

**2024 FLUG TRAINING FORUM
Daily Overview**

| | | |
|---------------------|---|---|
| Monday Oct. 7 | 4:30pm - 6:30pm Seagrapes | Early Bird On-Site Registration Support Partner Setup |
| TUESDAY Oct. 8 | 7:00am - 8:30am Sea Oats / Seagrapes | Registration and Breakfast |
| | 8:00am - 8:15am Sea Oats | Welcome and Event Announcements |
| | 8:30am - 5:15pm | General Sessions and Hands-On Workshops |
| WEDNESDAY Oct. 9 | 7:00am - 8:30am Sea Oats / Seagrapes | Registration and Breakfast |
| | 8:00am - 8:15am Sea Oats | Welcome and Event Announcements |
| | 8:15am - 9:15am Sea Oats | Key Note: TBD |
| | 9:45am - 5: 15pm | General Sessions and Hands-On Workshops |
| | 7:00pm - 9:00pm Sea Oats | <i>Evening Event: Pub Style Trivia - TBD - Limited Drink Coupons will be available! Presented by FLUG - Teams of a 6 Max - Sign up begins at 6:30pm - Food will be available for purchase from Longboards Tiki Beach Grille menu.</i> |
| THURSDAY Oct. 10 | 7:00am - 8:30am Sea Oats / Seagrapes | Registration and Breakfast |
| | 8:00am - 8:15am Sea Oats | Welcome and Event Announcements |
| | 8:30am - 5:15pm | General Sessions and Hands-On Workshops |
| | <i>6:30pm - 9:30pm Ball Room</i> | <i>Evening Social: Refreshments Served! Presented by FLUG and Our Partners</i> |
| FRIDAY Oct. 11 | 7:00am - 8:30am Sea Oats / Seagrapes | Registration and Breakfast |
| | 8:00am - 8:15am Sea Oats | Welcome and Event Announcements |
| | 8:30am - 3:45pm | General Sessions and Hands-On Workshops |



Tuesday - October 8th

| | General Session Dunes (60) | General Session Sea Oats (120) | General Session Sawgrass (60) | General Session Starfish (34) | General Session Sand Dollar (30) | General Session Sundial (24) | Workshop Sandcastle I | Workshop Sandcastle II | Workshop Seahorse | Workshop Horizon |
|---|---|--|---|--|--|--|--|--|--|---|
| 8:30-9:30 | FDOT FDOTConnect General Workspace Setup Configuration and Troubleshooting FDOT Matt Sexton | *** Road & Survey - Tips and Tricks and new functionality added in recent releases 2023, 2022 Release 1, 2, 3 Bentley Jimmie Prow | FDOT FDOT C3D 2025 What's New FDOT Mike Racca & Randy Roberts | What's new in OpenBridge Designer? Bentley Steve Willoughby | * Introduction to Reality Modeling Bentley Kurt Rasmussen | Getting Started On Bentley Infrastructure Cloud Bentley Teresa Bouton | * T-1-SC I OpenRoads - Creating and Editing Centerline Geometry Bentley Megan Roden | * T-1-SC II OpenRoads - Introduction to OpenRoads Designer for Civil 3D Users Bentley Jeremy Carson | T-1-SH QuickStart for MicroStation CONNECT Edition for ALL Users Bentley Dave Mayer | * T-1-H FDOT Connect - Roadway Design 2D Basics ACEC-FDOT Gary Gaioti & Emmanuel Marin |
| Break | | | | | | | | | | |
| 9:45-10:45 | FDOT FDOTConnect2023 CADD Compliance Delivery Checklist Tools FDOT Matt Sexton & James Griffith | OpenRoads - Workspace Best Practices Bentley Chuck Lawson | * FDOT FDOT C3D 2025 Plan Production Workflows FDOT Mike Racca | * OpenBridge Modeler - What is it and How Can You Use it Today Bentley Steve Willoughby | * Manage your Road project in iTwin Capture Manage & Extract Bentley Kurt Rasmussen | CAD to GIS - Where is My Easy Button? Areas of Focus: AI/Machine Learning, Digital Twins, GIS, CAD Management and Design Phocaz Mark Stefanchuk | ↓ | ↓ | ↓ | |
| Break | | | | | | | | | | |
| 11:00-12:00 | * FDOT FDOTConnect2023 Automated Quantities Troubleshooting and Custom Pay Items FDOT Kandi Daffin | * OpenRoads - Deep Dive into Annotations - Text Favorites Bentley Megan Roden | FDOT FDOT C3D 2025 Traffic Plans Tools Update FDOT Randy Roberts | * OpenBridge Plans Production Tools Bentley Steve Willoughby | OpenBuildings Designer & iTwins for a Civil Workflow Bentley Mark Enos | * You Break It, You Buy It: Updating & Modifying Civil Geometry in ORD AtkinsRealis Samuel Worthy | * T-2-SC I OpenRoads - Creating and Managing Multiple Terrain Models *NEW* Bentley Najib Azougagh | * T-2-SC II OpenRoads - Designing a Pond Bentley Jordan Hatfield | T-2-SH AccuDraw Basics for Civil Design and Modeling Bentley Dave Mayer | |
| Lunch | | | | | | | | | | |
| 1:30-2:30 | OpenRail - New functionality added in recent releases 2023, 2022 Release 1, 2, 3 Bentley Matthew Wheeler | * OpenRoads - Deep Dive into Annotations - Annotation Groups Bentley Megan Roden | * FDOT FDOT C3D 2025 Geotech Tools FDOT James Griffith | * Custom Item types in OpenBridge Modeler Bentley Steve Willoughby | *** Digital Workflow - Moving all Data from all Places - Bentley to Trimble to the Field - Quadri Trimble Adrien Patane | * OpenRoads - Earthwork, Grading, and working with Meshes Bentley Jimmie Prow | ↓ | ↓ | ↓ | |
| Break | | | | | | | | | | |
| 2:45-3:45 | *** OpenRail - Regression Analysis - Rail Bentley Matthew Wheeler | * OpenRoads - Deep Dive into Annotations - Civil Labeler Bentley Chuck Lawson | FDOT FDOTConnect2023 Traffic Tools Update FDOT Marcus Duval | * Drawing with MicroStation for Civil Designers Bentley Dave Mayer | * OpenRoads - Special ditch and curb annotation in profile Bentley Jordan Hatfield | * Getting the Model Right: Above and Beyond Corridor Modeling Bentley Christiana Holmes | * T-3-SC I OpenRoads - Introduction to Creating Civil Cells Part 1 (2D & 3D Geometry) *NEW* Bentley Todd Holt | * T-3-SC II OpenRoads - Designing Gutters to Convey Runoff Bentley Erika Smith | * T-3-SH OpenBridge - 2D Drawing Production with OBM Bentley Steve Willoughby | |
| Snack with the Support Partners! (Technology Hub) | | | | | | | | | | |
| 4:15-5:15 | * OpenRail - Modeling a Crossover Bentley Matthew Wheeler | **Add Digital Context to Digital Twins with High-fidelity 3D Reality Meshes Bentley Kurt Rasmussen | * FDOT FDOTConnect2023 Civil Plan Labeler FDOT Brian Martin | Controlling the Display of Designs for Civil Designers Bentley Dave Mayer | Creating Forms, Custom Stamps, & Comparisons with Bluebeam Revu DDS CAD Ari Rejtman | * OpenRoads -Geometry Rules and Relationships Bentley Najib Azougagh | ↓ | ↓ | ↓ | ↓ |

"Technology Hub Open - Come and visit our Support Partners!"

- Legend
 * denotes PDH credits
 ** denotes PSM CE Credits
 *** denotes both PDH and PSM CE Credits



Wednesday - October 9th

| | General Session Dunes (60) | General Session Sea Oats (120) | General Session Sawgrass (60) | General Session Starfish (34) | General Session Sand Dollar (30) | General Session Sundial (24) | Workshop Sandcastle I | Workshop Sandcastle II | Workshop Seahorse | Workshop Horizon |
|---|---|--|---|---|---|--|--|--|--|--|
| 8:30-9:30 | Key Note | | | | | | | | | |
| Break | | | | | | | | | | |
| 9:45-10:45 | FDOT FDOT C3D 2025 Drainage Workflows FDOT Randy Roberts & Mike Racca | * FDOT FDOTConnect Custom Drainage Structures: Pond Control FDOT James Worley | Learn how to Manage & Share your Reality Data with 3DM Cloud/Publisher Bentley Kurt Rasmussen | * Detailing of Bridge Elements using ProStructures Bentley Steve Willoughby | * ** OpenRoads - Creating Proposed Terrain Models Bentley Matthew Wheeler | * OpenBuildings Designer for Road Infrastructure – Design of Support Buildings and Structures Bentley Mark Enos | W-1-SC I Simultaneous Collaboration with Bluebeam Studio Sessions DDS CAD Ari Rejtman | * W-1-SC II OpenRoads - Intersection Design Part 1 - Horizontal and Vertical Geometry Bentley Jeremy Carson / Megan Roden | * W-1-SH OpenRoads - Introduction to Creating Civil Cells Part 2 (3D Modeling Detailing) *NEW* Bentley Todd Holt | * W-1-H FDOT Connect - Existing Modeling ACEC-FDOT Gary Gaiotti & John Thomas |
| Break | | | | | | | | | | |
| 11:00-12:00 | * FDOT FDOTConnect2023 Geotech Tools FDOT James Griffith | * FDOT FDOTConnect Custom Drainage Structures: Bottom's up! FDOT James Worley | Processing, uploading & managing reality data in iTwin Services Bentley Kurt Rasmussen | * OBD - Grading Design and Modeling at Bridge Abutments Bentley Steve Willoughby | OpenRoads - Data Migration - New Tools and Workflows Bentley Najib Azougagh | Best Practices for OpenBuildings Designer with Civil and Plant Infrastructure Projects Bentley Mark Enos | ↓ | ↓ | ↓ | ↓ |
| Lunch | | | | | | | | | | |
| 1:30-2:30 | What's New in MicroStation 2024 Bentley Tamicca Sellars & Dan Eng | OpenRoads Designer Troubleshooting AtkinsRealis Samuel Worthy | * OpenRoads - Drainage/Utilities Plans Production Tips and Tricks Bentley Erika Smith | * OpenRoads - All about creating Drainage Features Bentley Najib Azougagh | * OpenRoads - How to Supplement a DOT Workspace Bentley Christiana Holmes | Empowering Urban Infrastructure : The Role of Urban Digital Twins Bentley Mark Enos | * W-2-SC I OpenBridge - 3D Drawing Production with OBM Bentley Steve Willoughby | ↓ | * W-2-SH OpenRoads - Drainage Plans, Profiles and Cross Sections *NEW* Bentley Jordan Hatfield | ↓ |
| Break | | | | | | | | | | |
| 2:45-3:45 | MicroStation CE - Printing and Publishing Bentley Dave Mayer | OpenRoads - Best Practices for organizing Files and References Bentley Christiana Holmes | * OpenRoads - Annotating Drainage and Utilities Bentley Erika Smith | * Civil 3D Tips and Tricks AtkinsRealis Oscar Castaneda | * OpenRoads - Best Practices for Civil Cells Bentley Todd Holt | * OpenRoads - Cross Sections Annotation Bentley Jimmie Prow | ↓ | * W-2-SC II OpenRoads - Intersection Design Part 2 - 3D Model Detailing Bentley Jeremy Carson / Megan Roden | ↓ | ↓ |
| Snack with the Support Partners! (Technology Hub) | | | | | | | | | | |
| 4:15-5:15 | MicroStation CE - Creating Tables and Reports Bentley Dave Mayer | 3D Deliverables for Model as a Legal Document: First Steps on First Coast Expressway RS&H John-Mark Palacios | * OpenRoads - Creating Staged Cross Sections Bentley Jimmie Prow | * OpenRoads Designer in The Civil3D World AtkinsRealis Oscar Castaneda | OpenRoads - File Federation and Optimizing the Corridor Bentley Christiana Holmes | * ** Construction Roadway Volume Verification for FDOT Sitech - Trimble Mike Eason | ↓ | ↓ | ↓ | ↓ |

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 *** denotes both PDH and PSM CE Credits



