2018 FLUG TRAINING FORUM
Daily Overview

TUESDAY Oct. 23	7:00 - 8:30 Sea Oats / Seagrapes	Registration and Breakfast
	8:00 - 8:15 Sea Oats	Welcome with Opening Announcements
	8:30 - 5:15	General Sessions and Hands-On Workshops
WEDNESDAY Oct. 24	7:00 - 8:30 Sea Oats / Seagrapes	Registration and Breakfast
	8:00 - 8:15 Sea Oats	Welcome with Opening Announcements
	8:15 - 9:15 Sea Oats	**Keynote:** Special Guest *You will not want to miss it!*
	9:45 - 5: 15	General Sessions and Hands-On Workshops
THURSDAY Oct. 25	7:00 - 8:30 Sea Oats / Seagrapes	Registration and Breakfast
	8:00 - 8:15 Sea Oats	Welcome with Opening Announcements
	8:30 - 5:15	General Sessions and Hands-On Workshops
	6:30 - 8:30 ***Tiki Bar***	***Evening Social: Refreshments Served!*** ***Presented by FLUG and Our Partners***
FRIDAY Oct. 26	7:00 - 8:30 Sea Oats / Seagrapes	Registration and Breakfast
	7:30 - 7:45 Sea Oats	Welcome with Opening Announcements
	7:45 - 8:15	**TechTalk: Embracing the Change** *Presented by IMAGINiT-Harvey Pruit*
	8:30 - 3:45	General Sessions and Hands-On Workshops

2018 FLUG TRAINING FORUM
General Registration Information

Name Badges: are required for entrance in to all Sessions, Workshops, Evening Social & Meals.

Guest Name Badges may be purchased at the FLUG Registration Table.

Workshop Sign-In: is required by all Attendees upon entering each workshop!

Attendees must Sign-In during each session or workshop applicable to receive credit.

Workshop Free Audit Seats will be available on a 1st Come, 1st Serve basis.

Professional Development Hours (PDH Credits): " * " indicates general sessions and workshops with PDH credits available.

offer one (1) Credit per one (1) Hour of class.

Attendees must Sign-In during each session or workshop applicable to receive credit.

Pick up Professional Credit Certificates at the FLUG Registration Table

FLUG Raffle Tickets: are sold at the FLUG Registration Table.

All FLUG Participants are eligible to participate

Door Prizes!!!: See the Registration Desk for the many opportunities to win

Visit our Supporting Partners and drop off ONE business card at each booth! Get your sheet Stamped!

FLUG Registration & Workshop Fees: Collected fees cover all costs of Sessions, Workshops, Meals, FLUG Give-a-ways & Evening Social Event during the FLUG Forum. All Flug Participants present are eligible to participate. Please refer to FLUG Disclaimers.

