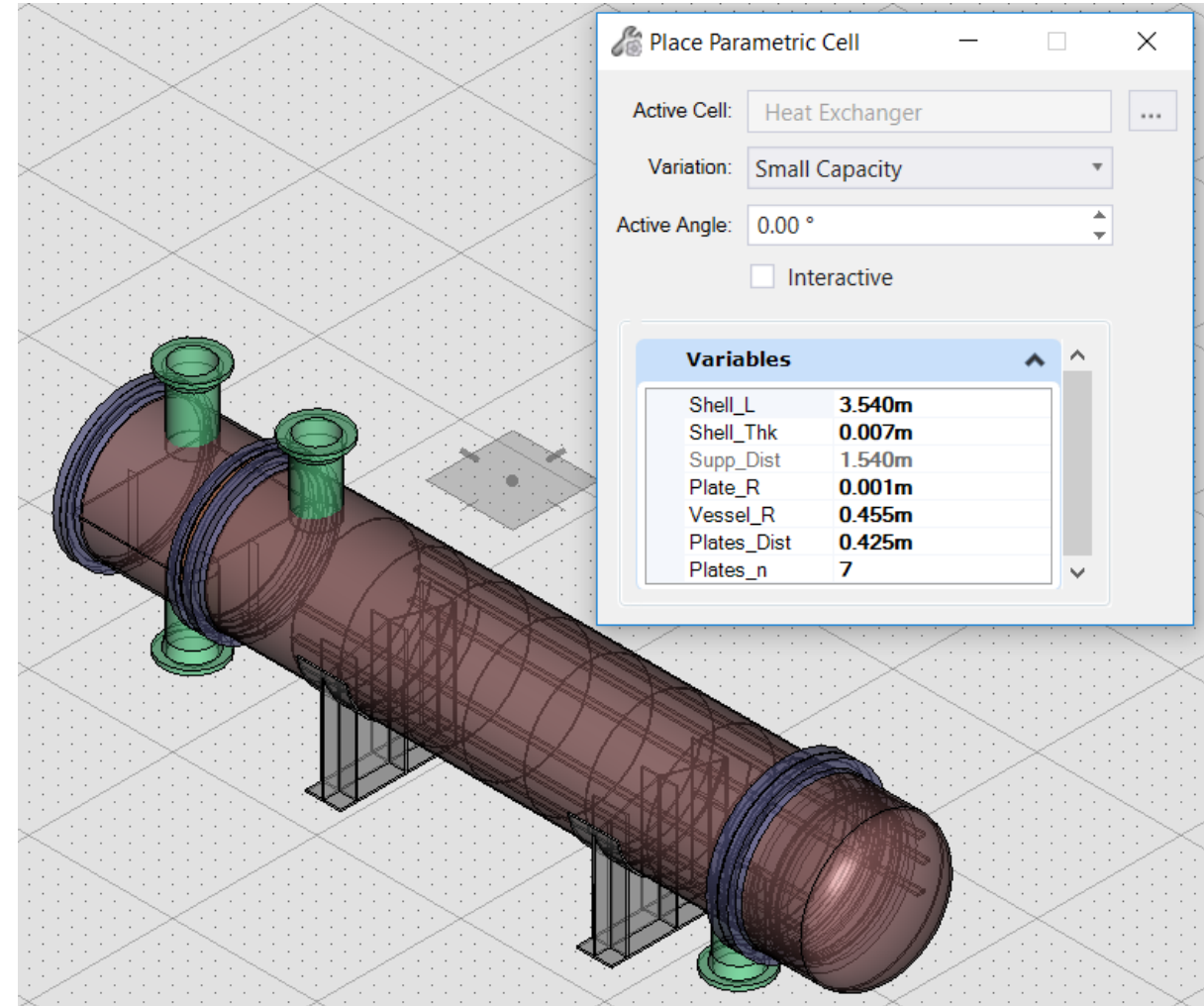
Integrate real-world context with reality meshes





## 3 - Functional Components

- Build smarter, leaner libraries of re-usable, parametric content
- One Parametric Model with many pre-defined variations to fit multiple designs
- Leverages the new Parametric Cells and constraint-based modeling



# TOP 10 NEW CAPABILITIES OF

# MicroStation CONNECT Edition

3

## Functional Components

Create flexible parametric components with pre-defined variants



4

## Constraint-based Modeling

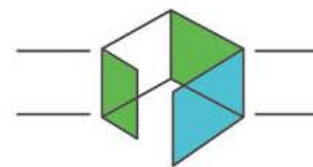
Use persistent constraints to ensure design intent



5

## Parametric Solids and Surfaces

Speed modeling tasks with integrated parametric modeling workflows



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## Item Types

Create, manage, and share picklists for item properties



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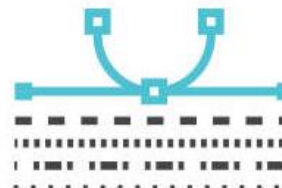
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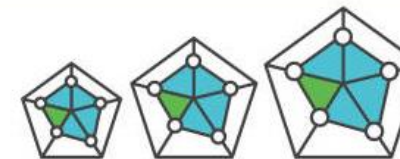
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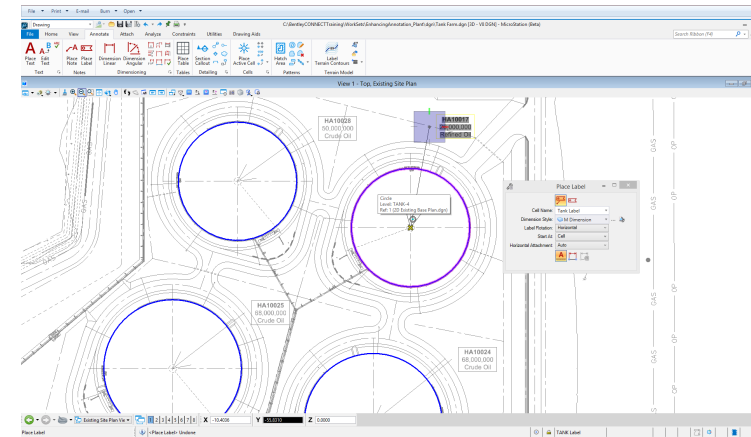
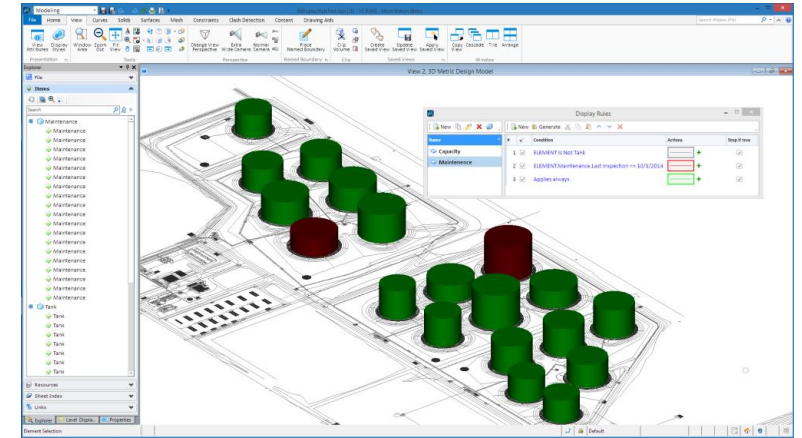
Integrate real-world context with reality meshes