Thursday - October 10th

| | General Session Dunes (60) | General Session Sea Oats (120) | General Session Sawgrass (60) | General Session Starfish (34) | General Session Sand Dollar (30) | General Session Sundial (24) | Workshop Sandcastle I | Workshop Sandcastle II | Workshop Seahorse | Workshop Horizon | |
|---|---|---|--|--|--|--|--|---|---|---|--|
| 8:30-9:30 | FDOT FDOTConnect2023 CADD Compliance Delivery Checklist Tools (Repeat) FDOT Matt Sexton & James Griffith | Introduction to OpenRoads Designer Bentley Jimmie Prow | Why choose ProjectWise for your projects? Bentley Buddy Branham | * Tips and Tricks using OpenBridge Bentley Steve Willoughby | ** Utility Coordination/Conflict: Turnkey Relocation and Project Management Badger / GeoPoint Surveying Larry Hill / Michael Wolf | SYNCHRO Construction Solution Bentley Arpit Prakash | ***TH-1-SC I Locate Geometry in the Correct Place on Earth with MicroStation CONNECT Edition Bentley Dave Mayer | TH-1-SC II OpenBuildings Designer: Modeling and BIM Essentials of a 3D Transit Station Bentley Mark Enos | ** TH-1-SH OpenRoads - Geometry for Surveyors *NEW* Bentley Todd Holt | *TH-1-H FDOT Connect - Drainage & Pond Design with 3D Modeling & Plans Development ACEC-FDOT Kyle Rosenmeyer & Ramone Spalding | |
| Break | | | | | | | | | | | |
| 9:45-10:45 | * FDOT FDOTConnect2023 Automated Quantities Troubleshooting and Custom Pay Items (Repeat) FDOT Kandi Daffin | * OpenRoads - Item Type Fundamentals – Part 1 Bentley Jordan Hatfield | FDOT FDOTConnect2023 ProjectWise Managed Workspace FDOT / Bentley Mike Robertson / Buddy Branham | * OpenBridge - Custom Abutments with Functional Components Bentley Steve Willoughby | ** Utility Coordination/Conflict: Paving the Way to Project success with Early Detection Badger / GeoPoint Surveying Larry Hill / Michael Wolf | Interrogating an iModel in SYNCHRO Bentley Arpit Prakash | ↓ | ↓ | ↓ | | |
| Break | | | | | | | | | | | |
| 11:00-12:00 | * OpenRoads - Creating Drainage Reports Bentley Christiana Holmes | * OpenRoads - Item Type Fundamentals – Part 2 Bentley Jordan Hatfield | What's new in ProjectWise v2023 and what's ProjectWise Cloud? Bentley Teresa Bouton | FDOT FDOTConnect2023 for OBM Updates FDOT Steve Tisser | Utility Coordination/Conflict: Using 3D Model tools in Utility Coordination: Utility Conflict Resolution Inwood Consulting Engineers Melonie Schwartz & Josh Kelly | * Creating a Construction Model in SYNCHRO Bentley Arpit Prakash | * TH-2-SC I OpenBridge - Bridge Modeling 101 Bentley Steve Willoughby | * TH-2-SC II Trimble Business Center 101 - Building a Basics Model for Sites and Roads Trimble Scott Bridges | ** TH-2-SH OpenRoads - Regression for Surveyors *NEW* Bentley Todd Holt | | |
| 1.5 Hr | ↓ | | | | | | | | | | |
| 1:30-2:30 | 3D Deliverables with Civil 3D and InfraWorks and more! AtkinsRealis Oscar Castaneda | * Soil Boring in OpenRoads Designer 3D Highway Engineering Richard Perez | Tips & Tricks for ProjectWise Users Bentley Arbie Parker | ***Reality Modeling for Transportation Projects Bentley Kurt Rasmussen | Utility Coordination/Conflict: Utility Conflict Identification and Constructability Inwood Consulting Engineers Melonie Schwartz & Josh Kelly | * The OPERATIONAL Model with SYNCHRO WSB Doug Hobyan | ↓ | ↓ | ↓ | | |
| *NEW* | | | | | | | | | | | |
| 2:45-3:45 | Working Together: OpenRoads Designer, ProjectWise and iTwin Integration. Bentley Jeremy Carson | Simplifying Signatures & Submittals with Bluebeam Revu DDS CAD Ari Rejtman | An Introduction to the I-Model Composition Server, ProjectWise Web, and ProjectWise Drive Bentley Arbie Parker | MicroStation CONNECT Edition - Tips & Tricks, The Game Show Version Bentley Dave Mayer | Utility Coordination/Conflict: When to get SUE (Subsurface Utility Exploration) and not get SUE, that is the question! Inwood Consulting Engineers Melonie Schwartz & Josh Kelly | * OpenRoads Designer to SYNCHRO Construction Bentley Arpit Prakash | * TH-3-SC I OpenBridge - Advanced Bridge Modeling Techniques with OBM Bentley Steve Willoughby | * TH-3-SC II OpenRoads - Creating and Managing Utilities *NEW* Bentley Erika Smith | * TH-3-SH OpenRoads - Road Regression and Re-Design *NEW* Bentley Christiana Holmes | | |
| Snack with the Support Partners! (Technology Hub) | | | | | | | | | | | |
| 4:15-5:15 | * OpenRoads - Design and Model ADA Ramps Bentley Jeremy Carson | *** Creating a Constructable Model for Machine Control and Field Layout Trimble Scott Bridges | Bentley ProjectWise Deliverables Management Overview and Best Practices Bentley Teresa Bouron / Buddy Branham | MicroStation CONNECT Edition - Tips & Tricks, The Game Show Version (Con't) Bentley Dave Mayer | * Using OpenRoads Designer to Identify and Manage Utility Clashes in Transportation Projects Bentley Najib Azougghagh | * SYNCHRO 4D Models Bentley Arpit Prakash | ↓ | ↓ | ↓ | ↓ | |

"Technology Hub Open - Come and visit our Support Partners!"

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 *** denotes both PDH and PSM CE Credits



Friday - October 11th

| | | General Session Dunes (60) | General Session Sea Oats (120) | General Session Sawgrass (60) | General Session Starfish (34) | General Session Sand Dollar (30) | General Session Sundial (24) | Workshop Sandcastle I | Workshop Sandcastle II | Workshop Seahorse | Workshop Horizon | |
|---|--|--|---|--|--|--|---|---|---|--|--|--|
| 8:30-9:30 | "Technology Hub Open - Come and visit our Support Partners!!" | * OpenRoads - Roundabout Modeling Part 1 Bentley Jeremy Carson | ** OpenRoads Survey - QuickStart for Survey Bentley Sonya Pieterse | * iTwins – A Practical Overview with Case Studies AtkinsRealis Samuel Worthy | * Advanced Tips and Tricks for Sheet Seed Creation Bentley Jimmie Prow / Chuck Lawson | 3D QC : Developing Policy & Statements. How to create and implement effective Guidance Documents for 3D Design and Quality Control RS&H John-Mark Palacios | Introduction to OpenRoads ConceptStation Bentley Todd Holt | * F-1-SC I Getting Started with iTwin Capture Manage & Extract and AI based workflows for feature extraction *NEW* Bentley Kurt Rasmussen | * F-1-SC II Using Parametric Solids, Constraints, Variables & Variants- All Together with Parametric Modeling of a 3D Box Culvert Bentley Dave Mayer | * F-1-SH OpenRoads - Introduction to Drainage Layout and Hydraulics Bentley Najib Azouggagh | * F-1-H FDOT Connect - Roadway Design 3D Modeling ACEC-FDOT Emmanuel Marin & Tejsing Rana | |
| Break | | | | | | | | | | | | |
| 9:45-10:45 | | * OpenRoads - Roundabout Modeling Part 2 Bentley Jeremy Carson | ** OpenRoads Survey - Editing Link Code Features Bentley Sonya Pieterse | Item Types - My expensive CAD System doesn't have that Data! Areas of Focus: BIM, Digital Twins, CAD Phocaz Mark Stefanchuk | ** Photogrammetry processing for Point Clouds and Surface Creation Sitech - Trimble Mike Eason | FDOT FDOTConnect2023 Custom Drainage Resources FDOT James Worley | Introduction to OpenSite Designer Bentley Todd Holt | | | | | |
| Break | | | | | | | | | | | | |
| 11:00-12:00 | | * OpenRoads - Templates Deconstructed Bentley Jimmie Prow | ** OpenRoads Survey - Editing Survey Features Using Point Lists Bentley Todd Holt | * OpenRoads - Modeling Retaining Walls and Side Slopes Bentley Jeremy Carson | * OpenRoads - Parametric Cell Creation Bentley Erika Smith | * FDOT FDOT C3D 2025 Plan Production Workflows (Repeat) FDOT Mike Racca | Civil Design Review with Bentley Infrastructure Cloud Bentley Christiana Holmes / Jordan Hatfield | | | * F-2-SC II OpenRoads - Creating and Manipulating the Corridor Bentley Sonya Pieterse | | |
| Lunch | | | | | | | | | | | | |
| 1:30-2:30 | | * OpenRoads - Tips and Tricks for Creating Civil Sheet Seed Definitions Bentley Chuck Lawson | FDOT FDOTConnect2023 Traffic Tools Update (Repeat) FDOT Marcus Duval | * OpenRoads- Drainage & Utilities - Tips and Tricks and new functionality added in recent releases Bentley Christiana Holmes | What's New in MicroStation 2024 (Repeat) Bentley Tamicca Sellars & Dan Eng | FDOT FDOT C3D 2025 Traffic Plans Tools Update (Repeat) FDOT Randy Roberts | * Making the Model More Visual Using the OpenRoads WorkSpace Bentley Jimmie Prow | * F-2-SC I OpenRoads - ConceptStation *NEW* Bentley Todd Holt | | | * F-2-SH OpenRoads - Editing and Managing Geometry *NEW* Bentley Megan Roden | |
| Snack with the Support Partners! (Technology Hub) | | | | | | | | | | | | |
| 2:45-3:45 | *** OpenRoads - Understanding Terrain Models Bentley Jordan Hatfield | * FDOT FDOTConnect2023 Civil Plan Labeler (Repeat) FDOT Brian Martin | FDOT FDOT C3D 2025 Drainage Workflows (Repeat) FDOT Randy Roberts & Mike Racca | MicroStation CE - Taking Control of how Models are Presented in the View Bentley Dave Mayer | * FDOT FDOT C3D 2025 Geotech Tools (Repeat) FDOT James Griffith | * OpenRoads - Grading - It's not just Dirt! Bentley Najib Azouggagh | | | | | | |