2018 FLUG Training Forum

General Sessions and Hands-On Workshops

Tuesday - Oct 23

		GENERAL SESSION OpenRoads Sea Oates (120)	GENERAL SESSION MicroStation Dunes (80)	GENERAL SESSION FDOT Civil 3D Sawgrass (60)	GENERAL SESSION OpenBridge Starfish (32)	GENERAL SESSION Site Design / LiDAR / OpenRoads Sand Dollar (32)	GENERAL SESSION General Sundial (20)	WORKSHOP FDOT (SS4) Horizon (35)	WORKSHOP MicroStation CONNECT Seahorse (15)	WORKSHOP OpenRoads CONNECT Sandcastle I (20)	WORKSHOP Civil 3D / OpenRoads CONNECT Sandcastle II (15)
8:30-9:30		**Moving to OpenRoads Designer - Where to Start** **Bentley** *Chuck Lawson*	**Introducing The MicroStation CONNECT Edition** **Bentley** *Steve Rick*	*** Roadway Island Modeling with FDOTC3D** **FDOT** *Mike Racca*	*** Modeling a prestressed concrete bridge with OBD/OBM** **Bentley** *Alex Mabrich*	**Bentley Site Design: Together we can lead the site industry into the 3D automated future** **Bentley** *David Settlemyer*	**Fly your Data Away** **Infrastructure Engineers** *Oscar Castaneda*	**CLOSED FOR SET UP**	**CLOSED FOR SET UP**	**CLOSED FOR SET UP**	**CLOSED FOR SET UP**
15 Min		**BREAK**									
9:45-10:45		**OpenRoads Best Practice - Civil Cells** **Bentley** *Bob Rolle*	**Displaying Aerial Imagery MicroStation CONNECT Edition** **Bentley** *Steve Rick*	**FDOTC3D Code Set Styles** **FDOT** *Mike Racca*	*** Modeling a steel bridge with OBD/OBM** **Bentley** *Alex Mabrich*	**Bentley Site Design: Time to change the workflows for site projects** **Bentley** *David Settlemyer*	**A Practical Approach to Precise Slopes - Grading Civil 3D and Beyond** **Geosyntec** *Charles Turlington*	*** T-1-H FDOTSS4 2D Rule Based Roadway Design** **FDOT** *T.Holt/C.Thorp/M.Sexton*	**T-1-D2 Introduction to MicroStation CONNECT Edition** **Bentley** *Dave Mayer*	*** T-1-S1 Introduction to OpenRoads Designer for GEOPAK, InRoads, & MXROAD Users** **Bentley** *Jimmy Prow*	*** T-1-S2 Autodesk Civil 3D: Corridor Modeling-Road Design Fundamentals** **Applied Software** *Ken Driscol*
15 Min		**BREAK**									
11:00-12:00		*** OpenRoads Best Practice - Making the Model More Visual** **Bentley** *Bob Rolle*	**Ground Extraction from Mesh or Point Cloud** **Bentley** *Kurt Rasmussen*	**Updates to FDOTC3D Automated Quantities** **FDOT** *Randy Roberts*	*** Modeling a segmental bridge with OBD/OBM** **Bentley** *Alex Mabrich*	**Bentley Site Design: Is your client demanding and picky? Then let's make them HAPPY** **Bentley** *David Settlemyer*	**"Under Pressure" Civil 3D Pressure Pipes** **David Douglas** *Jason Panicaro*				
1 1/2 Hr		**LUNCH**									
1:30-2:30		*** OpenRoads Best Practice - Terrain Modeling** **Bentley** *Ray Filipiak*	**Managing Seed Files in MicroStation CONNECT Edition** **Bentley** *Dave Mayer*	**Updates to FDOT C3D Signs Tool** **FDOT** *Randy Roberts*	**Plans production in OBD/OBM CONNECT Edition** **Bentley** *Alex Mabrich*	**Integrating LiDAR and Image data for Bridges in the Bentley Environment** **Certainty 3D** *Mike Cook*	**Road Work Ahead - New techniques for road reconstruction using Civil 3D 2019** **5D Consulting** *Peter Funk*		**T-2-D2 Getting Started with 3D in MicroStation CONNECT Edition** **Bentley** *Steve Rick*	*** T-2-S1 QuickStart for OpenRoads Designer Corridor Modeling** **Bentley** *Christiana Holmes*	*** T-2-S2 Creating and Manipulating the Corridor** **Bently** *Kevin Jackson*
15 Min		***BREAK***									
2:45-3:45		*** OpenRoads Best Practice - Geometry** **Bentley** *Ray Filipiak*	**The Ribbon: The New Face of the MicroStation CONNECT Edition** **Bentley** *Dave Mayer*	**Updated FDM/GB Design Criteria for FDOTSS4 and FDOTC3D2018** **FDOT** *John-Mark Palacios*	**Geometry and quantity reports in OBM** **Bentley** *Alex Mabrich*	*** RRR Design & Modeling with OpenRoads** **3D Highway Engineering** *Richard Perez*	**"It Flows Down Hill" Designing Gravity Networks in Autodesk Civil 3D** **Advanced Solutions** *Leo Lavayen*				
30 Min		**"Snack with the *SUPPORT PARTNERS* !"**									
4:15-5:15		**OpenRoads Best Practice - Project Management** **Bentley** *Chuck Lawson*	**Customizing the Ribbon in the MicroStation CONNECT Edition** **Bentley** *Dave Mayer*	*** Earthwork Calculation Methods** **FDOT** *John-Mark Palacios*	**Packaging your projects using I.models** **Bentley** *Alex Mabrich*						