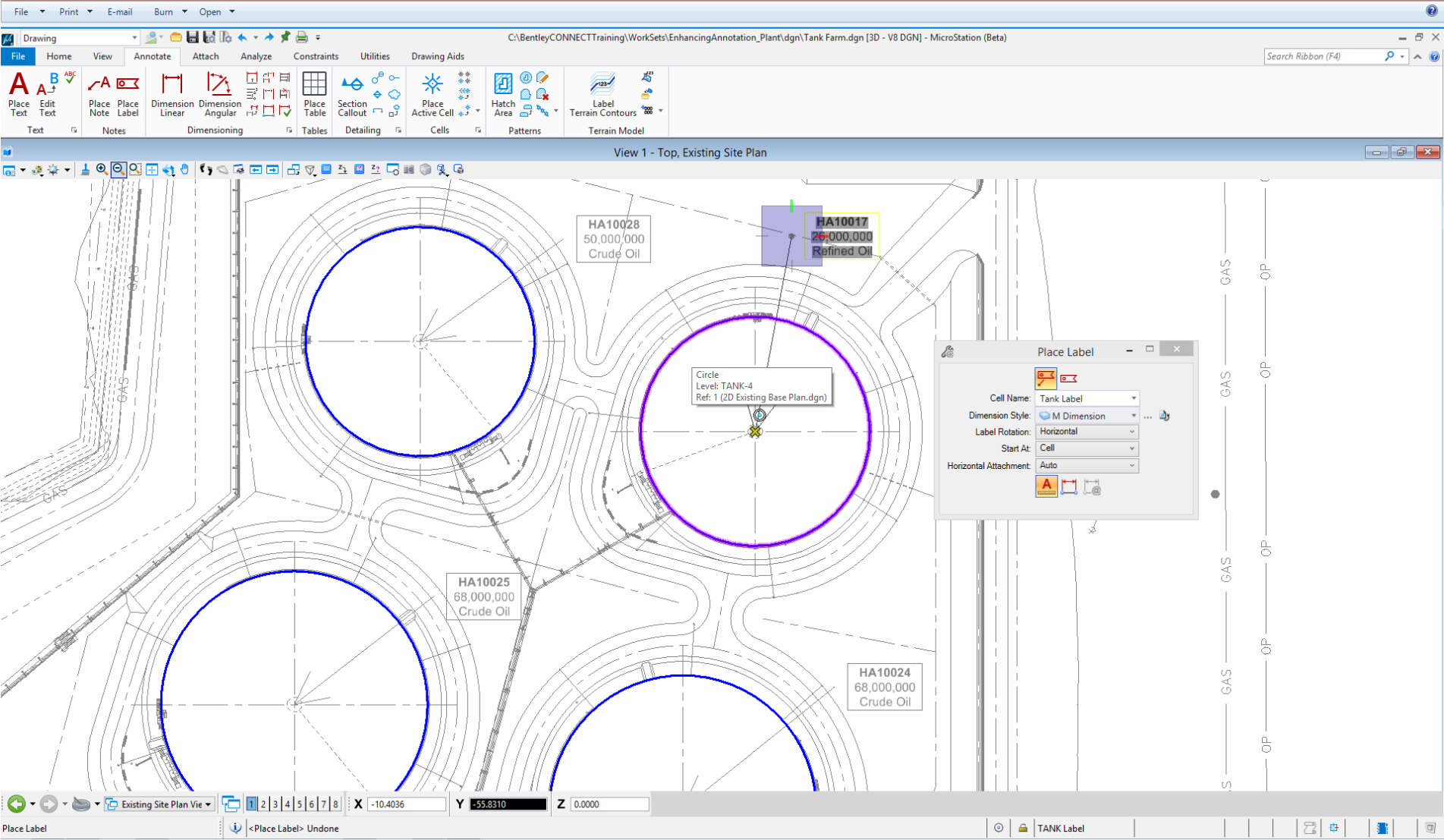
## 2 – Property Driven Design

- Display Styles and Display Rules for Property Driven Design
- Text Fields and Label Cells for Property Driven Annotation
- Report Definition and Place Table for Property Driven Reports

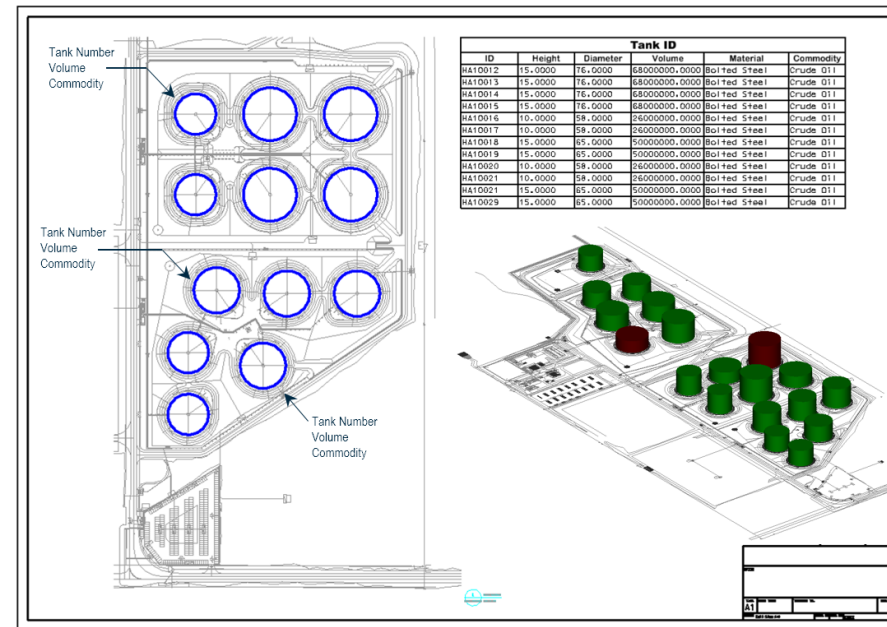
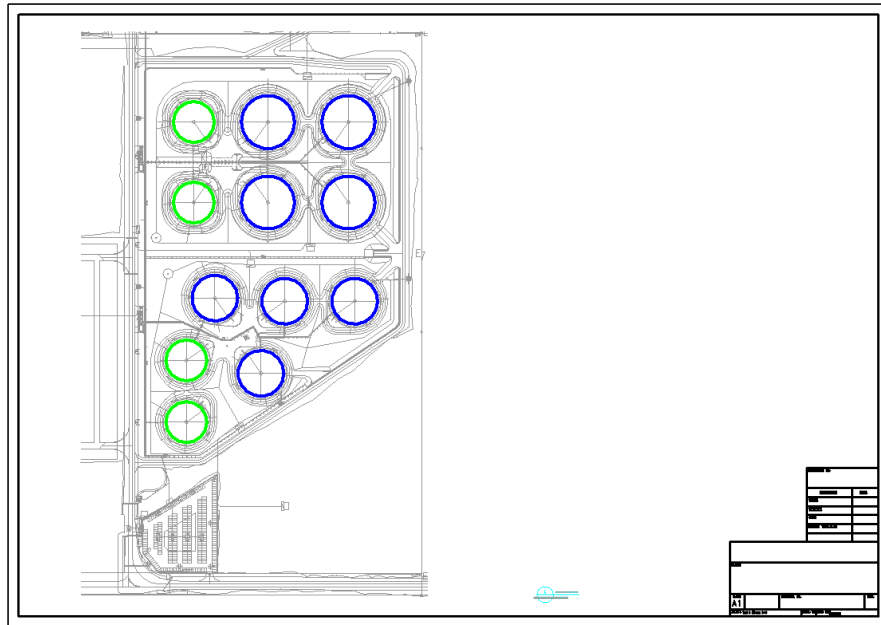
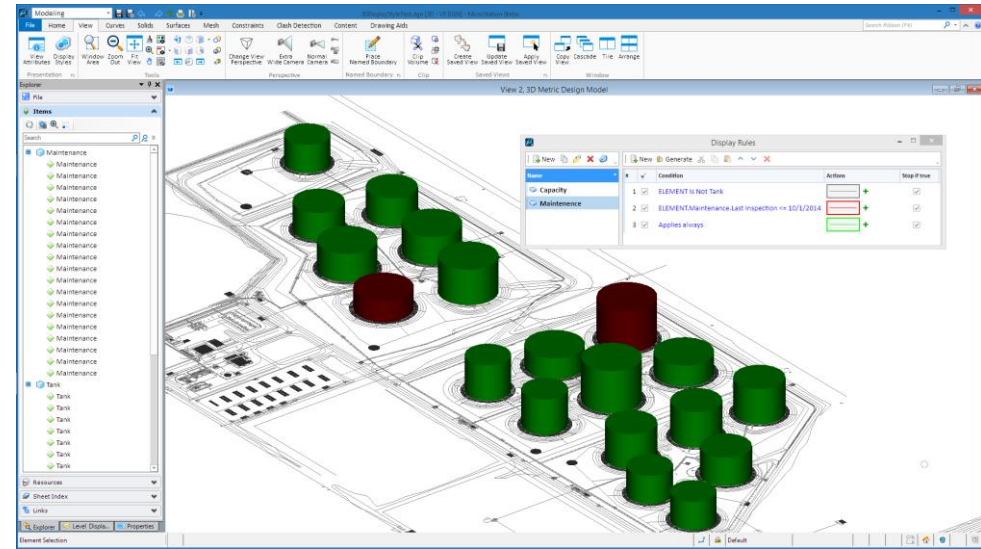
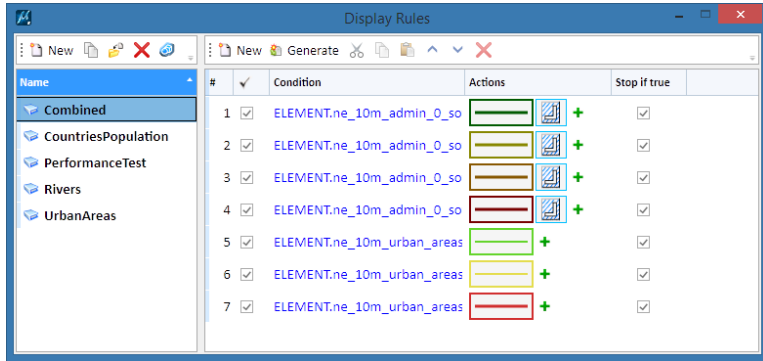