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TUESDAY OCTOBER 8th SESSIONS

| Time | Title | Speaker | Description | Level | Software | PDH/PSM Credits |
|--------------|--|---------|--|-----------------------|--------------------------------|--------------------------------------|
| 8:30 - 9:30 | FDOT FDOTConnect General Workspace Setup Configuration and Troubleshooting | FDOT | This session is an in-depth dive into the process of setting up, configuring and troubleshooting the FDOT workspace. This session will help the attendee to understand how the software is installed and what to do when things don't go as planned. | Intermediate - Expert | FDOTConnect | PDH Credits : N/A |
| 8:30 - 9:30 | * ** Road & Survey - Tips and Tricks and new functionality added in recent releases 2023, 2022 Release 1, 2, 3 | Bentley | In this session, learn how to be more productive and efficient as Bentley experts share useful tips, tricks and highlight some of the newer tools that have been added to OpenRoads Designer over the past few releases. | Novice - Expert | OpenRoads - Foundations | PDH Credits : 1 PSM CE Credit : 1 |
| 8:30 - 9:30 | FDOT FDOT C3D 2025 What's New | FDOT | Get caught up with what's new in the latest release of the FDOT Civil 3D State Kit 2025. Topics include Maintenance Release (MR) and new version updates. | Novice - Expert | FDOT C3D 2025 | PDH Credits : N/A |
| 8:30 - 9:30 | What's new in OpenBridge Designer? | Bentley | In this session, we will preview some of the new enhancements that are coming for the next release of OpenBridge Modeler and OpenBridge Designer: bridge deck customizations, pier templates, pile layout, Generative Components, DOT's design code updates and more. | Novice - Expert | OpenBridge Designer | PDH Credits : N/A |
| 8:30 - 9:30 | * Introduction to Reality Modeling | Bentley | Discover how reality modeling provides real-world digital context for digital twins. | Novice - Expert | Bentley Reality Modeling | PDH Credits : 1 |
| 8:30 - 9:30 | Getting Started On Bentley Infrastructure Cloud | Bentley | Bentley Infrastructure Cloud brings teams, projects, and asset data together in collaborative and managed environments, allowing you to design, build, and operate sustainable infrastructure. Join us for this info-packed session where we will walk you through the evolution of Bentley Infrastructure Cloud, demonstrate the upgrade path for legacy cloud projects, and reveal best practices for cloud project management | Novice - Expert | Bentley - Infrastructure Cloud | PDH Credits : N/A |
| 9:45 - 10:45 | FDOT FDOTConnect2023 CADD Compliance Delivery Checklist Tools | FDOT | This session will discuss the various CADD Office tools developed to assist with CADD delivery. Specifically with regards to the CADD Compliance Checklist; Project QC reports, Project Validator reports, Reference Manager/Checker, and Geographic Coordinate System Reports | Intermediate - Expert | FDOTConnect | PDH Credits : N/A |
| 9:45 - 10:45 | OpenRoads - Workspace Best Practices | Bentley | Whether it is keeping up to date, consolidating resources, or configuration variable tweaks, there are always improvements that can be done in a WorkSpace. In this presentation, we will examine some of these more challenging topics. | Intermediate - Expert | OpenRoads - Foundations | PDH Credits : N/A |
| 9:45 - 10:45 | * FDOT FDOT C3D 2025 Plan Production Workflows | FDOT | This session is will focus FDOT C3D Plans Production. We will explain and demonstrate how to create an FDOT Civil 3D Project, Sheet Set (.dst) file, sheets, edit sheets and plotting. We will create and edit fields to make a custom sheet or edit the topics/fields to suit specific needs for FDOT title blocks. | Novice - Expert | FDOT C3D 2025 | PDH Credits : 1 |
| 9:45 - 10:45 | * OpenBridge Modeler - What is it and How Can You Use it Today | Bentley | Develop intelligent, 3D, parametric bridge models for your highway projects with Bentley's OpenBridge Modeler. Easily manage changes with built-in, user-defined relationships among bridge components and reference DGN models throughout the lifecycle of the bridge. Learn how OpenBridge Modeler's integrated workflow minimizes errors and improves efficiency. OpenBridge Modeler leverages OpenRoads geometry data (terrain, alignments, profile, and superelevation) ensuring the bridge and roadway geometry are the same and transfers directly into LEAP Bridge and RM Bridge for detailed design and analysis. | Novice - Expert | OpenBridge Modeler | PDH Credits : 1 |
| 9:45 - 10:45 | * Manage your Road project in iTwin Capture Manage & Extract | Bentley | Tips and tricks to semiautomatic or automatic extract road markings and road borders from pointclouds or images. The session shall show how to use different methods to extract the features. For example usages of Orbit, ContextCapture, Microstation or other Bentley software to extract the features. Both in 2D and 3D. | Novice - Expert | Bentley iTwin Capture | PDH Credits : 1 |

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| 9:45 - 10:45 | CAD to GIS - Where is My Easy Button? Areas of Focus: AI/Machine Learning, Digital Twins, GIS, CAD Management and Design | Phocaz | GDOT's CLIP is a CAD to GIS initiative that looks to capture road characteristics from CAD files and add them to GIS. The solution leverages digital twins, AI, and traversal algorithms (CLIP CAR). The CLIP application will traverse a road and interpret the linework in the CAD file. And, it will transform element heavy CAD designs to a streamlined GIS representation with simplified road geometry. Further, lane counts, widths, shoulder locations and more are captured and associated with the transformed GIS roads. Instead of a manual inventory, GDOT can now process any project in a few minutes. Building upon the CLIP effort, the team has developed new CAD to GIS workflows. The Phorz Query workflow makes building common searches easy. Quickly create searches for telecomm, drainage, signs, or any design feature - a one time effort. Then apply these searches to any project that follows the same design standard. Data, such as item types are also captured. In fact users of the program can apply any data schema to associate with captured graphic elements. In this session learn about our work on GDOT's CLIP project, and see how easy it is to build searches using the new workflows we have developed. The session will also introduce a new application for extracting data from PDF. Leveraging the latest in LLM AI, the team has built an application that can quickly extract and tabulate data found in image files like PDFs. | Novice - Expert | AI, Machine Learning, iTwin, GIS, CAD Management and Design | PDH Credits : N/A |
| 11:00 - 12:00 | * FDOT FDOTConnect2023 Automated Quantities Troubleshooting and Custom Pay Items | FDOT | This session will explore how to use native Bentley ORD and FDOT workspace tools to visualize and troubleshoot and customize pay item information for quantities. | Novice - Expert | FDOTConnect | PDH Credits : 1 |
| 11:00 - 12:00 | * OpenRoads - Deep Dive into Annotations - Text Favorites | Bentley | All automated annotation has one thing in common, the use of Text Favorites. Text Favorites are capable of infinite combinations of label content. In this presentation, learn how to properly navigate and search the Text Favorite dialog looking for those unique properties. In addition, we will explore some of the more significant Text Favorite settings. Lastly, learn the significance of the Text Style inclusion and how Text Favorites directly interact. | Novice - Expert | OpenRoads - Foundations | PDH Credits : 1 |
| 11:00 - 12:00 | FDOT FDOT C3D 2025 Traffic Plans Tools Update | FDOT | Updates to the Traffic Applications for Civil 3D 2025, including, new MUTCD signs, FDOT Signs, Place Block Group, Pavement Markings, Light Pole Manager, Signal Design Tool, Entity Manager, & Guide sign | Novice - Expert | FDOT C3D 2025 | PDH Credits : N/A |
| 11:00 - 12:00 | * OpenBridge Plans Production Tools | Bentley | Optimize your plans creation process using the tools provided in OpenBridge Modeler and take advantage of what the MicroStation platform offers as well. Design, Drawing and Sheet models, Section callouts, Elevation Callouts, Clip Volume, Annotation scales are the few topics that we will cover in this session. | Novice - Expert | OpenBridge Modeler | PDH Credits : 1 |
| 11:00 - 12:00 | OpenBuildings Designer & iTwins for a Civil Workflow | Bentley | OpenBuildings Designer with Cloud Services and iTwin Workflows. More specifically exploring how to accelerate Desktop Productivity, improve coordination for Design/Engineering/Construction workflows, leverage iTwins for Advanced Services, and best practices for iTwins. Topics will include: <ul style="list-style-type: none"> • Projectwise Issue Resolution Service powered by iTwins in OpenBuildings Designer workflows. • SYNCHRO iTwin workflows with OpenBuildings Designer • Synchronize OpenBuildings models and analytical structural models with the iTwin Service Add-in. • Using iTwin Referencing for Coordination with Revit in OpenBuildings Designer • LumenRT with iTwins and LumenRT for NVIDIA Omniverse | Novice - Expert | OpenBuildings Designer - iTwin | PDH Credits : N/A |
| 11:00 - 12:00 | * You Break It, You Buy It: Updating & Modifying Civil Geometry in ORD | AtkinsRealis | This session will focus on making changes and updates to existing horizontal alignments and vertical profiles. Since the old workflow of "break it and rebuild it" can now break many reference links within ORD, the proper tools for modifying civil geometry must be used but can be tricky. This presentation shows all the tips and tricks for making these modifications without breaking the links from named boundaries, civil labels, etc. The presentation will include pre-recorded videos of each method, along with live demonstrations. | Novice - Expert | OpenRoads - Geometry | PDH Credits : 1 |
| 1:30 - 2:30 | OpenRail - New functionality added in recent releases 2023, 2022 Release 1, 2, 3 | Bentley | Join the Bentley Rail expert to hear what is new in OpenRail Designer. | Novice - Expert | OpenRail - Foundations | PDH Credits : N/A |

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| 1:30 - 2:30 | * OpenRoads - Deep Dive into Annotations - Annotation Groups | Bentley | Annotation Groups are the key to setting up automated annotation for both geometry along with cross section and profile sheets. In this presentation, we will explore the different types of Annotation Groups. After defining the different types of Annotation Groups, we will next look at creating and editing them. Lastly, we will explore importing Annotation Groups from other WorkSpaces to simplify the creation process. | Novice - Expert | OpenRoads - Foundations | PDH Credits : 1 |
| 1:30 - 2:30 | * FDOT FDOT C3D 2025 Geotech Tools | FDOT | Bored? Let's talk borings! This session will explore how to use the FDOTC3D2025 Geotech Tools to create/import borehole data using the Geotechnical Data Manager and how to use that data to generate the report of core borings, 2D plan elements, 3D Geotech model, and how to create and annotate geotech cross sections. | Novice - Expert | FDOT C3D 2025 | PDH Credits : 1 |
| 1:30 - 2:30 | * Custom Item types in OpenBridge Modeler | Bentley | Join us in this presentation as we will explore the use of item types in a bridge project context. | Novice - Expert | OpenBridge Modeler | PDH Credits : 1 |
| 1:30 - 2:30 | *** Digital Workflow - Moving all Data from all Places - Bentley to Trimble to the Field - Quadri | Trimble | This session covers Trimble's soup to nuts workflow, where we highlight the value & benefits of taking a digital design through the entire design to construct process, including field connectivity, and finally into the operations and maintenance phase, leveraging the intelligent as-built. | Novice - Expert | Trimble / Quadri | PDH Credits : 1 PSM CE Credit : 1 |
| 1:30 - 2:30 | * OpenRoads - Earthwork, Grading, and working with Meshes | Bentley | This presentation will cover the many nuances with computing quantities and calculating earthwork such as unsuitable materials, multiple substrata, and complex volumes with meshes. | Intermediate - Expert | OpenRoads - Earthwork | PDH Credits : 1 |
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| 2:45 - 3:45 | *** OpenRail - Regression Analysis - Rail | Bentley | In this course you will learn how to create a horizontal and vertical alignment along an existing track using the regression tools available in OpenRail Designer. | Novice - Expert | OpenRail - Foundations | PDH Credits : 1 PSM CE Credit : 1 |
| 2:45 - 3:45 | * OpenRoads - Deep Dive into Annotations - Civil Labeler | Bentley | Every engineering project requires manual annotation. Civil Labeler allows the user to create any combination of both static and computed text. Civil Labeler supports many different settings to control the symbology and overall appearance such as rotation, leader lines, etc. In this Presentation we will learn how to create different types of Civil Labels from start to finish. In addition, learn how to import Civil Label Definitions from other Workspace Environments. | Novice - Expert | OpenRoads - Foundations | PDH Credits : 1 |
| 2:45 - 3:45 | FDOT FDOTConnect2023 Traffic Tools Update | FDOT | Updates to the Traffic Applications for Civil 3D 2025, including, new MUTCD signs, FDOT Signs, Place Block Group, Pavement Markings, Light Pole Manager, Signal Design Tool, Entity Manager, & Guide Sign. | Novice - Expert | FDOTConnect | PDH Credits : N/A |
| 2:45 - 3:45 | * Drawing with MicroStation for Civil Designers | Bentley | In the MicroStation CONNECT Edition, there are a host of placement tools that allow you to create new drawing elements efficiently and accurately using tools such as Place SmartLine, Place Circle, Create Region, and others. AccuDraw is an intuitive drawing aid that helps you to define exact distances and angles while creating new elements or manipulating existing ones. In this session, you will utilize the Place SmartLine tool along with the aid of AccuDraw for precision placement of the lines which will make up the subdivision for your project. | Novice - Expert | MicroStation CE - Civil Design | PDH Credits : 1 |
| 2:45 - 3:45 | * OpenRoads - Special ditch and curb annotation in profile | Bentley | In this OpenRoads session, you will learn workflows for adding and annotating Special Ditches in Profile. | Intermediate - Expert | OpenRoads - Foundations | PDH Credits : 1 |
| 2:45 - 3:45 | * Getting the Model Right: Above and Beyond Corridor Modeling | Bentley | This presentation covers corridor modeling methods and tips for creating accurate corridor models. | Intermediate - Expert | OpenRoads - Corridor Modeling | PDH Credits : 1 |
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| 4:15 - 5:15 | * OpenRail - Modeling a Crossover | Bentley | In this lecture, participants will learn how to create a detailed 3D model of a railway crossover using the latest features and tools available in Bentley's OpenRail software. Designed for both beginners and experienced professionals in railway design and engineering, this session will guide you through the entire process of modeling a double mainline railway crossover, focusing on the railway tools, templates and corridor best practices. | Novice - Expert | OpenRail - Modeling | PDH Credits : 1 |
| 4:15 - 5:15 | **Add Digital Context to Digital Twins with High-fidelity 3D Reality Meshes | Bentley | The survey sector has made advances in the quality and quantity of data acquired by using different types of equipment and sensors. Having the ability to combine all the data to provide clear insight to stakeholders is a key differentiator. iTwin Capture has the unique ability to combine point clouds from laser scanners and photos and videos from cameras. Moreover, iTwin Capture can leverage cloud and on-premise resources for faster and more efficient processing, to help you deliver in all situations. Learn about iTwin Capture's new features and how it can automatically register different sources of data to produce accurate 3D engineering-ready reality meshes to create digital twins or to use in design, construction, and operations workflows. | Intermediate - Expert | Bentley iTwin Capture | PSM CE Credits : 1 |