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

2018 FLUG Training Forum

General Sessions and Hands-On Workshops

Wednesday - Oct 24

		GENERAL SESSION FDOT SS4 Sea Oates (120)	GENERAL SESSION Reality Modeling / MicroStation Dunes (80)	GENERAL SESSION Civil 3D Sawgrass (60)	GENERAL SESSION Subsurface Utility Starfish (32)	GENERAL SESSION General Sand Dollar (32)	GENERAL SESSION Revit Sundial (20)	WORKSHOP FDOT (SS4) Horizon (35)	WORKSHOP OpenRoads (SS4) Seahorse (20)	WORKSHOP MicroStation / OpenBridge CONNECT Sandcastle I (15)	WORKSHOP FDOT Civil 3D Sandcastle II (15)
9:45-10:45	*"Technology Hub Open - Come and visit our Support Partners!!"*	FDOT directions for 3D Models in Planning, Design, Construction and Maintenance **FDOT** *Vern Danforth*	Reality Modeling Goes Mainstream: What's New and What's Next in ContextCapture, Modeling for Your Mobile Device **Bentley** *Kurt Rasmussen*	What's New in 2018/2019 Civil 3D **ProSoft** *Shawn Herring*	* Why you Should be Using Subsurface Utilities and How to Get There **Bentley** *Christiana Holmes*	What's New in Bluebeam Revu 2018 **Bluebeam** *Matt Beaumont*	Family Manipulation in Revit **Advanced Solutions** *Jamie Owens*	* W-1-H FDOTSS4 3D Roadway Modeling **Bentley/FDOT** *A. Griffiths/T. Holt/M.Sexton*	* W-1-D2 Intersection Modeling: Adding Elevations (3D) to 2D Geometry **Bentley** *Chuck Lawson*	W-1-S1 Introduction to MicroStation CONNECT Edition (Repeat) **Bentley** *Dave Mayer*	* W-1-S2 FDOTC3D Automated Quantities **FDOT** *Randy Roberts*
15 Min		**BREAK**									
11:00-12:00		FDOT CADD OFFICE Supported Platforms and FAQs **FDOT** *Matt Sexton*	* Reality Modeling for Transportation Projects **Bentley** *Kurt Rasmussen*	Civil 3D in a MicroStation World **Infrastructure Engineers** *Oscar Castaneda*	* Under the Surface with Subsurface Utilities **Bentley** *Ray Filipiak*	BIM for Transportation and Transit Projects **Bentley** *Mark Enos*	Parameters and Schedules **Advanced Solutions** *Jamie Owens*				
1 1/2 Hr		**LUNCH**									
1:30-2:30		* Existing Feature Modeling **FDOT** *Chris Thorp*	WorkSpaces and WorkSets in MicroStation CONNECT Edition **Bentley** *Steve Rick*	Hydrology & Hydraulics in Civil 3D **Applied Software** *Ken Driscol*	* QuickStart - Evaluating Subsurface Utilities in OpenRoads Designer **Bentley** *Christiana Holmes*	3D Deliverables for Automated Machine Guidance (AMG) **FDOT** *Todd Holt*	Family Creation in Revit **Advanced Solutions** *Jamie Owens*		* W-2-D2 Intersection Modeling in OpenRoads **Bentley** *Bob Rolle*	* W-2-S1 Modeling and Designing a PC Bridge with OpenBridge Modeler and Leap Bridge Concrete **Bentley** *Alex Mabrich*	* W-2-S2 FDOT RRR Design using Civil 3D **FDOT** *Mike Racca*
15 Min		***BREAK***									
2:45-3:45		* Cross Sections & More in FDOTSS4 **FDOT** *Chris Thorp/Todd Holt*	Creating WorkSpaces in MicroStation CONNECT Edition **Bentley** *Steve Rick*	Planes, Trains and Automobile with Vehicle Tracking – How to use Vehicle Tracking **Applied Software** *Ken Driscol*	* Including Geotechnical Data in an OpenRoads Designer Model **Bentley** *Ray Filipiak*	Value Engineering with Trimble Quantm & Business Center - HCE **Trimble** *S. Bridges/A. Patane*	Conceptualizing your BIM Model **Advanced Solutions** *Jamie Owens*				
30 Min		**"Snack with the *SUPPORT PARTNERS* !"**									
4:15-5:15		* Automated Quantities updates in FDOTSS4 **FDOT** *Kandi Daffin*	MicroStation CONNECT Edition - Ask the Instructor **Bentley** *Steve Rick*	* Autodesk Civil 3D – Field to Finish **Advanced Solutions** *Leo Lavayen*	* Using Subsurface Utility Quality Control Tools to Ensure 100% Confidence **Bentley** *Ray Filipiak*	Project Management for 3D Engineered Models including Quality Control Checklist **FDOT** *Vern Danforth*	Linking Files into Revit **Advanced Solutions** *Jamie Owens*				