Tank ID					
ID	Height	Diameter	Volume	Material	Commodity
HA1D012	15.0000	76.0000	68000000.0000	Boiled Steel	Crude 011
HA1D013	15.0000	76.0000	68000000.0000	Boiled Steel	Crude 011
HA1D014	15.0000	76.0000	68000000.0000	Boiled Steel	Crude 011
HA1D015	15.0000	76.0000	68000000.0000	Boiled Steel	Crude 011
HA1D016	10.0000	58.0000	26000000.0000	Boiled Steel	Crude 011
HA1D017	10.0000	58.0000	26000000.0000	Boiled Steel	Crude 011
HA1D018	15.0000	65.0000	50000000.0000	Boiled Steel	Crude 011
HA1D019	15.0000	65.0000	50000000.0000	Boiled Steel	Crude 011
HA1D020	10.0000	58.0000	26000000.0000	Boiled Steel	Crude 011
HA1D021	10.0000	58.0000	26000000.0000	Boiled Steel	Crude 011
HA1D021	15.0000	65.0000	50000000.0000	Boiled Steel	Crude 011
HA1D029	15.0000	65.0000	50000000.0000	Boiled Steel	Crude 011

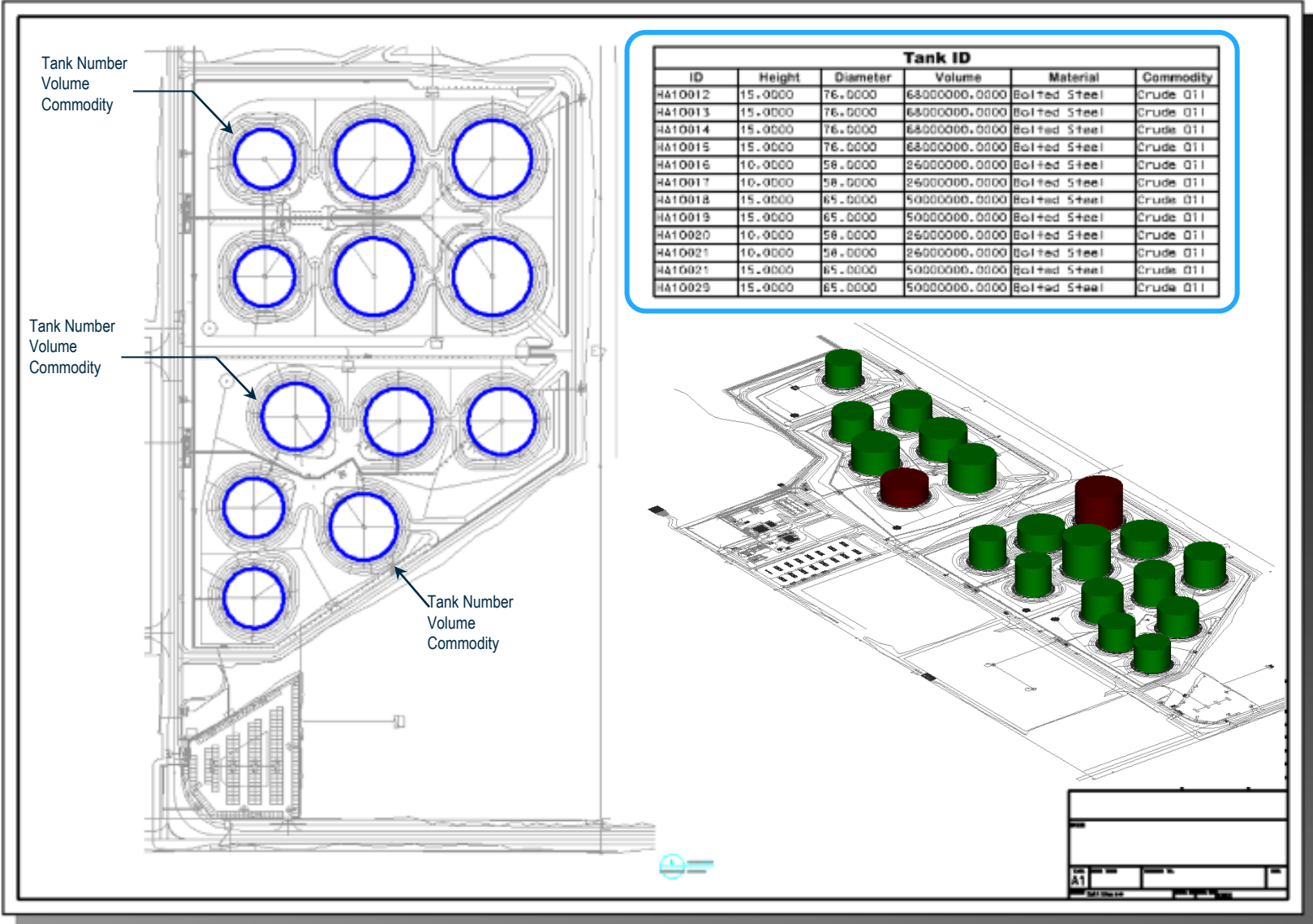
# Property Driven Annotation



# Property Driven Display



# Property Driven Reports



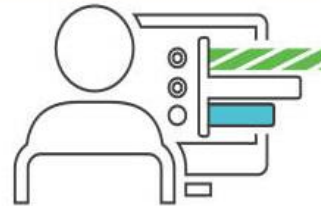
# TOP 10 NEW CAPABILITIES OF

# MicroStation CONNECT Edition

2

## Property-driven Drawing Production

Use object properties to automate reporting, annotations, and symbology



3

## Functional Components

Create flexible parametric components with pre-defined variants



4

## Constraint-based Modeling

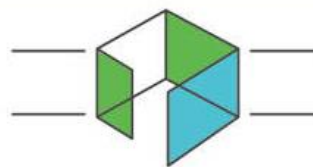
Use persistent constraints to ensure design intent



5

## Parametric Solids and Surfaces

Speed modeling tasks with integrated parametric modeling workflows



6

## Item Types

Create, manage, and share picklists for item properties



7

## Powerful Search

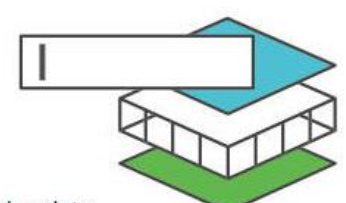
Use the new search bar to find *anything* or get help