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| 4:15 - 5:15 | * FDOT FDOTConnect2023 Civil Plan Labeler | FDOT | This session will focus on FDOT's implementation of the Civil Labeler Tool in FDOTConnect2023, as well as recent updates and future enhancements. | Novice - Expert | FDOTConnect | PDH Credits : 1 |
| 4:15 - 5:15 | Controlling the Display of Designs for Civil Designers | Bentley | In the MicroStation CONNECT Edition, there are many ways you can control how you view your designs. In this session, you learn how to control the display of levels in both the active and those of attached references. Set View Attributes by creating a Display Style that will be matched up to a Display Rule. You will then learn how to create a Clip Volume, which will limit the region that is displayed within a view to the area of that around the project site, and then finally preserving all these view settings through the creation of a Saved View. | Novice - Expert | MicroStation - Civil Design | PDH Credits : N/A |
| 4:15 - 5:15 | Creating Forms, Custom Stamps, & Comparisons with Bluebeam Revu | DDS CAD | This presentation delves into "The Three C's" of Bluebeam Revu. We'll start with creating forms in "Form Mode" and how to manipulate each form field. Then, we'll see how these form fields are connected to creating custom stamps that use JavaScript to automatically input important information onto our shop drawings. Then, we'll learn about the "Comparison" and "Overlay" tools and how they work hand-in-hand to help us determine what changes were made between old and new revisions of the same documents. | Novice - Expert | Bluebeam Revu | PDH Credits : N/A |
| 4:15 - 5:15 | * OpenRoads -Geometry Rules and Relationships | Bentley | Understanding Geometry parent/child relationships, how to build geometry in such a way that it maximizes efficiency when dealing with design changes. | Intermediate - Expert | OpenRoads - Geometry | PDH Credits : 1 |
| TUESDAY WORKSHOP | | | | | | |
| 8:30 - 10:45 | * T-1-SC I OpenRoads - Creating and Editing Centerline Geometry | Bentley | In this course, you will learn how to create and edit horizontal and vertical geometry using various tools and techniques. You will be defining the horizontal and vertical geometry for River Rd. You will also learn how to make changes to the River Rd. geometry and how to make changes to the existing geometry for Mountain Highway and Pike Rd. | Intermediate - Expert | OpenRoads - Geometry | PDH Credits: 2 |
| 8:30 - 10:45 | * T-1-SC II OpenRoads - Introduction to OpenRoads Designer for Civil 3D Users | Bentley | This course is a basic introduction to OpenRoads Designer intended for Civil 3D Users. | Novice - Intermediate | OpenRoads - Fundamental | PDH Credits: 2 |
| 8:30 - 10:45 | T-1-SH QuickStart for MicroStation CONNECT Edition for ALL Users | Bentley | The MicroStation CONNECT Edition features updates to many parts of the software. These updates include the introduction of a ribbon-style graphical user interface (GUI), a relocation of the workspace settings, a new Backstage, updated tools and dialogs, Property Driven Annotation, a new Explorer replacing Project Explorer, and much more. Master these new and exciting features. | Novice - Expert | MicroStation CE | PDH Credits: N/A |
| 11:00 - 2:30 | * T-2-SC I OpenRoads - Creating and Managing Multiple Terrain Models *NEW* | Bentley | In this workshop, you will learn about terrain model feature types, managing existing terrain models using null terrains and complex terrains, clipping terrain models to speed up corridor processing, creating a terrain model using graphical filters, and creating merged terrain models. | Intermediate - Expert | *NEW* - OpenRoads - Terrain | PDH Credits: 2 |
| 11:00 - 2:30 | * T-2-SC II OpenRoads - Designing a Pond | Bentley | This class will look at how to create a pond from a terrain model and to add attenuation to the drainage system. The software was used to build a pond and a terrain from that pond, so it is all fully parametric. The file has been referenced into the imported drainage network file. You can modify the volume and the terrain of this pond at any time you can come back to this file, change the values and there model will automatically update and therefore you can use this for your pond hydraulics. | Intermediate - Expert | OpenRoads - Drainage | PDH Credits: 2 |
| 11:00 - 2:30 | T-2-SH AccuDraw Basics for Civil Design and Modeling | Bentley | In this course, you will learn how to navigate in 2D and 3D design space using AccuDraw. You will learn the basic features, functionality, usage and related settings and shortcuts required for this purpose. This geometrically translates into relocation of the origin and reorientation of the coordinate axes. Starting from the need for a coordinate system, its types and role in the modeling process; its embodiment in AccuDraw is laid out. The main parts of AccuDraw – the Compass and the Coordinate Window – and their role are covered. Besides the main function, other conveniences provided by AccuDraw are also covered like the auto placement of point, context-based change of mode and orientation of axes, access to snap modes, tool settings etc. which add to the speed and thus efficiency. | Novice - Expert | MicroStation CE | PDH Credits: N/A |
| 2:45 - 5:15 | * T-3-SC I OpenRoads - Introduction to Creating Civil Cells Part 1 (2D & 3D Geometry) *NEW* | Bentley | This course teaches the tools and techniques that can be used to create a civil cell. You will learn how to create a civil cell for a T-Intersection using horizontal and vertical geometry. This course will only focus on the horizontal and vertical civil geometry tools to create 2D and 3D geometric elements to create a Civil Cell. | Intermediate - Expert | *NEW* - OpenRoads - Modeling | PDH Credits: 2 |

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| 2:45 - 5:15 | * T-3-SC II OpenRoads - Designing Gutters to Convey Runoff | Bentley | In this class you will learn how to place inlets with catchment delineation, and how to calculate and collect the runoff from a road surface. You will also learn how to evaluate whether the inlet efficiencies, and the spread widths of the flows along the road edge are acceptable, and adjust the design to achieve this. | Intermediate - Expert | OpenRoads - Drainage | PDH Credits: 2 |
| 2:45 - 5:15 | * T-3-SH OpenBridge - 2D Drawing Production with OBM | Bentley | This course teaches the general terminology and workflows for creating drawing and sheet models using 2D only techniques. | Novice - Intermediate | OpenBridge Modeler - Production | PDH Credits: 2 |
| 8:30 - 5:15 | * T-1-H FDOT Connect - Roadway Design 2D Basics | ACEC-FDOT | This course was developed to introduce the Drainage and Utilities Workflow and OpenRoads Designer CONNECT Edition tools for drainage design and modeling on Florida Department of Transportation (FDOT) projects. The curriculum was developed within the FDOTCONNECT Workspace to provide sample exercises for many of the Drainage Tools on a sample project data set. Participants of this course will be introduced to the newest OpenRoads environment and a Workflow for designing two-dimensional (2D) Plans, Profiles, and three-dimensional (3D) Models for drainage-related Construction Deliverables. | Intermediate - Expert | FDOT Connect - OpenRoads 2D Basics | PDH Credits: 6 |

WEDNESDAY OCTOBER 9th SESSIONS

| Title | Speaker | Description | Level | Software | PDH/PSM Credits |
|---|---------|--|--------------------------|------------------------------|---------------------------------------|
| FDOT FDOT C3D 2025 Drainage Workflows | FDOT | This session demonstrates the updates coming to the FDOT drainage parts list. We will show the steps we are doing using Inventor and Infrastructure parts editor to create individual parts that will be set up to use with Civil 3D. | Novice - Expert | FDOT C3D 2025 | PDH Credits : N/A |
| * FDOT FDOTConnect Custom Drainage Structures: Pond Control | FDOT | Have at least one pond on your project? Then you will more than likely have at least one Pond Control Structure that will be needed. In this session we will look at how an existing ORD Drainage Structure can be made into a Pond Control Structure. Starting with a standard top we will add weirs, an orifice and even a skimmer to make the new structure top. Also if you stay until the end you will be among the first to see an upcoming application to help with this process. So, come join in on the fun and learn how it is done. | Novice - Expert | FDOTConnect | PDH Credits : 1 |
| Learn how to Manage & Share your Reality Data with 3DM Cloud/Publisher | Bentley | Discover how you can easily process, manage & share all of your reality data with the Orbit 3DM Cloud/Publisher Solution. Users will be given insights into the solution and the workflows required to share all of their reality data. | Novice - Expert | Orbit 3DM Cloud/Publisher | PDH Credits : N/A |
| * Detailing of Bridge Elements using ProStructures | Bentley | As part of your plans production deliverables, Rebar detailing is one of the more time-consuming tasks in your project. Learn how to detail standard and custom structural elements using ProStructures and generate an automatic bar list and bar bending diagrams. | Intermediate - Expert | OBD/OBM - ProStructures | PDH Credits : 1 |
| * ** OpenRoads - Creating Proposed Terrain Models | Bentley | In this is session you will learn to create Proposed Terrains Using Graphical Filters, create Proposed Terrains from Design Meshes and create Combined Terrains Using Create Complex Terrain. | Intermediate - Expert | OpenRoads - Terrain | PDH Credits : 1 PSM CE Credits : 1 |
| * OpenBuildings Designer for Road Infrastructure – Design of Support Buildings and Structures | Bentley | OpenBuildings Designer is a scalable, multi-discipline building design application that enables BIM workflows to develop and design buildings of any size or complexity from support buildings such as toll plazas, vehicular maintenance buildings, comfort stations and weigh stations. Bentley's federated BIM approach allows quick design alternative exploration and adaptive re-use. | Intermediate - Expert | OpenBuildings Designer | PDH Credits : 1 |
| * FDOT FDOTConnect2023 Geotech Tools | FDOT | Bored? Let's talk borings! This session will explore how to use the FDOTC3D2025 Geotech Tools to create/import borehole data using the Geotechnical Data Manager and how to use that data to generate the report of core borings, 2D plan elements, 3D Geotech model, and how to create and annotate geotech cross sections. | Novice - Expert | FDOTConnect | PDH Credits : 1 |
| * FDOT FDOTConnect Custom Drainage Structures: Bottom's up! | FDOT | What do you do when you need the ORD Drainage Structure you placed to have a different bottom box? Well that is what you will see in this informative look at creating Custom Structures with larger sized, rotated, off center or completely custom sized or shaped bottom boxes. Come join in on the fun and learn how it is done. | Novice - Expert | FDOTConnect | PDH Credits : 1 |
| Processing, uploading & managing reality data in iTwin Services | Bentley | Users can learn the basics of importing, processing and uploading reality data into Bentley iTwin Services. This session will also demonstrate how this data is then consumed across the different Bentley solutions within iTwin Services. | Novice - Expert | iTwin | PDH Credits : N/A |
| * OBD - Grading Design and Modeling at Bridge Abutments | Bentley | Let's review how using the new incorporated linear templates functionality in OpenBridge Modeler allows us to model more complex abutment grading options thru the use of a pre-defined template library. | Intermediate - Expert | OpenBridge Designer | PDH Credits : 1 |
| OpenRoads - Data Migration - New Tools and Workflows | Bentley | Over the past several releases of OpenRoads Designer we have been adding more tools to make moving legacy data easier for the users. This session will highlight those tools and how to use them to migrate data. | Novice - Expert | OpenRoads - Foundations | PDH Credits : N/A |