2018 FLUG Training Forum

General Sessions and Hands-On Workshops

Thursday - Oct 25

		GENERAL SESSION OpenRoads Sea Oates (120)	GENERAL SESSION MicroStation Dunes (80)	GENERAL SESSION Civil3D / Drone / InfraWorks Sawgrass (60)	GENERAL SESSION Survey Starfish (32)	GENERAL SESSION OpenRail / General Sand Dollar (32)	GENERAL SESSION AECOsim Sundial (20)	WORKSHOP Trimble / MicroStation CONNECT Horizon (35)	WORKSHOP MicroStation (SS4) / OpenRoads CONNECT Seahorse (20)	WORKSHOP OpenRoads / OpenBridge CONNECT Sandcastle 1 (15)	WORKSHOP Civil 3D Sandcastle II (15)
8:30-9:30		Moving to OpenRoads Designer - Where to Start (Repeat) Bentley *Bob Rolle*	Employing your 3D Models into Visualization Applications Bentley *Kurt Rasmussen*	* Autodesk Civil 3D - Tips, Tricks and Troubleshooting Advanced Solutions *Leo Lavayen*	FDOTSS4 Design Survey Deliverables for 3D Modeling FDOT *John Hazlip*	QuickStart to OpenRail Designer Bentley *Kevin Jackson*	AECOsim Building Designer CONNECT Edition Update Bentley *Mark Enos*	CLOSED FOR SET UP	CLOSED FOR SET UP	CLOSED FOR SET UP	CLOSED FOR SET UP
15 Min		BREAK									
9:45-10:45		* Conceptualize and Communicate Your Road Design with OpenRoads ConceptStation Bentley *Bob Rolle*	Utilizing Drone and Aerial Photos Bentley *Kurt Rasmussen*		FDOTSS4 Design Survey Complex Terrain Models for 3D Design FDOT *John Hazlip*	QuickStart to OpenRail ConceptStation Bentley *Kevin Jackson*	BIM for Owners: Easily Manage Spaces and Assets Bentley *Mark Enos*	TH-1-H Complete workflow from a CAD model to the GPS machine control system using Trimble software SITECH *Mike Eason*	TH-1-D2 Basic Workspace Development Bentley *Steve Rick*	* TH-1-S1 Creating Terrain from Lidar Data Bentley *Christiana Holmes*	TH-1-S2 Autodesk Civil 3D: Site Grading – Practical Ways To Grade Without Stress Applied Software *Ken Driscol*
15 Min		BREAK									
11:00-12:00		* 4D Modeling for Roads with Bentley Schedule Simulation Bentley *Jimmie Prow*	* Leveraging Reality Modeling in Civil Design Bentley *Kurt Rasmussen*	From Flight to Finish – The latest in Drone Technology w/ 3DR site scan - FLIGHT Prosoft *Shawn Herring*	QuickStart for Survey Bentley *Ray Filipiak*	Get Control Over Your CONNECT and V8i Reference Files! Axiom *Eiren Smith*					
1 1/2 Hr		LUNCH									
1:30-2:30		* Enhanced Engineering Model Attribution for OpenRoads Designer Bentley *Jimmie Prow*	Drawing with MicroStation for Civil Designers Bentley *Dave Mayer*	From Flight to Finish – The latest in Drone Technology w/ 3DR site scan - FINISH Prosoft *Shawn Herring*	QuickStart for Terrain Display Bentley *Ray Filipiak*	Integrating LiDAR & Image data for Analyzing ADA Ramps and other Features, in the Bentley Environment Certainty 3D *Mike Cook*	AECOsim Enhancements: Drawings, Sheets and Reports Bentley *Mark Enos*	* TH-2-H Reality Modeling - Integrating Acute 3D Models into your Workflow Bentley *Kurt Rasmussen*	* TH-2-D2 Creating and Manipulating the Corridor (Repeat) Bentley *Christiana Holmes*	* TH-2-S1 Modeling and Designing a Steel Bridge with OpenBridge Modeler and Leap Bridge Bentley *Alex Mabrich*	* TH-2-S2 Autodesk Civil 3D: Advanced Subassemblies – Using General & Conditionals Advanced Solutions *Leo Lavayen*
15 Min		*BREAK*									
2:45-3:45		* Using Reality Models During Your Design Process Bentley *Kevin Jackson*	Manipulating and Modifying Elements Bentley *Dave Mayer*	* Lifecycle of a Civil 3D Construction Model Applied Software *Ken Driscol*	Importing Field Data Bentley *Ray Filipiak*	FDOT 3D Modeling - Best Practices for OpenRoads Stantec *Denise Broom*	BIM for Transportation and Transit Projects (Repeat) Bentley *Mark Enos*				
30 Min		"Snack with the *SUPPORT PARTNERS* !"									
4:15-5:15		* Modeling Techniques - Roundabouts Bentley *Kevin Jackson*	Controlling the Display of Designs for Civil Designers Bentley *Dave Mayer*	* InfraWorks 360 Roadway Design – Fasten Your Seatbelt Applied Software *Ken Driscol*	Editing Field Book Data Bentley *Ray Filipiak*	Road Work Ahead - New techniques for road reconstruction using Civil 3D 2019 (Repeat) 5D Consulting *Peter Funk*	BIM enlivened – AECOsim Building Designer & LumenRT Bentley *Mark Enos*				