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## Text Favorite Manager

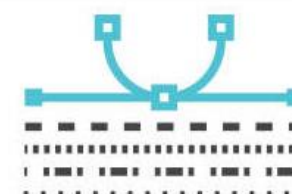
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## 2D/3D Line Styles

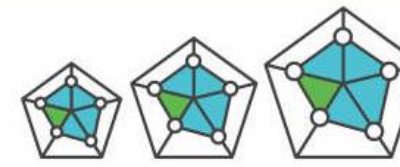
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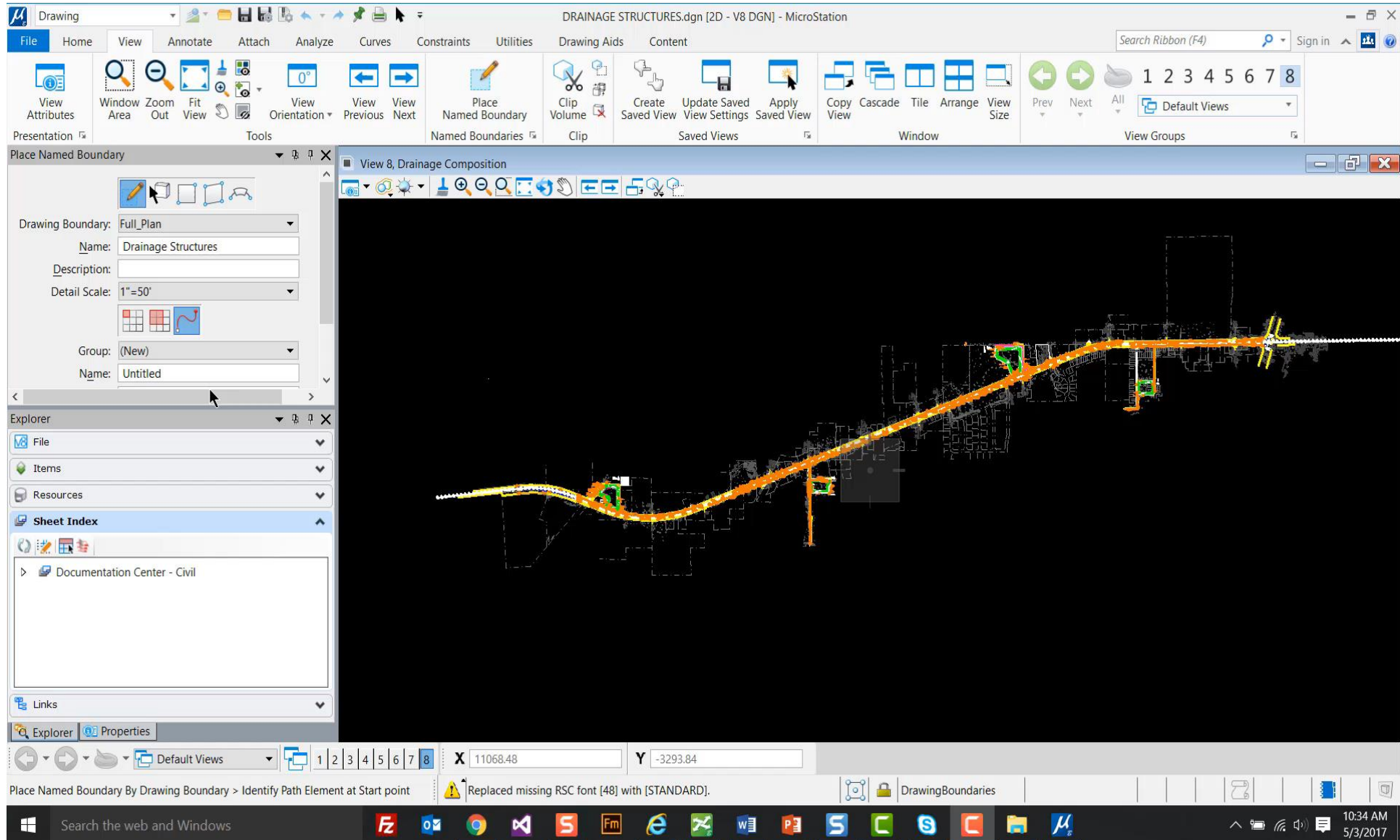
## Scalable Meshes

Integrate real-world context with reality meshes





# 1 – Automated Sheets



# Quarterly Updates

- MicroStation CONNECT Edition – September 2015
- Update 1 – May 2016
- Update 2 – August 2016
- Update 3 – October 2016
- Update 4 – January 2017
- Update 5 – May 2017
- Update 6 – July 2017
- Update 7 - October 2017
- Update 8 - February 2018
- Update 9 – April 2018
- Update 10 – July 2018
- Update 11 ~ October 2018
- Update 12 ~ December 2018



## Update 11

- Configuration Assistant
- iModel 2.0 Tech Preview
- Item Type Pick Lists (CR)
- Associative Extraction of Edge/Surface (GA)
- Named Presentation (GA)
- Perforators (GA)
- Centralized Management of Proxy Server Settings
- Added Australia, Japan, and Czech GCS projections
- SDK: API Improvements and Examples
- SketchUp 2018 Support
- CONNECT Licensing
- Bentley View CONNECT Edition



# Technology Preview States

## Limited Access

Limited, Private, Targeted user group  
Early Access Feedback  
Token File needed to access Feature included in product

## General Access

All users have access  
Can be made *unavailable* from the Installer  
Denoted by Tech Preview Icon