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| Best Practices for OpenBuildings Designer with Civil and Plant Infrastructure Projects | Bentley | <p>OpenBuildings Designer is a scalable, multidiscipline building design application that enables BIM workflows that is built on the “Open” Platform Technology that has the embedded power of MicroStation. We will explore Digital Workflows and Best Practices when working on Water/Plant projects with OpenPlant Modeler and Bentley Cable and Raceway Management. Also we explore workflow on Civil Projects with OpenRoads Designer and OpenRail Designer.</p> <ul style="list-style-type: none"> • Review of OpenBuildings Designer Workflows (Seed files, Working Units) and Geo-Referencing Civil Models from OpenRoads Designer & OpenRail Designer • Annotating and Displaying Centerlines for OpenPlant Modeler Piping in OpenBuildings Designer • OpenBuildings Best Practices and Tips & Tricks for Concrete: Modeling Sloped Slabs and Walls, Penetrations, and Drawing Family/Part Unification and Re-symbolization • Leveraging Display Rules & Display Styles in Models and Drawings between applications • Creating Tunnels with GenerativeComponents from the OpenRoads Designer & OpenRail Designer alignments • OpenBuildings Designer using iTwin Referencing for Coordination with Revit • OpenBuildings Designer iTwin Referencing with OpenPlant Modeler | Novice - Expert | OpenBuildings Designer | PDH Credits : N/A |
| What's New in MicroStation 2024 | Bentley | Discover what is new and improved with MicroStation 2024. Learn about key workflows with designing in context with MicroStation’s Geospatial tools as well as improved drawing production advancements. Also, see how your feedback drives MicroStation’s user experience. | Novice - Expert | MicroStation CE | PDH Credits : N/A |
| OpenRoads Designer Troubleshooting | AtkinsRealis | Join Samuel as he discusses some of the common errors and issues in OpenRoads and how to troubleshoot these issues, making you more productive. | Novice - Expert | OpenRoads - Foundations | PDH Credits : N/A |
| * OpenRoads - Drainage/Utilities - Plans Production Tips and Tricks | Bentley | In this OpenRoads Designer session, we will cover a variety of tips and tricks for drainage and utilities in plans production. | Novice - Expert | OpenRoads - Drainage / Utilities | PDH Credits : 1 |
| * OpenRoads - All about creating Drainage Features | Bentley | In this session you will learn what you need and how do you create drainage features in OpenRoads Designer. | Intermediate - Expert | OpenRoads - Drainage | PDH Credits : 1 |
| * OpenRoads - How to Supplement a DOT Workspace | Bentley | In this OpenRoads Designer session we will cover how to add features to a Workspace received from an agency. Often the consulting organizations find that they need additional features and sheets, this session will give you the knowledge on how to add this needed information. | Novice - Expert | OpenRoads - Foundations | PDH Credits : 1 |
| Empowering Urban Infrastructure : The Role of Urban Digital Twins | Bentley | <p>A dynamic Urban Digital Twin is a solution that can be employed to build real-time connectivity between virtual and physical city infrastructure. Enabling cities to have the capabilities to plan for the entire lifecycle of project workflows from early Digital Urban Planning to Digital Construction Management and then to Continuous Infrastructure Asset Management and Operations. Digital Twins combine Reality Models, GIS, BIM models, Road & Bridge Models, CAD files, photographs, and many other file formats, services and databases,</p> <p>Connecting Digital Twins to technologies like the Internet of Things (IoT) and artificial intelligence (AI), cities can monitor and predict sustainable Vehicular & Pedestrian Mobility, Transit Systems, Energy Efficiency, and Emergency Response workflows.</p> | Novice - Expert | Digital Twins / Reality Modeling / ORD / OBD | PDH Credits : N/A |
| MicroStation CE - Printing and Publishing | Bentley | The final phase in completing a design project is producing the construction document set. It can be as simple as fencing an area in a design model and printing what is seen within the view window using the default settings or may include the use of sheet models, pen tables and print styles. Drawing sheets may be printed individually or in a “batch” mode using Print Organizer. This session will contain exercises intended to familiarize a new MicroStation user with the basic printing capabilities found in the MicroStation CONNECT Edition. | Novice - Expert | MicroStation CE | PDH Credits : N/A |
| OpenRoads - Best Practices for organizing Files and References | Bentley | In this session, you will learn about best practices for organizing your OpenRoads Designer project data, files, and references. Federating and organizing your project data will improve the efficiency of your project and your design environment in OpenRoads Designer. | Novice - Expert | OpenRoads - Foundations | PDH Credits : N/A |

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| * OpenRoads - Annotating Drainage and Utilities | Bentley | Have you ever needed to annotate a drainage or utility feature but wasn't sure how? This presentation will cover the process of creating annotations of drainage and utility features in: Plan, profile, and cross section views. The tools discussed will include, but are not limited to, creating named boundaries, annotation labels, civil labels, and text favorites to meet your client's needs. | Intermediate - Expert | OpenRoads - Drainage / Utilities | PDH Credits : 1 |
| * Civil 3D Tips and Tricks | AtkinsRealis | This session is to share some basic commands and practical procedures when using Civil 3D for plan production and design purposes, including some tips and tricks associated to alignments & profiles. | Intermediate - Expert | Civil 3D | PDH Credits : 1 |
| * OpenRoads - Best Practices for Civil Cells | Bentley | Civil cells allow for the rapid placement of geometry & 3D modeling that can be quickly modified to match project/site specific criteria. The development of the civil cells plays a large role in the flexibility of the cell. This presentation will share best practices to follow, as well as limitations you may encounter when developing civil cells. | Intermediate - Expert | OpenRoads - Foundations | PDH Credits : 1 |
| * OpenRoads - Cross Sections Annotation | Bentley | Learn more about cross section annotation automation and setup. | Intermediate - Expert | OpenRoads - Foundations | PDH Credits : 1 |
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| MicroStation CE - Creating Tables and Reports | Bentley | Learn how to quantify item types, edit items, use existing picklists, create various reports, spreadsheets and tables in the design. Learn to edit existing tables and to add useful functions like table breaks, plus much more. | Novice - Expert | MicroStation CE | PDH Credits : N/A |
| 3D Deliverables for Model as a Legal Document: First Steps on First Coast Expressway | RS&H | Florida DOT recently began requiring submission of Model as a Legal Document (MALD) and signing and sealing of files related to earthwork calculations. One of the projects using Model as a Legal Document was a 4.4 mi. segment of the First Coast Expressway in Jacksonville, a \$360 million greenfield highway construction project that included new construction, milling and resurfacing, excavation of unsuitable organic material, and surcharge embankment. For design, the budget was \$5.5 million, the schedule was compressed to 12 months, and the team consisted of 5 firms. This presentation focuses on some of the challenges and lessons learned in creation of the required 3D Deliverables. While FDOT has a set of required 3D Deliverables, they do allow some flexibility in determining which files to sign and seal for the MALD. Work through the decision process on which files are best to sign and seal, then hear about workflows and obstacles to avoid when creating various 3D Deliverable surfaces, including: Existing Subgrade, Unsuitable Material, Subsoil Excavation, Surcharge Embankment, Proposed Finish Grade, Milling Surface and Proposed Subgrade. Some of these deliverables are new enough or rare enough that the workflows to create them have not been well documented, so this session will share what worked well for each deliverable on a project of this scale. With subsoil excavation, for example, the project shifted from traditional cross-section based markup to directly modeling 3D elements, surfaces, and closed meshes. Various teams took ownership of their areas. For example, structures 3D modeled bridges and walls, and these models were used to develop grading surfaces in these areas. ITS modeled grading pads; drainage modeled headwalls and ponds. Other challenges arose in generating 3D quantities in a manner that would provide consistent volumes between design and construction software. Usability by construction software was also a factor in determining best file formats to provide with the deliverables. This session is ideally suited for Designers, PMs, and Engineers of Record. | Novice - Expert | 3D Models - Deliverables | PDH Credits : N/A |
| * OpenRoads - Creating Staged Cross Sections | Bentley | Discussion of need for staged cross sections, best practices and methods to achieve desired results. | Novice - Expert | OpenRoads - Foundations | PDH Credits : 1 |
| * OpenRoads Designer in The Civil3D World | AtkinsRealis | This presentation is intended to share the common ground that exists between Civil 3D and OpenRoads Designer. I will walk through key common elements within the user interface as well as best practices when combining these 2 platforms within a project | Novice - Expert | Civil 3D & OpenRoads | PDH Credits : 1 |

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| OpenRoads - File Federation and Optimizing the Corridor | Bentley | Although processes will vary for each organization, project, and even discipline, the principles of file management remain the same. This presentation is geared towards guiding users towards the best practice for their organization, project, or discipline when it comes to federating files. The presentation will also cover several tips and tricks that can be leveraged to develop a modeling approach that best suits the project and deliverables. | Novice - Expert | OpenRoads - Foundations | PDH Credits : N/A |
| * ** Construction Roadway Volume Verification for FDOT | Sitech - Trimble | Using Trimble Business Center software – we will walk through importing FL DOT Roadway data for Construction volume verifications. We will also discuss the volume variables – such as original ground conditions (which can be verified by drones or other survey methods). This is a great educational class as well for any CEIs wanting to learn more of the connection from engineering to construction. | Novice - Expert | Trimble Business Center | PDH Credits : 1 PSM CE Credits : 1 |
| WEDNESDAY WORKSHOP | | | | | |
| W-1-SC I Simultaneous Collaboration with Bluebeam Studio Sessions | DDS CAD | The ability to work together on the same PDF at the same time is a groundbreaking feature within Bluebeam Studio Sessions. It allows us to create markups and measurements that can be seen by our colleagues within seconds. Before uploading PDFs to a Studio Session, it's imperative that we prepare our PDFs with custom Status information and other data that can only be applied to PDFs that are found locally on our computers. This hands-on workshop covers best practices for working and communicating in Bluebeam Studio Sessions with our colleagues from around the world. | Novice - Expert | Bluebeam Studio | PDH Credits: N/A |
| * W-1-SC II OpenRoads - Intersection Design Part 1 - Horizontal and Vertical Geometry | Bentley | This course teaches tools and techniques that can be used to lay out a complex intersection. It will focus on the Horizontal and Vertical Geometry tools to create 2D and 3D geometric elements. In this course, you will be designing a complex intersection that includes turn lanes, median islands and turn lane islands. 2D horizontal geometry will be created using the Horizontal Geometry tools and Profiles and 3D elements will be created using the Vertical Geometry tools. The objective is to create a terrain model of the proposed pavement surface and analyze the proposed drainage contours. | Novice - Intermediate | OpenRoads - Geometry | PDH Credits: 3 |
| * W-1-SH OpenRoads - Introduction to Creating Civil Cells Part 2 (3D Modeling Detailing) *NEW* | Bentley | This course teaches tools and techniques that can be used to create a detailed 3D civil cell. This is part two of Introduction to Creating Civil Cells (2D & 3D Geometry) and we will cover the 3D modeling related tools and processes to finish modeling the T-Intersection created in that course. We will also show how to use points as civil cell references in this course by building a Turn Lane Civil Cell. | Intermediate - Expert | *NEW* - OpenRoads - Modeling | PDH Credits: 2 |
| * W-2-SC I OpenBridge - 3D Drawing Production with OBM | Bentley | This course teaches the general workflows for creating a general plan and elevation sheet from a 3D model along with creating a pier elevation and typical section. | Intermediate - Expert | OpenBridge Modeler - Production | PDH Credits: 3 |
| * W-2-SH OpenRoads - Drainage Plans, Profiles and Cross Sections *NEW* | Bentley | In this course, you will learn how to create and annotate plan, profile and cross section sheets. You will learn how to create Named Boundaries that will be used to generate plan, profile and cross section sheets. You will also learn about drawing models and sheet models that are used during the sheet creation process. Lastly, you will learn how to add individual annotations to label specific location coordinates, station-offset values, elevations, and more. | Intermediate - Expert | *NEW* - OpenRoads - Drainage | PDH Credits: 3 |
| * W-2-SC II OpenRoads - Intersection Design Part 2 - 3D Model Detailing | Bentley | This course teaches tools and techniques that can be used to accurately model a complex intersection in 3D. In this course, you will learn how to: Use Linear Templates to create the curb, sidewalk and side slope grading along the edges of pavement and islands. Use Surface Templates to apply material thickness to the pavement surface and median islands. Create a Finished Grade Terrain Model using Graphical Filters. Export Finished Grade Terrain Model to LandXML format. | Intermediate - Expert | OpenRoads - Modeling | PDH Credits: 2 |