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2018 FLUG Training Forum

General Sessions and Hands-On Workshops

Friday - Oct 26

		GENERAL SESSION FDOT SS4 Sea Oates (120)	GENERAL SESSION MicroStation Dunes (80)	GENERAL SESSION Civil 3D Sawgrass (60)	GENERAL SESSION Drainage Starfish (32)	GENERAL SESSION OpenBridge / General Sand Dollar (32)	GENERAL SESSION ProjectWise Sundial (20)	WORKSHOP FDOT (SS4) Horizon (35)	WORKSHOP FDOT (SS4) / OpenRoads (SS4) Seahorse (15)	WORKSHOP TopoDOT / MicroStation CONNECT Sandcastle I (15)	WORKSHOP Civil 3D Sandcastle II (15)
8:30-9:30		FDOT Traffic Plans Stantec *Denise Broom*	Utilizing Drone and Aerial Photos (Repeat) Bentley *Kurt Rasmussen*	* Roadway Island Modeling with FDOTC3D (Repeat) FDOT *Mike Racca*	* QuickStart - Laying out a Drainage Network in OpenRoads Designer Bentley *Christiana Holmes*	Introducing OpenBridge Designer Bentley *Alex Mabrich*	What's New in ProjectWise Bentley *J.P. Gauthier*	* F-1-H FDOTSS4 3D Roadway Modeling (Repeat) Bentley/FDOT *A. Griffiths/T. Holt/M.Sexton*	F-1-D2 CADD-GIS Interoperability for Right of Way Mapping FDOT *J. Hazlip/R. Barber*	F-1-S1 The Latest TopoDOT Tools Certainty 3D *Mike Cook*	* F-1-S2 Autodesk Civil 3D: Composite Terrains & Volumes Advanced Solutions *Leo Lavayen*
15 Min		BREAK									
9:45-10:45		* FDOT Roadway Design - Back to Basics Stantec *Denise Broom*	Changing the Display of Elements with Display Rules in MicroStation CONNECT Edition Bentley *Steve Rick*	Updates to FDOTC3D Automated Quantities (Repeat) FDOT *Randy Roberts*	Building a Storm Network from SHP Files Bentley *Christiana Holmes*	* Reports and Plans Production tools in OpenBridge Modeler Bentley *Alex Mabrich*	Simplify Administration with ProjectWise CONNECT Edition Bentley *J.P. Gauthier*				
15 Min		BREAK									
11:00-12:00		Project Management for 3D Engineered Models including Quality Control Checklist (Repeat) FDOT *Vern Danforth*	Understanding Georeferenced Coordinate Systems and Point Cloud Tools Bentley *Christiana Holmes*	Pipe Networks In Civil 3D Applied Software *Ken Driscol*	Creating Storm Drainage from Excel Data Bentley *Ray Filipiak*	Bridge Products Update and Future development plans Bentley *Alex Mabrich*	Configuring Your Project for Success Bentley *J.P. Gauthier*				
1 1/2 Hr		*LUNCH*									
1:30-2:30		Updated FDM/GB Design Criteria for FDOTSS4 and FDOTC3D2018 (Repeat) FDOT *John-Mark Palacios*	Using Terrain in MicroStation CONNECT Edition Bentley *Steve Rick*	FDOT directions for 3D Models in Planning, Design, Construction and Maintenance (Repeat) FDOT *Vern Danforth*	* Drainage Design Using StormCAD for OpenRoads Bentley *Jimmie Prow*	Collaborative Design Review in Bluebeam Revu and Studio Bluebeam *Matt Beaumont*	Under the Hood of ProjectWise Office 365 Integration Bentley *J.P. Gauthier*		* F-2-D2 Modeling a Superelevated Divided Highway Bentley *Kevin Jackson*	F-2-S1 Annotating Designs Bentley *Dave Mayer*	*F-2-S2 Let's go to REHAB!! Advanced Corridor Modeling in Civil 3D ProSoft *Shawn Herring*
15 Min		BREAK									
2:45-3:45		* Earthwork Calculation Methods (Repeat) FDOT *John-Mark Palacios*	MicroStation CONNECT Edition - Ask the Instructor (Repeat) Bentley *Steve Rick*	FDOT CADD OFFICE Supported Platforms and FAQs (Repeat) FDOT *Matt Sexton*	* Channel Modeling in OpenRoads Bentley *Jimmie Prow*	Pasting Excel and Word into Revit, MicroStation and AutoCAD! Axiom *Eiren Smith*	Advancing Collaboration with ProjectWise Share Bentley *J.P. Gauthier*				

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

2018 FLUG Training Forum

Descriptions - General Sessions and Hands-On Workshops

Tuesday - Oct 23

Room	Type	PDH Credits	Title	Description	Company	Speaker	Level
Sea Oates	General Session		Moving to OpenRoads Designer - Where to Start	During this session, we will consider the migration path options for moving to OpenRoads Designer from InRoads, GEOPAK, MXROAD, and PowerCivil SELECTseries 2, 3, and 4 software. Learn what can be done, the minimum that must be done, and what Bentley resources and services are available to assist you.	Bentley	Chuck Lawson	Novice - Expert
Sea Oates	General Session		OpenRoads Best Practice - Civil Cells	Join Bentley experts as they share tips and tricks for creating and using OpenRoads civil cells. Many of these tips and tricks apply to both OpenRoads Designer, CONNECT Edition and V8i versions of InRoads, GEOPAK, MXROAD, and PowerCivil.	Bentley	Bob Rolle	Novice - Expert
Sea Oates	General Session	1	* OpenRoads Best Practice - Making the Model More Visual	Learn how to increase the visual impact of your models with minimal effort. 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.	Bentley	Bob Rolle	Novice - Expert
Sea Oates	General Session	1	* OpenRoads Best Practice - Terrain Modeling	Tips and tricks for working with terrain models including the best way to create a single terrain from multiple corridors and linear templates, how to create and use graphical filters to create a single composite terrain, how to export the terrain to other formats, and more... Many of these tips and tricks apply to both OpenRoads Designer, CONNECT Edition and V8i versions of InRoads, GEOPAK, MXROAD, and PowerCivil.	Bentley	Ray Filipiak	Novice - Expert
Sea Oates	General Session	1	*OpenRoads Best Practice - Geometry	Join Bentley experts as they share tips and tricks for creating and editing OpenRoads geometry. Many of these tips and tricks apply to both OpenRoads Designer, CONNECT Edition and V8i versions of InRoads, GEOPAK, MXROAD, and PowerCivil.	Bentley	Ray Filipiak	Novice - Expert
Sea Oates	General Session		OpenRoads Best Practice - Project Management	Join Bentley experts as they share recommendations for organizing OpenRoads project data, files, and references. Federating and organizing project data, files, and references properly can make all the difference in the efficiency of OpenRoads and your design environment. Many of these tips and tricks apply to both OpenRoads Designer, CONNECT Edition and V8i versions of InRoads, GEOPAK, MXROAD, and PowerCivil.	Bentley	Chuck Lawson	Novice - Expert
Dunes	General Session		Introducing The MicroStation CONNECT Edition	The MicroStation CONNECT Edition features many updates to the user interface. These updates include the introduction of a ribbon-style graphical user interface (GUI), a relocation of the “workspace” settings such as Preferences and Configuration, and more. This course contains a set of exercises that are used to become familiar with the ribbon style interface found in the MicroStation CONNECT Edition.	Bentley	Steve Rick	Intermediate - Expert
Dunes	General Session		Displaying Aerial Imagery MicroStation CONNECT Edition	In this course, we will investigate how raster data may be incorporated within your mapping projects. We will attach aerial photos as background references.	Bentley	Steve Rick	Intermediate - Expert
Dunes	General Session		Ground Extraction from Mesh or Point Cloud	“Ground detection” is a Bentley Descartes tool that uses a point cloud file to create a terrain model representing the bare earth and then uses this terrain model to classify point cloud points as “ground”.	Bentley	Kurt Rasmussen	Intermediate - Expert
Dunes	General Session		Managing Seed Files in MicroStation CONNECT Edition	In this course, Administrators will create and edit seed files and learn practical applications for using them. When a DGN file is created, a seed file is used as a template for the file. The new DGN file is actually a copy of the seed file. Having a seed file with customized settings frees users from changing settings each time they create a new DGN file.	Bentley	Dave Mayer	Intermediate - Expert