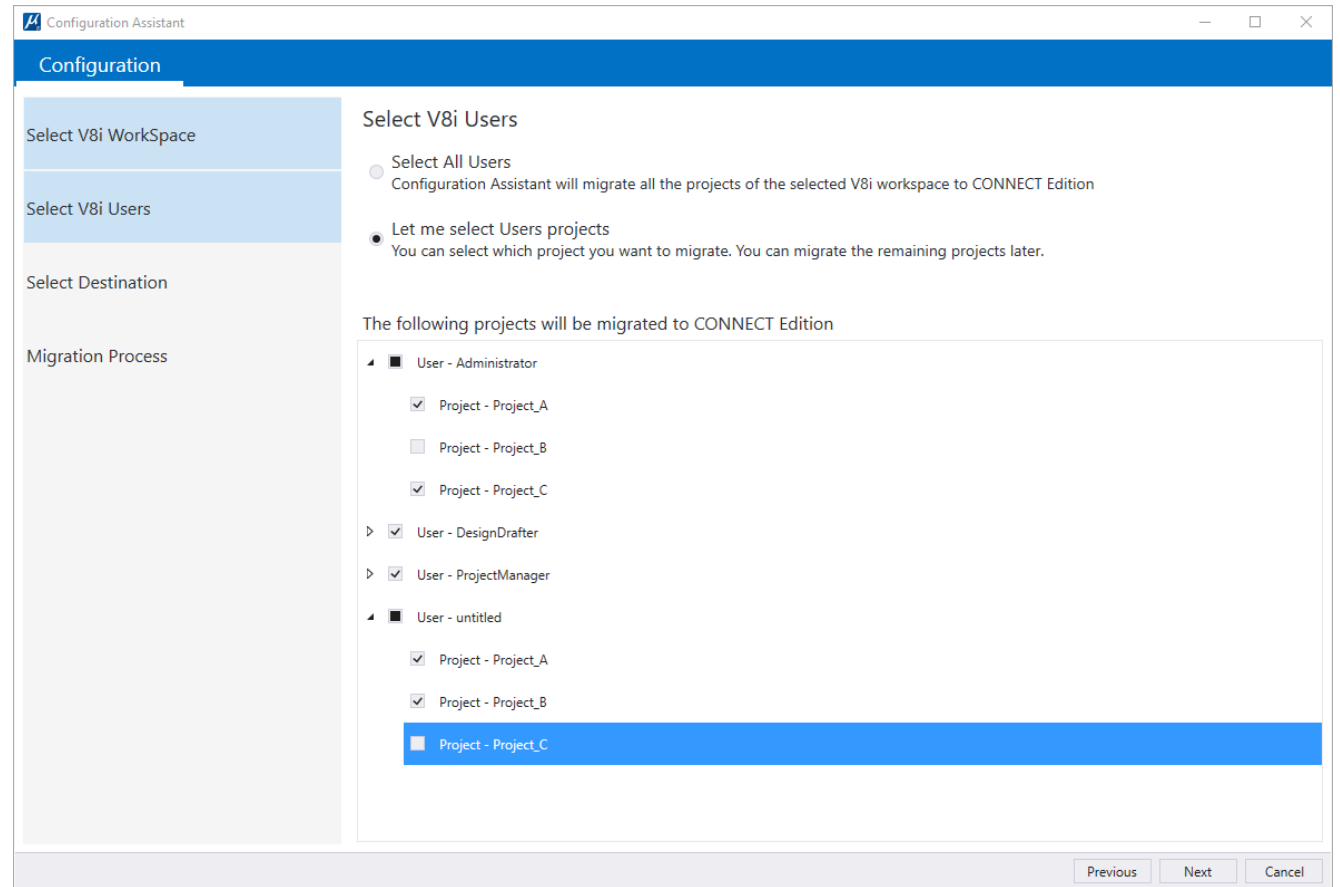
## Commercial Release

Fully supported  
Delivered to everyone



# Configuration Assistant

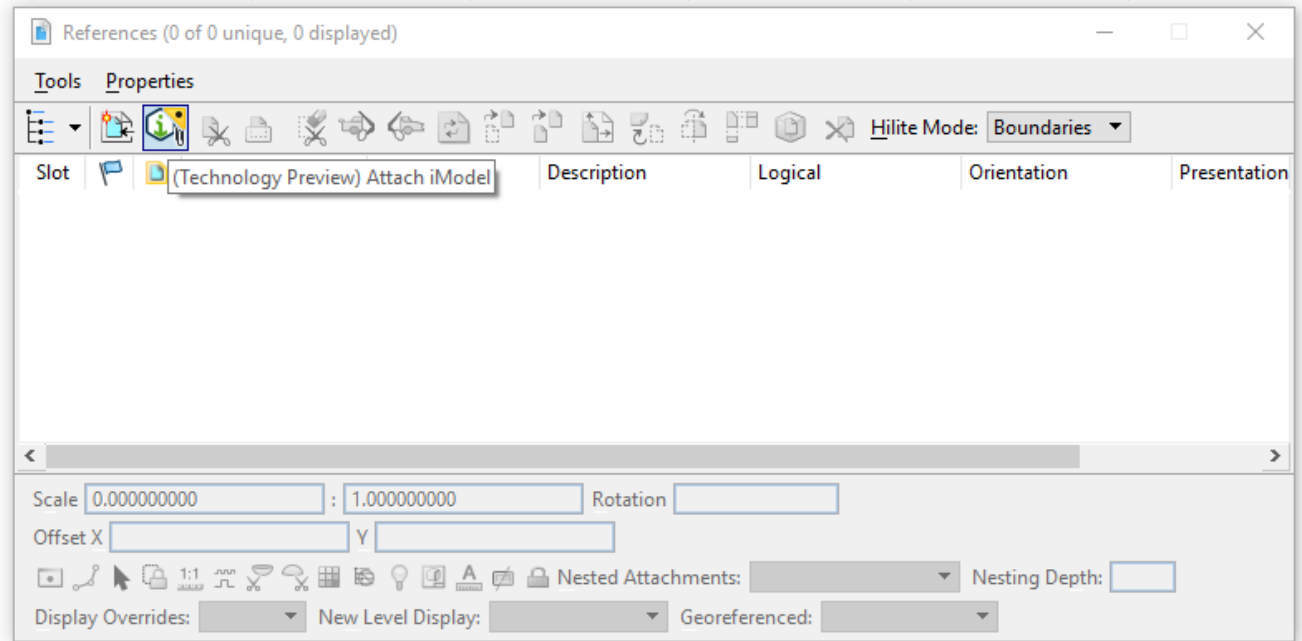
- Allows you to move V8i Workspaces to CONNECT Edition
- Improvement over the Configuration Migration Wizard
  - Allows for multiple Users and Projects
  - Select individual users or projects as needed





# iModel Enhancements


- Limited Access Technology Preview
- Navigator
- Download local copy of iModel from iModel Hub
- Opens/References local copy
- 2.0 iModel
- Future work – Change Set Versions

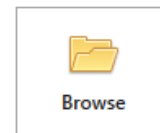


## MicroStation CONNECT Edition

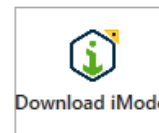
iModel Hub ▾ Paymogo ▾

### Recent Files

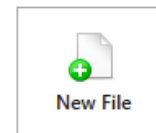
 Paymogo.dgn  
D:\MicroStation\_Configuration\WorkSpaces\iModel Hub\WorkSets\Paymogo\dgn\  
Modified: 9/13/2018 10:19:51 AM      Size: 29 KB



Browse



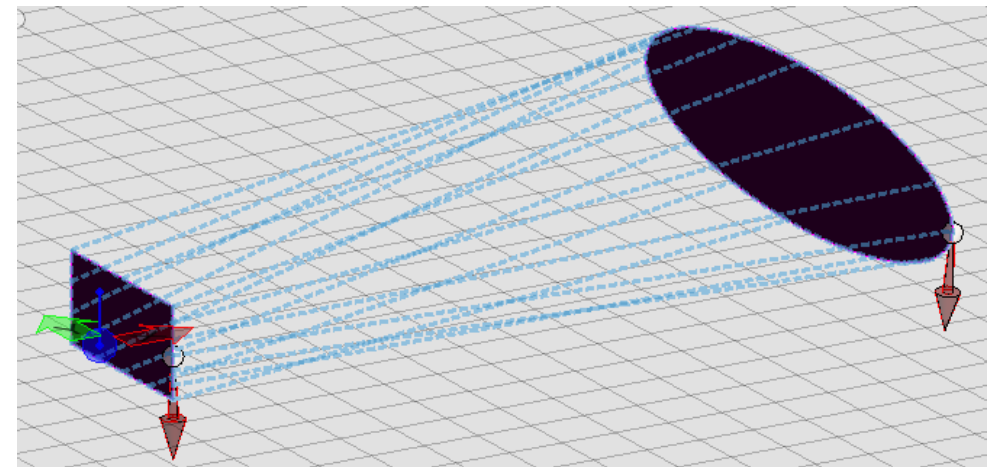
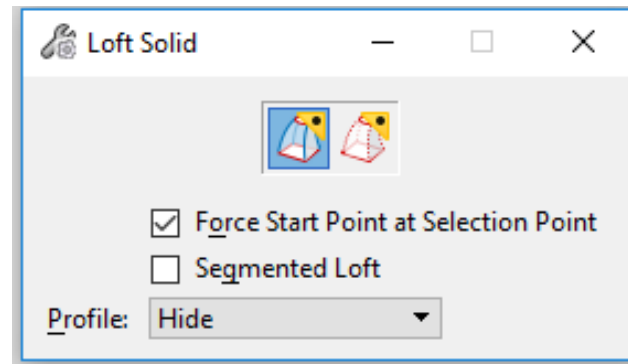
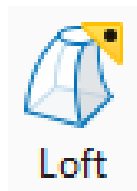
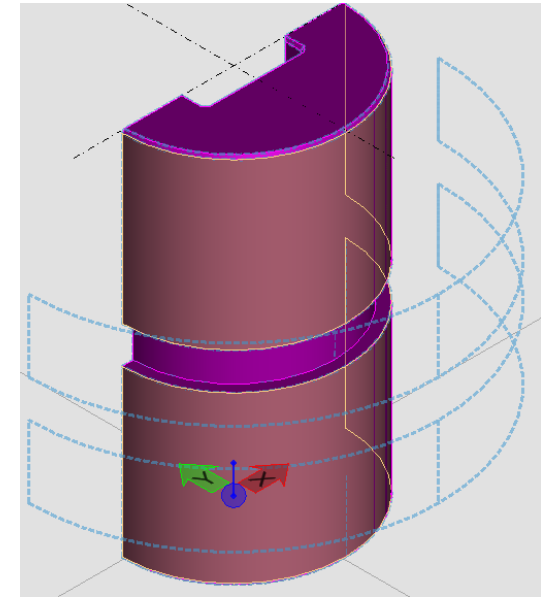
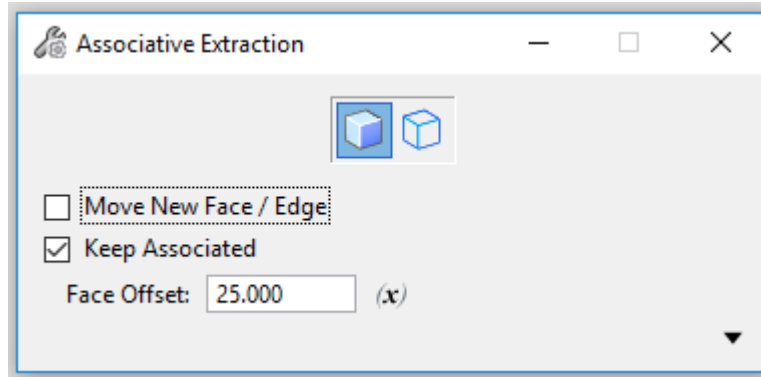
Download iModel