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| <p>* W-1-H FDOT Connect - Existing Modeling</p> | <p>ACEC-FDOT</p> | <p>This training course to go over the fundamentals of creating a 3D Model for existing features to include; hard surfaces (i.e. asphalt, concrete, sidewalks, curbs, etc...), utilities, drainage structures, and soil borings. Participants will be introduced to Bentley OpenRoads Designer CONNECT Edition – OpenRoads Technology tools for design and modeling; specifically for Florida Department of Transportation (FDOT) projects using the FDOTCONNECT Workspace.</p> | <p>Intermediate - Expert</p> | <p>FDOT Connect - OpenRoads Existing Modeling</p> | <p>PDH Credits: 5</p> |
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THURSDAY OCTOBER 10th SESSIONS

| Title | Speaker | Description | Level | Software | PDH/PSM Credits |
|--|-----------------------------------|---|--------------------------|-------------------------------------|--------------------|
| FDOT FDOTConnect2023 CADD Compliance Delivery Checklist Tools (Repeat) | FDOT | This session will discuss the various CADD Office tools developed to assist with CADD delivery. Specifically with regards to the CADD Compliance Checklist; Project QC reports, Project Validator reports, Reference Manager/Checker, and Geographic Coordinate System Reports | Novice - Expert | FDOTConnect | PDH Credits : N/A |
| Introduction to OpenRoads Designer | Bentley | Introduction to OpenRoads Designer capabilities. Comprehensive detailed design and documentation for roadway projects including surveying, drainage, subsurface utilities and visualization in one application. | Novice - Expert | OpenRoads - Foundations | PDH Credits : N/A |
| Why choose ProjectWise for your projects? | Bentley | Many organizations offer Project Managers the option to use ProjectWise for managing their project content. This session will examine factors such as collaboration features, performance considerations, improved quality assurance through standards compliance, server-side renditioning for PDFs and iTwins... | Novice - Expert | ProjectWise | PDH Credits : N/A |
| * Tips and Tricks using OpenBridge | Bentley | This is a review of our most common questions asked during our training classes. How to model multiple piers in the same support line, use of point controls in decks, unit definitions, etc. | Novice - Expert | OpenBridge Designer | PDH Credits : 1 |
| ** Utility Coordination/Conflict: Turnkey Relocation and Project Management | Badger / GeoPoint Surveying | This presentation will include: Management of activities required for utility relocation from coordination to completion. "The easy button" | Novice - Expert | Utility Coordination / Conflicts | PSM CE Credits : 1 |
| SYNCHRO Construction Solution | Bentley | An overview of the SYNCHRO portfolio, uses, and capabilities. | Novice - Expert | SYNCHRO | PDH Credits : N/A |
| * FDOT FDOTConnect2023 Automated Quantities Troubleshooting and Custom Pay Items (Repeat) | FDOT | This session will explore how to use native Bentley ORD and FDOT workspace tools to visualize and troubleshoot and customize pay item information for quantities. | Novice - Expert | FDOTConnect | PDH Credits : 1 |
| * OpenRoads - Item Type Fundamentals – Part 1 | Bentley | In this session you will learn about the fundamentals of using Item Types in OpenRoads Designer. Topics include: Item Type Properties, Pick Lists, Custom Property Types, Calculated Properties, Expression Builder, Lookup Expression | Novice - Intermediate | OpenRoads - Foundations | PDH Credits : 1 |
| FDOT FDOTConnect2023 ProjectWise Managed Workspace | FDOT / Bentley | The FDOT CADD Office has made several ProjectWise compatibility enhancements to accommodate corporate managed workspace configuration for the FDOTConnect2023 release. This session will discuss the steps necessary to get it working in your environment. | Novice - Expert | ProjectWise - FDOT CADD | PDH Credits : N/A |
| * OpenBridge - Custom Abutments with Functional Components | Bentley | Learn how to create custom pier and abutments for your bridge using the concept of parametric cells and functional components regarding the structure. | Novice - Expert | OpenBridge Designer | PDH Credits : 1 |
| ** Utility Coordination/Conflict: Paving the Way to Project success with Early Detection | Badger / GeoPoint Surveying | In this session, we will discuss Utility Conflicts locating, mapping and the project management of the conflicts. | Novice - Expert | Utility Coordination / Conflicts | PSM CE Credits : 1 |
| Interrogating an iModel in SYNCHRO | Bentley | Tools such as Data Visualization, Civil Tools, and Clash Detection allow users to search, locate, and interrogate the model data in order to visualize and understand the project with more information available than traditional plans. | Novice - Expert | SYNCHRO | PDH Credits : N/A |
| * OpenRoads - Creating Drainage Reports | Bentley | In this presentation, you will learn how to create reports using FlexTables. You will learn how to customize the FlexTables to show the desired data fields and formatting for the reports. FlexTables show data for one type of element - a catch basin or a manhole for example. This sometimes presents a struggle when trying to create a combined drainage report. Therefore this presentation will also include a demonstration of creating drainage reports leveraging item types. | Intermediate - Expert | OpenRoads - Drainage | PDH Credits : 1 |

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| * OpenRoads - Item Type Fundamentals – Part 2 | Bentley | In this session, we will focus on how to use Item Types with civil data and show how you can leverage Item Types for quantities and reporting. Topics include: Item Types with Feature Definitions, Single Source of Truth, Propagation, Prioritization, Conflict Resolution, Asset Manager, Annotation and Labeling, Display Styles and Display Rules, Items Browser, Reporting. | Intermediate - Expert | OpenRoads Foundations | PDH Credits : 1 |
| What's new in ProjectWise v2023 and what's ProjectWise Cloud? | Bentley | In this session we will highlight ProjectWise 2023 and the ProjectWise cloud to see what benefits there are to implementing this latest version. | Novice - Expert | ProjectWise | PDH Credits : N/A |
| FDOT FDOTConnect2023 for OBM Updates | FDOT | What's new for OBM in FDOTConnect2023. | Novice - Expert | FDOTConnect | PDH Credits : N/A |
| Utility Coordination/Conflict: Using 3D Model tools in Utility Coordination: Utility Conflict Resolution | Inwood Consulting Engineers | The session will discuss the identification of utility conflicts and their impacts, using iTWINS to view conflicts, and supplemental information utilities may need to complete their conflict review. | Novice - Expert | Utility Coordination / Conflicts | PDH Credits : N/A |
| * Creating a Construction Model in SYNCHRO | Bentley | Not all models are ready for construction. Construction teams have needs for the model that are usually not addressed. Modeler allows organizations the ability to turn a design model into a construction model for QTO, improved sequencing and adding detailed WBS to the components. This allows for accurate model-based bids, more efficient scheduling, and detailed analysis of the work needed to complete the project. | Novice - Expert | SYNCHRO | PDH Credits : 1 |
| 3D Deliverables with Civil 3D and InfraWorks and more! | AtkinsRealis | In this session, we will present a 3D Model using Civil 3D, Infracore and other 3rd Party integration such as SketchUp. A quick comparison will be run using ORD/LumenRT and ConceptStation for informational conceptual purposes only. | Novice - Expert | Civil 3D | PDH Credits : N/A |
| * Soil Boring in OpenRoads Designer | 3D Highway Engineering | In this session you will learn how to layout soil borings in a 3D model and how to add a 3D soil boring model to cross section sheets. | Novice - Expert | OpenRoads - Modeling | PDH Credits : 1 |
| Tips & Tricks for ProjectWise Users | Bentley | Learn more about the benefits of a ProjectWise deployment to assist you in enforcing corporate standards while producing timely deliverables for your customers. | Novice - Expert | ProjectWise | PDH Credits : N/A |
| * **Reality Modeling for Transportation Projects | Bentley | Leveraging Reality Modeling allowed users of a large-scale bridge and road construction site to monitor and quantify the construction progress resulting in the discovery of major differences in the areas between the design and the actual construction. | Novice - Expert | Reality Modeling | PDH Credits : 1 PSM CE Credits : 1 |
| Utility Coordination/Conflict: Utility Conflict Identification and Constructability | Inwood Consulting Engineers | In this session we will discuss what is a utility conflict, direct vs in-direct conflicts, design element impacts to utilities, critical utilities, utility relocation constraints, and constructability concerns. | Novice - Expert | Utility Coordination / Conflicts | PDH Credits : N/A |
| * The OPERATIONAL Model with SYNCHRO | WSB | This class will give you an in-depth look at the many ways to use an operational model and how it benefits the design and construction fields. An Operational Model is a single source of truth in a live 3D model that allows design and construction staff to visualize and see the outcome of projects before any work is performed. With an Operational Model, we can mitigate risks, compute quantities, create estimates, and identify trouble spots ahead of time. The power of having centralized data helps minimized downtime, reduce data errors, and improve project transparency. | Intermediate - Expert | SYNCHRO | PDH Credits : 1 |
| Working Together: OpenRoads Designer, ProjectWise and iTwin Integration. | Bentley | In this session, we are going to take a look at a sample highway project that several Bentley colleagues have been developing. We are going to discuss how ProjectWise, OpenRoads Designer, OpenBridge Designer and iTwin technology can be integrated together. In this session, we are going to take a look at a sample highway project that several Bentley colleagues have been developing. We are going to discuss how ProjectWise, OpenRoads Designer, OpenBridge Designer and iTwin technology can be integrated together. | Novice - Expert | OpenRoads - ProjectWise - iTwin | PDH Credits : N/A |
| Simplifying Signatures & Submittals with Bluebeam Revu | DDS CAD | While the digital signature and submittal process may seem daunting, it can be simplified by understanding the differences between key terminology like "Document Certification" and "Third-Party Authentication". In this presentation, we'll be discussing and demonstrating how to efficiently prepare your projects for submittal to cities and municipalities. Topics like Flattening, signature settings/recommendations, Batch Signature nuances, and how our signatures are always protected with "Click to view this version" will be reviewed. | Novice - Expert | Bluebeam Revu | PDH Credits : N/A |

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| An Introduction to the I-Model Composition Server, ProjectWise Web, and ProjectWise Drive | Bentley | Learn how to automate PDFs based on your corporate standards while reviewing those PDF's via Bentley's improved web access or your local file explorer client. | Novice - Expert | ProjectWise - I-Model | PDH Credits : N/A |
| MicroStation CONNECT Edition -Tips & Tricks, The Game Show Version | Bentley | In this highly interactive session you will learn the best tips and tricks gathered from our instructors and support colleagues. These tips and tricks cover a variety of topics in MicroStation. | Novice - Expert | MicroStation CE | PDH Credits : N/A |
| Utility Coordination/Conflict: When to get SUE (Subsurface Utility Exploration) and not get SUE, that is the question! | Inwood Consulting Engineers | In this session we will discuss utility conflicts, Subsurface Utility Exploration, utility agency owner information and how to finalize conflicts to complete the utility coordination process. | Novice - Expert | Utility Coordination / Conflicts | PDH Credits : N/A |
| * OpenRoads Designer to SYNCHRO Construction | Bentley | We have created some great designs in OpenRoads Designer. Now, take the design to the field with SYNCHRO; whether it's a 2D, 3D, or hybrid deliverable. In this session, you will learn how the field data is collected, the project tasks and schedule are managed, and how issues may be sent back to design for review in a signal system. | Intermediate - Expert | SYNCHRO | PDH Credits : 1 |
| * OpenRoads - Design and Model ADA Ramps | Bentley | See how OpenRoads Designer allows you to analyze, design, and model curb ramps. We will discuss how OpenRoads Designer can be used to evaluate existing curb ramps for regulatory compliance as well as stream-lining the design of ramps to meet legal requirements. | Intermediate - Expert | OpenRoads - Modeling | PDH Credits : 1 |
| * ** Creating a Constructable Model for Machine Control and Field Layout | Trimble | Importing CAD data and 3D models into Trimble Business Center with the purpose of verifying the data is ready field applications. We will walk through best practices to create a "Constructable Model" for use in Machine Control systems and for Survey and Construction layout. | Novice - Expert | Trimble Business Center | PDH Credits : 1 PSM CE Credits : 1 |
| Bentley ProjectWise Deliverables Management Overview and Best Practices | Bentley | This session will review some best practices from a Project Administrator Perspective on the setup and use of the Deliverables Management settings through the Project Portal and the Deliverables management Plugin. | Novice - Expert | ProjectWise | PDH Credits : N/A |
| MicroStation CONNECT Edition -Tips & Tricks, The Game Show Version (Con't) | Bentley | In this highly interactive session you will learn the best tips and tricks gathered from our instructors and support colleagues. These tips and tricks cover a variety of topics in MicroStation. | Novice - Expert | MicroStation CE | PDH Credits : N/A |
| * Using OpenRoads Designer to Identify and Manage Utility Clashes in Transportation Projects | Bentley | This presentation demonstrates what a 3D model-based workflow may look like for the average DOT using the 3D modeling and analysis workflows inside OpenRoads Designer Drainage and Utilities to help identify and manage utility conflicts on transportation projects. Below are the main topics covered throughout the presentation: How to import drainage/utility data using ModelBuilder How to create 3D drainage/utility model from CAD graphics or survey How to use the utility conflict detection tool How custom properties (UDX and/or Item Types) can be used to document and manage utility conflict status How to leverage the default and custom utility properties for reporting and data retention purposes | Novice - Expert | OpenRoads - Utilities | PDH Credits : 1 |
| * SYNCHRO 4D Models | Bentley | See how tying construction sequencing to a 3D model enhances communication, planning, and construction processes. 4D modeling allows users to visualize the construction process, virtually analyze sequencing in order to expose potential risks and issues prior to beginning the project. Thereby reducing risk, improving safety, and completing projects efficiently. | Intermediate - Expert | SYNCHRO | PDH Credits : 1 |
| THURSDAY WORKSHOP | | | | | |
| * **TH-1-SC I Locate Geometry in the Correct Place on Earth with MicroStation CONNECT Edition | Bentley | This courses will teach you how to incorporate a GCS to locate civil design geometry in the correct geographic location. We will define a GCS within our active model and leverage this GCS to place design graphics as well as incorporate data coming from other formats such as GIS shape files. | Intermediate - Expert | MicroStation CE - Civil Geometry | PDH Credits : 2 PSM CE Credits : 2 |