Dunes	General Session		The Ribbon: The New Face of the MicroStation CONNECT Edition	A fundamental knowledge of a user interface, the basic components, and how it functions is essential in being productive with any software package. This familiarity saves both time and money for an organization by making an application easier to adopt, use, and stay current with. It is for reasons such as these that the MicroStation CONNECT Edition has adopted a ribbon style of interface. This course contains a set of exercises to help you master the use of the Ribbon in the MicroStation CONNECT Edition.	Bentley	Dave Mayer	Intermediate - Expert
Dunes	General Session		Customizing the Ribbon in the MicroStation CONNECT Edition	When working in an application, we often find ourselves adapting our workflows to fit the application, rather than the application to our workflows. And, if the sets of tools that are required for various workflows are not properly grouped together, time is often lost remembering where to locate them and navigating between tool locations. As such, what are we to do? Learn how to begin creating a custom user experience in the MicroStation CONNECT Edition by creating custom workflows, ribbon tabs, and more.	Bentley	Dave Mayer	Intermediate - Expert
Sawgrass	General Session	1	* Roadway Island Modeling with FDOTC3D	Walk through the process of developing a 3D model of a Traffic Island at an intersection and learn some techniques that may be used in the FDOT Civil 3D State kit	FDOT	Mike Racca	Novice - Expert
Sawgrass	General Session		FDOTC3D Code Set Styles	Learn how Civil 3D's Code Set Styles enable you to manage the display of Cross Sections, 2D/3D Corridors and Assembly components by using a mapping system that maps codes to styles.	FDOT	Mike Racca	Novice - Expert
Sawgrass	General Session		Updates to FDOTC3D Automated Quantities	This session will provide an overview of the new features included with takeoff manager, including the quantities by sheet which allows the user to do the summary of Pay Items for traffic plans. Will also show tips & tricks, and good practices when generating reports. This session will be using the 2018 version of the State Kit.	FDOT	Randy Roberts	Novice - Expert
Sawgrass	General Session		Updates to FDOT C3D Signs Tool	This session will showcase the new improvements in the sign tool since last year, which includes dynamic copying, Guide Sign capabilities, and other new features. This session will be using the 2018 version of the State Kit and will include a "sneak peek" demo if the OpenRoads Designer version of the Sign Tool.	FDOT	Randy Roberts	Novice - Expert
Sawgrass	General Session		Updated FDM/GB Design Criteria for FDOTSS4 and FDOTC3D2018	This session will review the configuration and demonstrate the ability to checking/applying Florida Design Manual, and Florida Green Book design criteria on projects	FDOT	John-Mark Palacios	Novice - Expert
Sawgrass	General Session	1	* Earthwork Calculation Methods	How to calculate earthwork volumes with average end area tools and other methods in C3D and SS4	FDOT	John-Mark Palacios	Novice - Expert
Starfish	General Session	1	* Modeling a prestressed concrete bridge with OBD/OBM	Develop intelligent, 3D, parametric bridge models for your highway projects with Bentley's OpenBridge Modeler and learn the workflow of modeling a prestressed girder bridge and perform design calculation using LEAP Bridge Concrete.	Bentley	Alex Mabrich	Novice - Intermediate
Starfish	General Session	1	* Modeling a steel bridge with OBD/OBM	Develop intelligent, 3D, parametric bridge models for your highway projects with Bentley's OpenBridge Modeler and learn the workflow of modeling a steel I girder bridge with cross frames and diaphragms and, perform design calculation using LEAP Bridge Steel.	Bentley	Alex Mabrich	Novice - Intermediate
Starfish	General Session	1	* Modeling a segmental bridge with OBD/OBM	Develop intelligent, 3D, parametric bridge models for your highway projects with Bentley's OpenBridge Modeler, set up box haunches and constructions stages for further calculations in Bentley's RM Bridge.	Bentley	Alex Mabrich	Novice - Intermediate
Starfish	General Session		Plans production in OBD/OBM CONNECT Edition	During this session we will discuss all of the details, tips, and tricks to setup the drawing seeds used by the new OpenBridge Modeler and how to create drawings of the bridge plan/profile, superstructure and substructure.	Bentley	Alex Mabrich	Novice - Intermediate