New File

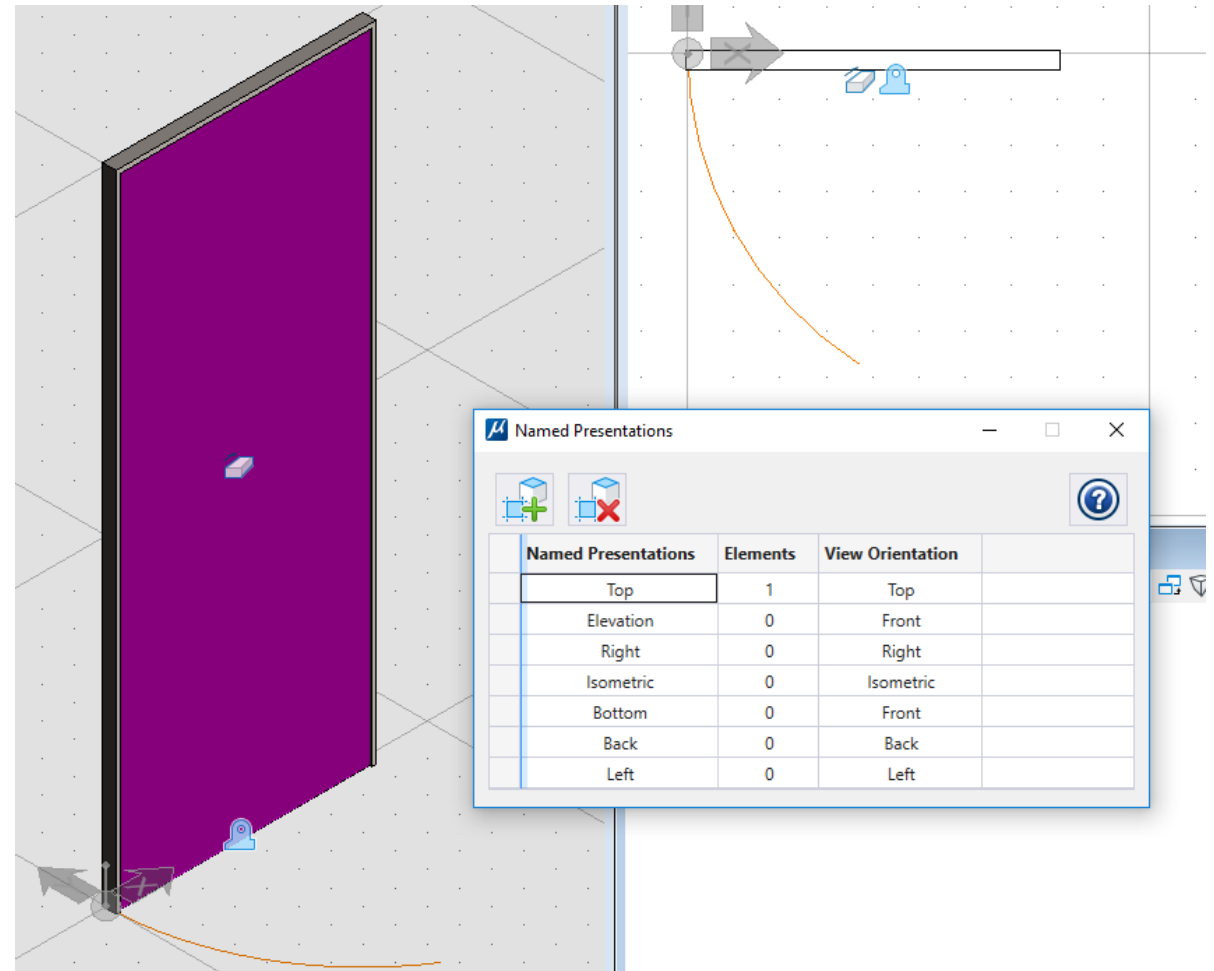
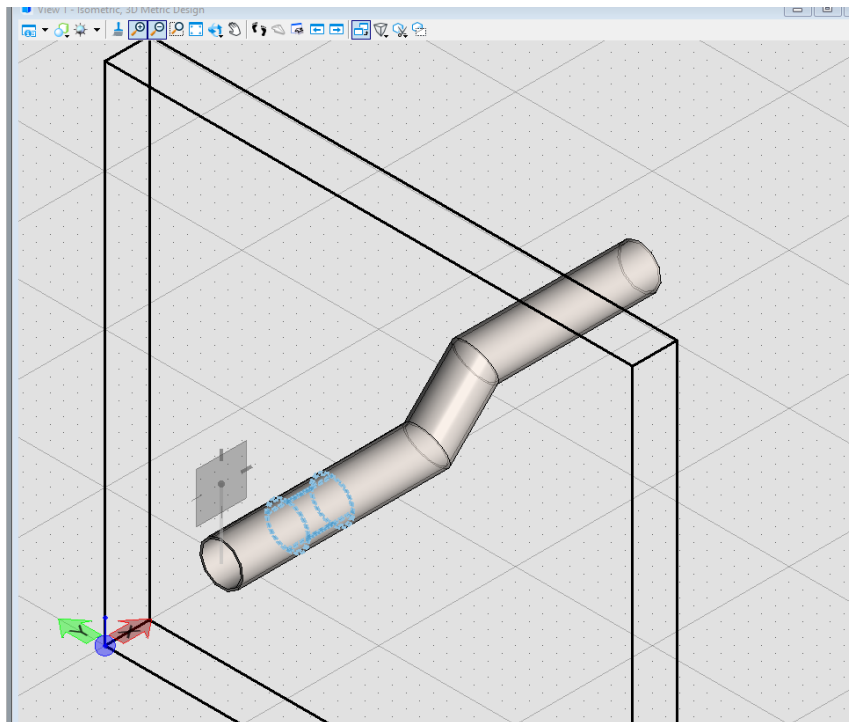
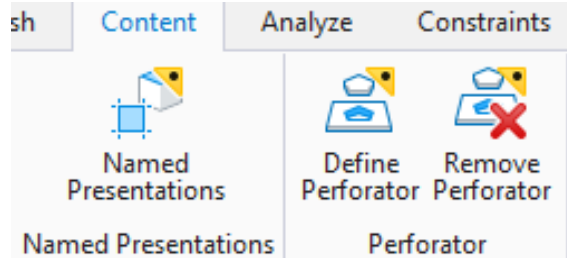


# Parametric Modeling – Tech Preview





# Functional Components – Tech Preview





# Item Types – Limited Access Tech Preview

## EC Expressions (incl. LookUp)

The 'Item Types' window displays a list of properties under the 'GetElement' category. The 'ElementSize' property is selected, and its 'Property Definition' is shown in a table below.