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| TH-1-SC II OpenBuildings Designer: Modeling and BIM Essentials of a 3D Transit Station | Bentley | This hands-on session contains exercises for getting started with Bentley's BIM solution, OpenBuildings Designer. The students will learn basic modeling techniques for working in a 3D environment and explore the workflow of creating an intelligent model for a small above ground transportation station. Exercises start with creating a conceptual block model, working with site files (geo-referencing), and then modeling columns, beams, walls, doors, windows, and curtain walls. | Novice - Intermediate | OpenBuilding Designer - BIM | PDH Credits: NA |
| ** TH-1-SH OpenRoads - Geometry for Surveyors *NEW* | Bentley | In this module you will learn the basics of drawing geometry with the civil geometry tools. You will start by learning how to enter property information and create a subdivision parcel. You will then learn to create the centerline, edges of pavement and right of way geometry for the Subdivision Road. You will also learn how to place labels and annotate geometry. | Novice - Intermediate | *NEW* - OpenRoads - Survey Geometry | PSM CE Credits: 2 |
| * TH-2-SC I OpenBridge - Bridge Modeling 101 | Bentley | Quickly model a bridge with the wizard and understand the assumptions made by the wizard and how to override them to achieve the desired model accuracy. Also, add approach slabs and other features to the model. | Intermediate - Expert | OpenBridge Modeler - Modeling | PDH Credits: 2 |
| * TH-2-SC II Trimble Business Center 101 - Building a Basics Model for Sites and Roads | Trimble | Introduction to Trimble Business Center (TBC) for Site creation and Road building. Importing Points, Building Surfaces, Calculating Volumes, Entering a Centerline and building a road template and surface. | Novice - Expert | Trimble Business Center - Modeling | PDH Credits: 2 |
| ** TH-2-SH OpenRoads - Regression for Surveyors *NEW* | Bentley | The project that we are going to undertake in this course is to create a Geometric Horizontal Alignment that follows, as closely as possible, the existing Surveyed centerline of a road using the regression tools available in OpenRoads Designer. A vertical alignment will be generated that follows the existing road profile, using the Best Fit Profile tool. | Intermediate - Expert | *NEW* - OpenRoads - Survey Geometry | PSM CE Credits: 2 |
| * TH-3-SC I OpenBridge - Advanced Bridge Modeling Techniques with OBM | Bentley | Utilize some of the lesser known tools in OBM like Place Advanced Deck, Assign Superelevation tool, Place Custom Abutment, Place Wingwall, Place Excavation, and Place Path. | Intermediate - Expert | OpenBridge Modeler - Modeling | PDH Credits: 2 |
| * TH-3-SC II OpenRoads - Creating and Managing Utilities *NEW* | Bentley | In this course, you will learn how to create existing utilities from graphics and how to detect utility conflicts. | Novice - Intermediate | *NEW* - OpenRoads - Utilities | PDH Credits: 2 |
| * TH-3-SH OpenRoads - Road Regression and Re-Design *NEW* | Bentley | The Project that we are going to undertake in this course is to create a Geometric Horizontal Alignment that follows, as closely as possible, the existing Surveyed centerline of a road using the regression tools available in OpenRoads Designer. A vertical alignment will be generated that follows the existing road profile, using the Best Fit Profile tool. We will then create a corridor and apply an Overlay and Stripping template to create the whole road cross section. Following on from that we will apply a designed superelevation that matches as best we can the existing cross fall on the existing road. We will also try to minimize the amount of Overlay and Stripping required and finally produce quantities. | Intermediate - Expert | *NEW* - OpenRoads - Geometry | PDH Credits: 2 |
| *TH-1-H FDOT Connect - Drainage & Pond Design with 3D Modeling & Plans Development | ACEC-FDOT | This course was developed to introduce the Drainage and Utilities Workflow and OpenRoads Designer CONNECT Edition tools for drainage design and modeling on Florida Department of Transportation (FDOT) projects. The curriculum was developed within the FDOTCONNECT Workspace to provide sample exercises for many of the Drainage Tools on a sample project data set. Participants of this course will be introduced to the newest OpenRoads environment and a Workflow for designing two-dimensional (2D) Plans, Profiles, and three-dimensional (3D) Models for drainage-related Construction Deliverables. | Intermediate - Expert | FDOT Connect - OpenRoads Drainage | PDH Credits: 6 |

FRIDAY OCTOBER 11th SESSIONS

| Time | Title | Speaker | Description | Level | Software | PDH/PSM Credits |
|-------------|---|--------------|---|-----------------------|----------------------------|--------------------|
| 8:30 - 9:30 | * OpenRoads - Roundabout Modeling Part 1 | Bentley | Modeling roundabouts is remarkably more complicated than a traditional intersection as the geometries and components that make up the roundabout are often unique. This presentation is part of a two-part series that will undoubtedly increase your knowledge of the different geometry and modeling tools available in OpenRoads, as well as how you can plan for the inevitable changes every project faces once the model is "complete". | Intermediate - Expert | OpenRoads - Modeling | PDH Credits : 1 |
| 8:30 - 9:30 | ** OpenRoads Survey - QuickStart for Survey | Bentley | This course is an introduction to the survey commands and tools. Learn how to create Field Books, import an ASCII file, edit data, use the decorations and view the terrain model. | Novice - Expert | OpenRoads - Survey | PSM CE Credits : 1 |
| 8:30 - 9:30 | * iTwins – A Practical Overview with Case Studies | AtkinsRealis | Overview of successful iTwin CONNECT implementation on linear infrastructure projects including highway design, utility coordination, and complex rail station reconstruction. Given the intent of FDOT to utilize the iTwin platform, this workshop is intended to provide an overview of the capabilities and tools which could be used on FDOT projects. The various tools within the iTwin CONNECT platform that will be highlighted including iModel setup & management, issues/comment configuration & management, clash analysis, PDF reviews, and PW Web connections. The presentation will include a live demonstration of the viewing & manipulation of iModels | Novice - Expert | iTWIN - FDOT | PDH Credits : 1 |
| 8:30 - 9:30 | * Advanced Tips and Tricks for Sheet Seed Creation | Bentley | A lot has changed over the past few years regarding the creation of Sheet Seed Definition DGNLibs. In this presentation we will look at some of the new techniques for sheet seed creation. One area of focus will be placing multiple sheet seed definitions into the same DGNLib. This will speed up workspace load times and increase speeds switching between files. Topics covered: Putting all sheet seed definitions into a single DGNLib Utilizing a backup system through the creation process Changing the reference attachment view settings Renaming Removing and replacing an invalid sheet seed definition Changing the assigned annotation group Important discussion on Units of Resolution Additional tips | Novice - Expert | OpenRoads - Foundation | PDH Credits : 1 |
| 8:30 - 9:30 | 3D QC : Developing Policy & Statements. How to create and implement effective Guidance Documents for 3D Design and Quality Control | RS&H | The transportation industry is undergoing a digital transformation, with the adoption of 3D design and quality control (QC) technologies that enable more efficient, accurate, and collaborative project delivery. However, the lack of consistent and comprehensive policy and standards for 3D QC poses a challenge for ensuring quality, compliance, and interoperability across different agencies, clients, and stakeholders. This presentation will share the process and outcomes of developing policy and standards for 3D QC within a large engineering firm that works on multiple transportation projects across the United States. It will highlight the importance of aligning the guidance documents with the current policies and deliverables required by the clients and owners, as well as the value-added by certain 3D design workflows that enhance the project performance and outcomes. It will also discuss the challenges and opportunities of balancing the need for localization and customization of policy and standards with the desire for establishing a reasonable "best practice" that can be used as a starting point for different projects and contexts. The presentation will demonstrate how the firm achieved group consensus and buy-in from various disciplines and teams, and how it implemented and monitored the policy and standards for 3D QC across its projects. The presentation will provide insights and lessons learned for other transportation professionals who are interested in developing and applying policy and standards for 3D QC in their own organizations and projects. | Novice - Expert | 3D Modeling - QC | PDH Credits : N/A |
| 8:30 - 9:30 | Introduction to OpenRoads ConceptStation | Bentley | Introduction to OpenRoads ConceptStation capabilities. Creating conceptual designs to evaluate more options, identify high-risk items, and minimize costs during the planning and pre-bid stage of your project, within hours and not weeks! | Novice - Expert | OpenRoads - ConceptStation | PDH Credits : N/A |