Starfish	General Session		Geometry and quantity reports in OBM	After creating the bridge model with OpenBridge Modeler, learn how you can generate geometry and quantity reports, and connect to Bentley's analytical software solutions.	Bentley	Alex Mabrich	Novice - Intermediate
Starfish	General Session		Packaging your projects using I.models	Create your bridge model, publish an i-model and perform vertical clearance checks and clash detection using Bentley Navigator	Bentley	Alex Mabrich	Novice - Intermediate
Sand Dollar	General Session		Bentley Site Design: Together we can lead the site industry into the 3D automated future	Learn how Bentley Systems has advanced the site design industry from 2D drafting to an automated 3D design world. The world of engineering and construction has moved into the 3D design environment and so has site design and planning. This session will look at the newest tools and workflows for designing and planning site projects. If you design the small projects or large complex sites, Bentley Systems has a new set of tools for you.	Bentley	David Settlemyer	Novice - Expert
Sand Dollar	General Session		Bentley Site Design: Time to change the workflows for site projects	Most engineers say they spend 80% of project time doing plan production and 20% designing. The newest set of site design tools are going to change that. This session will show by adopting automated workflow, designers will spend more time worrying about design and construction issues and less about plan production. Come see how Bentley Systems has created workflows that increase productivity and reduce errors by spending more time looking at designs.	Bentley	David Settlemyer	Novice - Expert
Sand Dollar	General Session		Bentley Site Design: Is your client demanding and picky? Then let's make them HAPPY	This session will walk engineers and architects through a project and show how using the newest site design workflows will make them more productive. Clients hire us for our ability to solve the problems of site and deliver the best projects possible. Bentley Systems has created a new set of site design tools to do just that, deliver better projects. Come see how to use your time for better designs and visualizations to wow even the pickiest client.	Bentley	David Settlemyer	Novice - Expert
Sand Dollar	General Session		Integrating LiDAR and Image data for Bridges in the Bentley Environment	LiDAR systems technology produce rich content which can be used beyond the surveying and mapping deliverables. Besides collecting topography information more effectively than any other survey method, this technology can be used to provide supplementary information to the design process. We will demonstrate the use of TopoDOT to compare design to field conditions for clearances, clash detection and surface monitoring. We will also show how easy it is to create data cross-sections to place elevations and label missing assets.	Certainty 3D	Mike Cook	Novice - Expert
Sand Dollar	General Session	2	* RRR Design & Modeling with OpenRoads	Learn to use a complete set of tools for evaluation, analysis and correction of existing roadway cross slopes on TIN surfaces and design modeling capabilities for milling, resurfacing, and overlay projects.	3D Highway Engineering	Richard Perez	Novice - Expert
Sundial	General Session		Fly your Data Away	What is it about drones, point cloud, GIS data sets, and others, and why should I care? Discover an easy and approachable perspective through this class by learning and understanding data collection and processing, point cloud data extraction, preliminary design, multi-platform collaboration, and final delivery to your client in a 3D VR context–all within a crazy brotherhood of Recap 360, Infraworks, Civil 3D, and some Navisworks with a little bit of Revit. Understand UAV point data collection and proper basic processing protocols. Learn how to maximize the data collected within Infraworks and Civil 3D by extracting data and creating existing conditions data sets. Learn how to create 3D visual concepts in Navisworks to transmit a clearer message to your clients over the design process. Understand the basic knowledge needed to take advantage of your AEC Collection.	Infrastructure Engineers	Oscar Castaneda	Novice - Expert