Property Definition	
Type	Text
Is Array	False
Default Value	
Expression	<code>this.GetElement().ElementSize</code>
Expression Failure Value	
Pick List	(None)

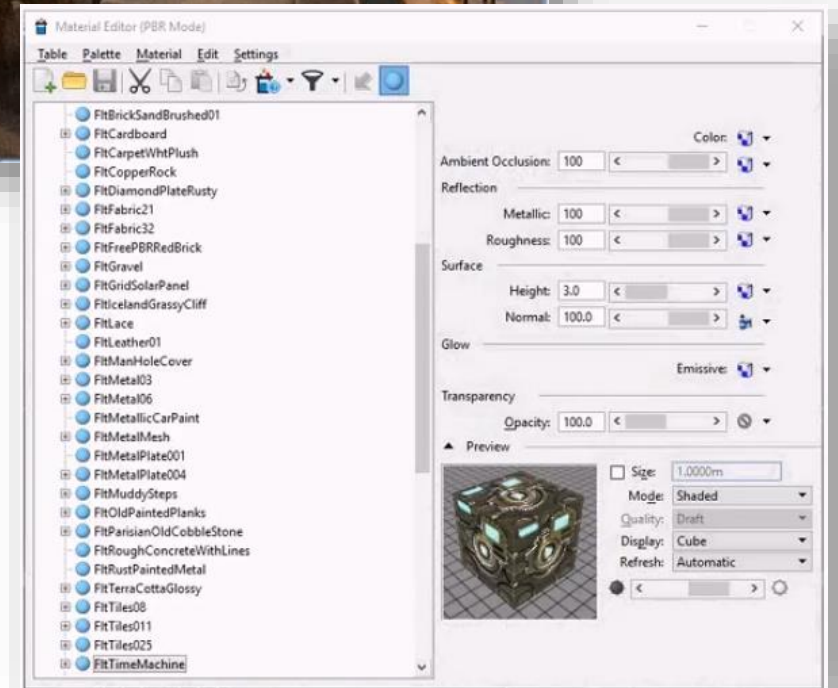
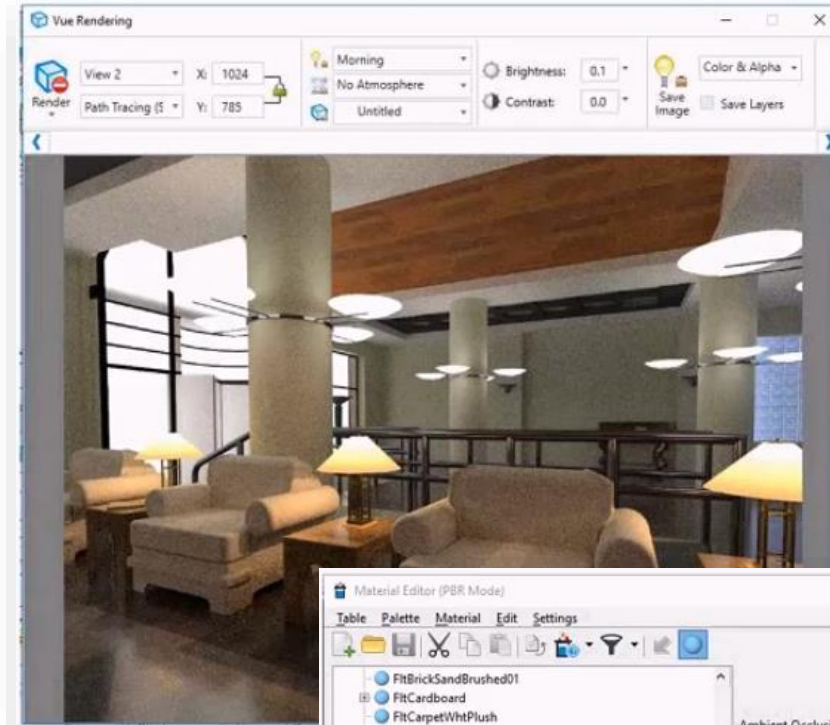
The screenshot shows a 3D model of a cylindrical tank with a floatation device. The 'Properties (Items)' window is open, showing the 'Floatation' item selected. Below the tree view, a table displays the properties of the selected item.

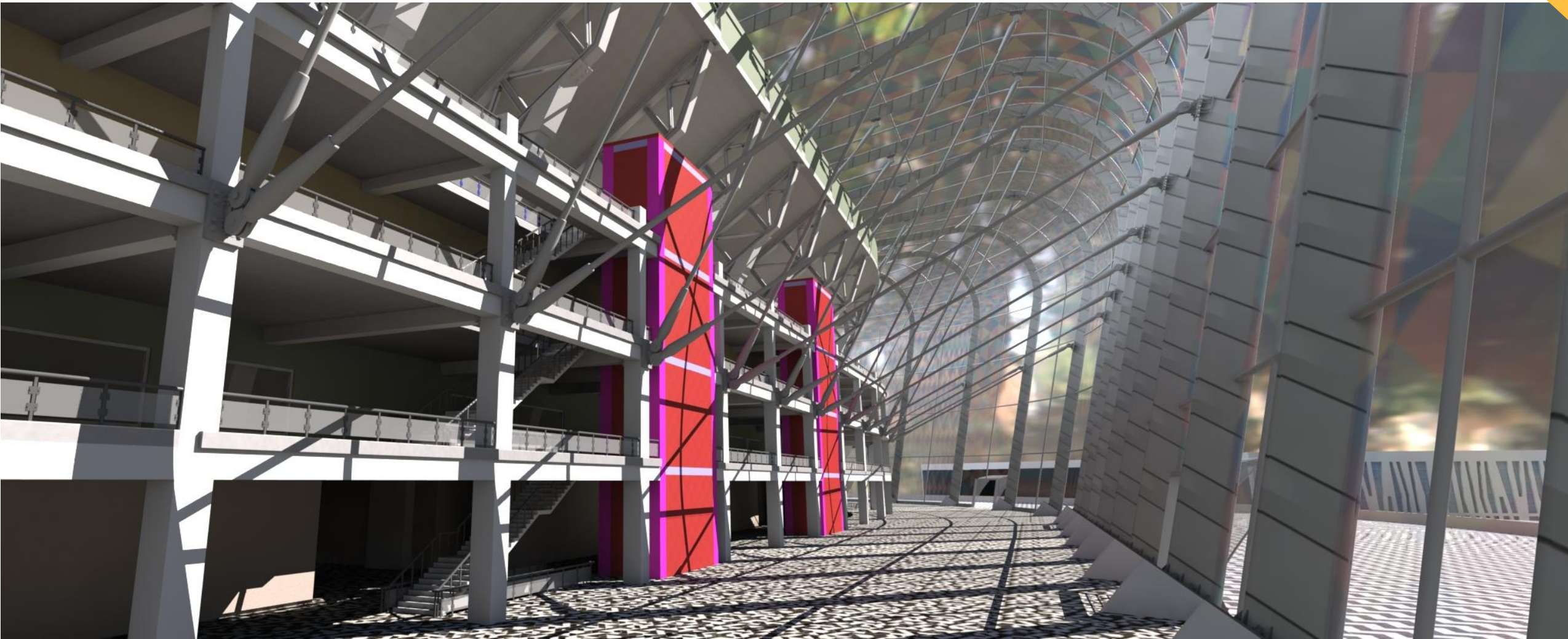
Floatation	
Volume	123780.9468522 cm <sup>3</sup>
FluidDensity	1.15 g/cm <sup>3</sup>
Uptrust	142348.08888003 g



# VUE Integration

- Replace current rendering engine
- Provides new capabilities
  - Path Tracing
  - Rich environments
  - Non-photorealistic rendering (NPR)
  - Physically-based Rendering (PBR)
- Targeting beta in Q4-18







# Issue Resolution Service

- Allow for digital redline process
- Provide method to communicate and address problems through the cloud
- Replaces paper workflow
- Audit trail to fix errors
- Use it to create check lists and job aids too
- Inclusion of BCF in Forms

The screenshot displays the 'Manage Issues' application window. At the top, there are buttons for '+ Create New', 'Publish iModel', and 'Reload'. Below these is a search bar and filters for 'Open (14)', 'Closed (5)', and 'All (19)'. A dropdown menu shows 'Priority: All'. The main area is a table with the following columns: ID, Subject, Model Name, Status, Assigned To, Created By, Created On, and Priority.