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| 9:45 - 10:45 | * OpenRoads - Roundabout Modeling Part 2 | Bentley | Modeling roundabouts is remarkably more complicated than a traditional intersection as the geometries and components that make up the roundabout are often unique. This presentation is part of a two-part series that will undoubtedly increase your knowledge of the different geometry and modeling tools available in OpenRoads, as well as how you can plan for the inevitable changes every project faces once the model is "complete". | Intermediate - Expert | OpenRoads - Modeling | PDH Credits : 1 |
| 9:45 - 10:45 | ** OpenRoads Survey - Editing Link Code Features | Bentley | In this course you will learn how to review and edit survey linear features by adjusting Link Codes and Field Codes. You will also learn how to annotate the features after they have been edited. | Intermediate - Expert | OpenRoads - Survey | PSM CE Credits : 1 |
| 9:45 - 10:45 | Item Types - My expensive CAD System doesn't have that Data! Areas of Focus: BIM, Digital Twins, CAD | Phocaz | What do you do when your expensive BIM application doesn't include a particular workflow? A great example - there are no signing and marking tools in OpenRoads. FDOT has done a great job with signs, signals, and striping. Applications for each guide users through the placement and selection of pay item, alignment, location data and so on. GDOT makes extensive use of item types in their Titleblock application - a spreadsheet view for all project title block entries. In this session we will take a look at how you might use item types for adding data to features. We will then walk through a couple of examples of how you might use tools like VBA to extract data for reporting, or QA/QC. We will also look at the Phorz Query iTwin application to see how it can search and retrieve based on item type data values. | Novice - Expert | BIM, Digital Twin, CAD | PDH Credits : N/A |
| 9:45 - 10:45 | ** Photogrammetry processing for Point Clouds and Surface Creation | Sitech - Trimble | Using Trimble Business Center software for drone and point cloud processing for local PCs. Using Propeller / Stratus software for uploading photos to the cloud for point cloud creation. We will discuss workflows and best practices and lessons learned in the field. | Novice - Expert | Trimble Business Center/Propeller | PSM CE Credits : 1 |
| 9:45 - 10:45 | FDOT FDOTConnect2023 Custom Drainage Resources | FDOT | So you need a pond structure or a larger offset and skewed bottom box for utility avoidance. Maybe you want to make a vertical drain or something more exotic. Come find out how to create just about anything you can dream up for use in your project. | Novice - Expert | FDOTConnect | PDH Credits : N/A |
| 9:45 - 10:45 | Introduction to OpenSite Designer | Bentley | Introduction to OpenSite Designer capabilities. Comprehensive conceptual, preliminary, and detailed design and documentation for site projects. These include surveying, drainage, subsurface utilities, earthwork optimization and visualization in one application. | Novice - Expert | OpenSite Designer | PDH Credits : N/A |
| 11:00 - 12:00 | * OpenRoads - Templates Deconstructed | Bentley | Deep dive into the template editor and a breakdown of the template structure and how it gets processed to help the user design better/more usable templates | Intermediate - Expert | OpenRoads - Foundations | PDH Credits : 1 |
| 11:00 - 12:00 | ** OpenRoads Survey - Editing Survey Features Using Point Lists | Bentley | This course focuses on how to easily correct erroneous survey linework by converting the Linking Code survey features to Point List Features and then editing the features. We will focus on converting Linking Code Features to Point List Features and then editing the Point List Features. | Intermediate - Expert | OpenRoads - Survey | PSM CE Credits : 1 |
| 11:00 - 12:00 | * OpenRoads - Modeling Retaining Walls and Side Slopes | Bentley | Learn how OpenRoads Designer enhances your ability to lay out and model retaining walls. During this session, we will demonstrate practical examples showing how to use intelligent end conditions to include retaining walls along your projects. You will learn about the powerful capabilities that allow you to model walls and side slopes while adhering to engineering requirements. You will also see how to extract useful data, such as profiles and quantities from the modeled walls and workflows to help you take advantage of modeling on your projects. <ul style="list-style-type: none"> • Retaining Wall and Side Slope Templates • Creating Retaining Wall Corridors and Alignments • Displaying Critical Retaining Wall Features in Profile • Creating Retaining Wall Plan and Profile Sheets <ul style="list-style-type: none"> • Cut and Fill Wall Modeling Techniques • Abutment Wall Modeling Techniques | Intermediate - Expert | OpenRoads - Modeling | PDH Credits : 1 |
| 11:00 - 12:00 | * OpenRoads - Parametric Cell Creation | Bentley | In this session you will learn about parametric controls and creating basic parametric cells. | Intermediate - Expert | OpenRoads - Foundations | PDH Credits : 1 |
| 11:00 - 12:00 | * FDOT FDOT C3D 2025 Plan Production Workflows (Repeat) | FDOT | This session will focus FDOT C3D Plans Production. We will explain and demonstrate how to create an FDOT Civil 3D Project, Sheet Set (.dst) file, sheets, edit sheets and plotting. We will create and edit fields to make a custom sheet or edit the topics/fields to suit specific needs for FDOT title blocks. | Novice - Expert | FDOT C3D 2025 | PDH Credits : 1 |

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| 11:00 - 12:00 | Civil Design Review with Bentley Infrastructure Cloud | Bentley | This presentation will look at digital project delivery, digital twins, and consider the implications for model validation processes with the new digital deliverables. | Novice - Expert | Infrastructure Cloud | PDH Credits : N/A |
| 1:30 - 2:30 | * OpenRoads - Tips and Tricks for Creating Civil Sheet Seed Definitions | Bentley | Sheet creation does not have to be a manual nor complicated task. OpenRoads Designer includes powerful tools to automate the sheet creation process. Sheet Seed Definition DGNLibs store all the settings for the user to take advantage of these tools. In this presentation we will examine and demonstrate a detailed checklist to make sure the proper techniques and settings are used. This checklist will be highlighted while creating different types of sheet seeds in a live demonstration. | Intermediate - Expert | OpenRoads - Foundations | PDH Credits : 1 |
| 1:30 - 2:30 | FDOT FDOTConnect2023 Traffic Tools Update (Repeat) | FDOT | Updates to the Traffic Tools Applications for ORD 2023, including, new MUTCD signs, FDOT Signs, Place Cell Group, Pavement Markings, Light Pole Manager, Signal Design Tool, Traffic Labels using Civil Labeler. | Novice - Expert | FDOTConnect | PDH Credits : N/A |
| 1:30 - 2:30 | * OpenRoads- Drainage & Utilities - Tips and Tricks and new functionality added in recent releases | Bentley | In this session, learn how to be more productive and efficient as Bentley Drainage experts share useful tips, tricks and highlight some of the newer Drainage & Utilities tools that have been added to OpenRoads Designer over the past few releases. | Novice - Expert | OpenRoads - Drainage / Utilities | PDH Credits : 1 |
| 1:30 - 2:30 | What's New in MicroStation 2024 (Repeat) | Bentley | Discover what is new and improved with MicroStation 2024. Learn about key workflows with designing in context with MicroStation's Geospatial tools as well as improved drawing production advancements. Also, see how your feedback drives MicroStation's user experience. | Novice - Expert | MicroStation CE | PDH Credits : N/A |
| 1:30 - 2:30 | FDOT FDOT C3D 2025 Traffic Plans Tools Update (Repeat) | FDOT | Updates to the Traffic Applications for Civil 3D 2025, including, new MUTCD signs, FDOT Signs, Place Block Group, Pavement Markings, Light Pole Manager, Signal Design Tool, Entity Manager, & Guide Sign. | Novice - Expert | FDOT C3D 2025 | PDH Credits : N/A |
| 1:30 - 2:30 | * Making the Model More Visual Using the OpenRoads WorkSpace | Bentley | Learn how to increase the visual impact of your models with minimal effort using the out of the box OpenRoads Designer workspace. Create models using realistic materials, pavement markings, guardrail, barriers, fences, traffic control and more. The techniques described in this session all use functionality built into the OpenRoads Designer workspace. | Intermediate - Expert | OpenRoads - Foundations | PDH Credits : 1 |
| 2:45 - 3:45 | * ** OpenRoads - Understanding Terrain Models | Bentley | Learn the tools and techniques behind these dynamic terrain models as well as the do's and don'ts with managing multiple terrain models. | Novice - Expert | OpenRoads - Models | PDH Credits : 1 PSM CE Credits : 1 |
| 2:45 - 3:45 | * FDOT FDOTConnect2023 Civil Plan Labeler (Repeat) | FDOT | This session will focus on FDOT's implementation of the Civil Labeler Tool in FDOTConnect2023, as well as recent updates and future enhancements. | Novice - Expert | FDOTConnect | PDH Credits : 1 |
| 2:45 - 3:45 | FDOT FDOT C3D 2025 Drainage Workflows (Repeat) | FDOT | This session demonstrates the updates coming to the FDOT drainage parts list. We will show the steps we are doing using Inventor and Infrastructure parts editor to create individual parts that will be set up to use with Civil 3D. | Novice - Expert | FDOT C3D 2025 | PDH Credits : N/A |
| 2:45 - 3:45 | MicroStation CE - Taking Control of how Models are Presented in the View | Bentley | The MicroStation CONNECT Edition contains a variety of tools and features that may be used to enhance the display of your 3D models. This includes tools developed specifically for use within civil design projects. This session will show how to use tools such as adding rendering materials and lighting. It will also discuss using the populate, stencil, and traffic animation tools and the 3D Warehouse to enhance your 3D civil drawings. | Novice - Expert | MicroStation CE | PDH Credits : N/A |
| 2:45 - 3:45 | * FDOT FDOT C3D 2025 Geotech Tools (Repeat) | FDOT | Bored? Let's talk borings! This session will explore how to use the FDOTC3D2025 Geotech Tools to create/import borehole data using the Geotechnical Data Manager and how to use that data to generate the report of core borings, 2D plan elements, 3D Geotech model, and how to create and annotate geotech cross sections. | Novice - Expert | FDOT C3D 2025 | PDH Credits : 1 |
| 2:45 - 3:45 | * OpenRoads - Grading - It's not just Dirt! | Bentley | This presentation introduces some non-corridor approaches to solving advanced grading problems. | Intermediate - Expert | OpenRoads - Modeling | PDH Credits : 1 |
| FRIDAY WORKSHOP | | | | | | |
| 8:30 - 12:00 | * F-1-SC I Getting Started with iTwin Capture Manage & Extract and AI based workflows for feature extraction *NEW* | Bentley | In this combined workshop, you will use Workflows for Reality data Consumption relying on Centralized Database. AI based workflows on faces, plates, traffic signs, manholes detection and extraction. Workflows to verify the 2D/3D asset resources relying on Reality Data and you will discover how you can easily process, manage & share all of your reality data with the Orbit 3DM Cloud/Publisher Solution. Users will be given insights into the solution and the workflows required to share all of their reality data. | Novice - Expert | *NEW* - iTwin Capture & Orbit | PDH Credits: 3 |

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| 8:30 - 10:45 | * F-1-SC II Using Parametric Solids, Constraints, Variables & Variants-All Together with Parametric Modeling of a 3D Box Culvert | Bentley | This course contains exercises that will assist experienced 2D MicroStation users become familiar with 3D tools and concepts, specifically parametric solids, 2D and 3D constraints, variables, variants and parametric cells within the MicroStation CONNECT Edition. 3S Box Culvert example. | Novice - Intermediate | MicroStation CE - 3D | PDH Credits: 2 |
| 8:30 - 12:00 | * F-1-SH OpenRoads - Introduction to Drainage Layout and Hydraulics | Bentley | In this course we cover creating and designing a highway drainage system consisting of Inlets, Manholes, Outlets, Pipes, and Drainage Areas. Topics covered include placing drainage structures, placing drainage areas, placing drainage pipes and computing flows through the system. We will also cover creating profiles of the system | Novice - Expert | OpenRoads - Drainage | PDH Credits: 3 |
| 11:00 - 3:45 | * F-2-SC II OpenRoads - Creating and Manipulating the Corridor | Bentley | In this course, you will create a roadway corridor and then explore the many tools and techniques to edit and manipulate the corridor. We will take a look at how to add multiple template drops along the corridor as you encounter intersections, driveways and turn lanes and how to edit and copy template drops in lieu of creating a new template. We will show how to make the corridor follow edge of pavement geometry using point controls and corridor references. You will learn how the secondary alignment tool aids in changing the direction of template processing as it applies to point controls and corridor reference elements. You will also learn how to use parametric constraints to override default template values for pavement depths, curb heights, shoulder slopes and ditch widths and how to use the clipping reference tool to clip out a portion of your corridor. We will take a look at how corridors interact with other corridors by learning how to use target aliasing to seek corridors. And finally we will show how to create end condition exceptions in areas that require a different type of end condition solution. | Intermediate - Expert | OpenRoads - Corridor | PDH Credits: 3 |
| 1:30 - 3:45 | * F-2-SC I OpenRoads - ConceptStation *NEW* | Bentley | This course is an introduction to the OpenRoads ConceptStation software. In this course you will learn how to import data for existing conditions, and how to create conceptual roadway designs that include road corridors and their interactions with intersections, bridges and ramps, including lighting, guardrail and street markings. | Novice - Intermediate | *NEW* - OpenRoads - ConceptStation | PDH Credits: 2 |
| 1:30 - 3:45 | * F-2-SH OpenRoads - Editing and Managing Geometry *NEW* | Bentley | There are many tools to edit civil geometry in OpenRoads Designer and understanding how to use them is critical to maintain the rules and relationships between geometric elements. In this workshop, we will take a look at various tools and techniques for editing civil geometry. | Intermediate - Expert | *NEW* - OpenRoads - Geometry | PDH Credits: 2 |
| 8:30 - 3:45 | * F-1-H FDOT Connect - Roadway Design 3D Modeling | ACEC-FDOT | This training course to include fundamentals of 3D Modeling. Participants will continue to learn the Bentley OpenRoads Designer Connect Edition tools for design and modeling within the FDOTCONNECT workspace. | Intermediate - Expert | FDOT Connect - OpenRoads - Modeling | PDH Credits: 5 |