ID	Subject	Model Name	Status	Assigned To	Created By	Created On	Priority
0027	CNS	Model 1	Open	Samir Haque	Samir Haque	6/5/2018	
0026	Issue to Test Notificaton Service		Open	Samir Haque	Samir Haque	6/5/2018	
0025	Cone Base	Model 1	Open	Samir Haque	Samir Haque	3/26/2018	
0024	New_Issue_3-5-18	Model 1	Open	Samir Haque	Samir Haque	3/5/2018	
0023	PhysicalObject- Survey Existing Terrain	BSI400-W01-Terrain.imodel	Open	Samir Haque	Samir Haque	2/1/2018	
0022	Check Alignment	Model 1	Open		Samir Haque	1/12/2018	
0021	Check Slope	Model 1	Closed	Samir Haque	Samir Haque	12/20/2017	
0020	Check Safety Protocols		Closed	Richard Ruth	Samir Haque	12/20/2017	
0019	Cloud created Issue		Closed		Samir Haque	12/19/2017	
0016	Check locatrion of station	Model 1	Open		Samir Haque	10/11/2017	
0015	Check foundation concrete type	Model 1	Open				
0014	Second Story I-bean type	Apache.imodel	Closed				
0013	Footing Concrete Type	Model 1	Open				
0011	Steel Member	Apache.imodel	Closed				
0010	New Issue	Model 1	Open				
0009	DGN too	Model 1	Open				
0006	Check Door Type	BuildingExample.dgn.i.imodel	Open				
0005	Footing Piles angle	Model 1	Open				
0003	Footing Pile Type	Model 1	Open				

Below the table, there is a detailed view of an issue. It includes tabs for 'Details', 'Attachments', and 'Comments'. The 'Attachments' tab is active, showing a redline image titled 'Bridge\_RampC\_Default-3D2017\_12\_20\_06\_51\_27\_1.bmp'. The image shows a 3D model of a bridge ramp with red lines indicating areas of concern. At the bottom of the detailed view, there are 'OK', 'Cancel', and 'Save' buttons.



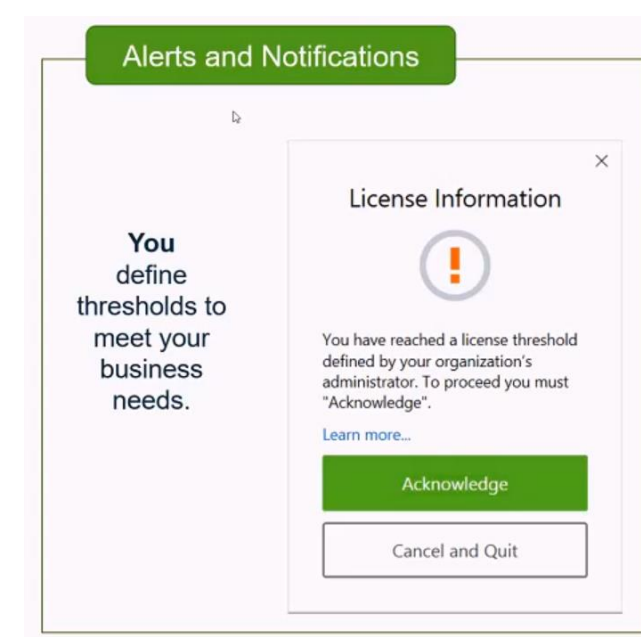
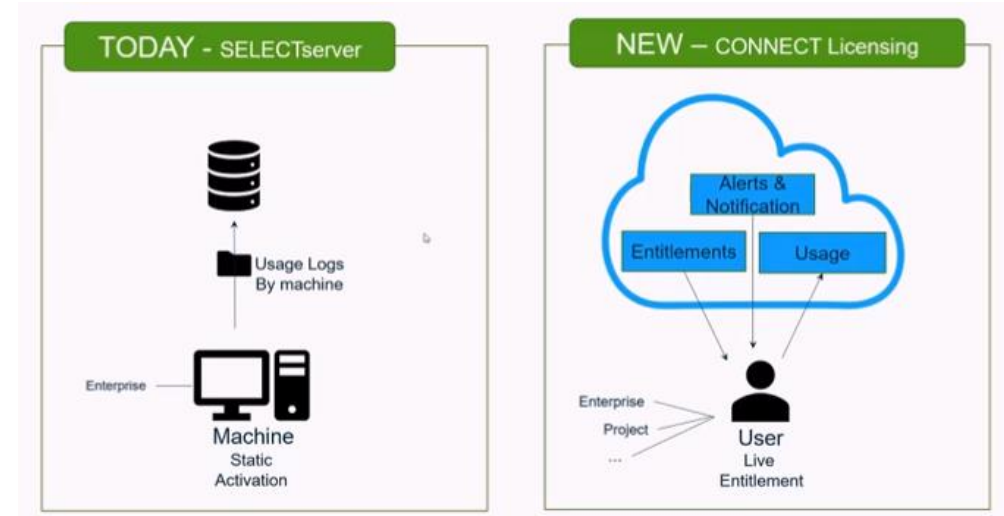
# CONNECT Notification Service

- Get Notified in-product about changes to:
  - Your status in a ProjectWise Project on the cloud
  - Product Update notifications
  - Having an Issue assigned to you
  - Completion of Cloud based apps e.g. Cloud Based Rendering



# CONNECT Licensing

- User-based activation...no more waiting for license keys
- Usage control...prevent over-usage
- In the future, will provide more granular licensing of product capabilities



# Bentley View CONNECT Edition



Free of charge



View drawings with 100% fidelity



Current supported file formats



Measure, inspect properties, print



Works when disconnected




Easy to download

## Reasons to Upgrade to Bentley View CONNECT Edition

- Most recent DGN and DWG file versions fully supported
- Improved user interface
- Fully compatible with CONNECT Edition applications
- Bentley View V8i will be retired

# Bentley Support Policy

SUPPORT STATUS	CONTINUOUS SUPPORT	FULL SUPPORT	EXPIRING SUPPORT	SUPPORT DISCONTINUED
CONNECT Edition	■			
<b>V8i (Latest SELECTseries)</b> Refer to <a href="#">Latest V8i Applications SELECTseries</a>		■	As of July 1, 2019	As of January 1, 2021
<b>V8i (Earlier SELECTseries)</b>		■	As of October 1, 2018	As of July 1, 2019
<b>V8, XM, 2004, ...</b>			■	As of January 1, 2019



		LEAD	"Fast Track" Services
CE VERSION TRAINING	Online User Training	Content Eng.	●
	Train-the-trainer, virtual	Content Eng.	●
	On-Site Account-specific Learning Conference	Content Eng.	●
	On-Site Training	Content Eng.	●
WORKSPACE MIGRATION	Discovery Workshop, onsite or virtual	Advocate	●
	Workspace Development Workshop, onsite	Advocate	●
	CONNECT Edition Pilot Best Practices & Support	Advocate	●
CUSTOMIZATION	Analyze MDL\VBA and Customizations	Advocate	●
	Train Developers on API	BDN	●
	Virtual Development Support	BDN	●
	Onsite Porting Model	BDN	●

Green = Professional Services Engagement