Sundial	General Session		A Practical Approach to Precise Slopes - Grading Civil 3D and Beyond	Have you noticed that achieving an intended contour slope, such as 3h:1v, or 6h:1v is not possible grading from a break-line that is also sloped, without actually grading 3.15h:1v, or 7.5h:1v? This bust in your intended contour slope occurs as a result of simple slope geometry, and is common grading roadway projects, and any project with break-line grades of 2% and greater. Why not achieve the slope you actually intend, and what about slope stability, do you really want a slope of 2.9h:1v when you really intend a slope of 3h:1v? This 45 minute course provides the solution to achieve precise contour slopes using Civil 3D grading tools; by taking a quick look at contour slope geometry, developing a cheat sheet of adjusted Civil 3D slope settings, and offers a few examples at grading the side of a simple roadway and ditch that have longitudinal grades of 2% and greater."	Geosyntec	Charles Turlington	Intermediate - Expert
Sundial	General Session		"Under Pressure" Civil 3D Pressure Pipes	This presentation will walk the user through the setup and design of pressure pipes in Civil 3D. We will discuss styles and labeling for pipes, fittings, appurtenances, etc. We will walk through the process of taking a general 2d layout and converting it into Civil 3D utilizing tools within the software. We will also look at modifying and/or adding to the already completed design as well as utilizing tools to check for interferences and creating deflections as needed.	David Douglas	Jason Panicaro	Novice - Expert
Sundial	General Session		Road Work Ahead - New techniques for road reconstruction using Civil 3D 2019	With 80% of road construction budgets are going towards road rehabilitation, is "mill 2/overlay 2" the best that can be done? This class will explore the new Road Rehab tools in Civil 3D and show how they can be used reduce milling, reduce material costs and produce a smoother final road surface. We'll explore the new tools as well as how to incorporate mobile LiDAR in to your design process to identify potential problems in design instead of the field. We'll also look at how the techniques in these new tools are being used at a US DOT.	5D Consulting	Peter Funk	Novice - Expert
Sundial	General Session		"It Flows Down Hill" Designing Gravity Networks in Autodesk Civil 3D	This session will be a fast paced overview of making the best of the Gravity Piping tools inside of Civil 3D. From Configuration, Layout and Analysis you will understand how to best use Civil 3D in your Storm or Sanitary Systems.	Advanced Solutions	Leo Lavayen	Intermediate - Expert
Horizon	Workshop	5	* T-1-H FDOTSS4 2D Rule Based Roadway Design	Participants will be introduced to Bentley PowerGEOPAK V8i SELECT Series4 (SS4) OpenRoads Technology Civil Tools; specifically Horizontal and Vertical Geometry tools for rule -based 2D Roadway Design using the Florida Department of Transportation FDOTSS4 Workspace. Workshop Exercises include: • Create Civil Geometry Features in the design file to calculate and define a proposed centerline of construction. • Apply FDOT Standard Design Criteria validation and reporting. • Create Civil Geometry Features in the design file to define the 2D roadway design plan for the proposed project. • Place several FDOT Civil Cells delivered from within the FDOTSS4 Civil Cell DGN library and modify to meet specific project requirements. • Create Civil Geometry Features in the design file to define the vertical profiles for a proposed centerline. • Save and import data from XML and GPK files.	FDOT	T.Holt/C.Thorp/M.Sexton	Novice - Expert
Seahorse	Workshop		T-1-D2 Introduction to MicroStation CONNECT Edition	This course will help a MicroStation user become familiar with the MicroStation CONNECT Edition. This will be done from the point of view of a designer or drafter working at a design firm and has been awarded a design project that they will be involved with. During this course you will learn basic navigation of the MicroStation CONNECT user interface, creating and working with MicroStation design files, design file settings, and more.	Bentley	Dave Mayer	Novice - Intermediate
Seahorse	Workshop		T-2-D2 Getting Started with 3D in MicroStation CONNECT Edition	Learning 3 Dimensional drawing with MicroStation CONNECT Edition is an extension of your knowledge of 2 Dimensional drawing. If you can draw in 2 Dimensions (2D), then all that is needed is to learn how to manipulate the AccuDraw compass in 3 Dimensional (3D) space.	Bentley	Steve Rick	Novice - Intermediate

Sandcastle I	Workshop	2	* T-1-S1 Introduction to OpenRoads Designer for GEOPAK, InRoads, & MXROAD Users	This course is an introduction to the capabilities of the OpenRoads Designer software for existing GEOPAK, InRoads, and MXROAD OpenRoads Technology users.	Bentley	Jimmy Prow	Novice - Intermediate
Sandcastle I	Workshop	3	* T-2-S1 QuickStart for OpenRoads Designer Corridor Modeling	In this course, you will be creating a Corridor and 3D model for a 2 lane rural road. You will learn how to create a Corridor, assign template drops, create dynamic cross sections and review the Corridor and 3D model. You will also learn how to use parametric constraints and point controls to vary pavement depths and shoulder widths. This course will also cover how to create and assign superelevation to a Corridor. And lastly, you will learn how to compute quantities from the 3D model.	Bentley	Christiana Holmes	Novice - Intermediate
Sandcastle II	Workshop	2	* T-1-S2 Autodesk Civil 3D: Corridor Modeling-Road Design Fundamentals	Ken will share corridor modeling lessons he has learned over the past 8 years thanks to his experiences with training people in AutoCAD Civil 3D software and supporting the integration of AutoCAD Civil 3D software into design processes. This class will take a broad look at the workflows in AutoCAD Civil 3D software, and we will discuss how to optimize them for successful corridor modeling applications. We will provide tips and guidelines for determining how to create assemblies, how to use conditional subassemblies, when to use offset assemblies, and what the competitive advantages are of developing custom subassemblies. Key Learning: •Learn how to identify a wide range of applications for corridor models •Understand how to develop assemblies to attain specific design objectives, such as 3D models, sections, or quantities •Learn to build smarter corridor models with conditional subassemblies •Recognize the need and benefits of custom subassemblies • Drawing Setup and Existing Data • Alignments and Profiles • Assemblies and Subassemblies • Corridors and Surfaces • *New Rehab Tools	Applied Software	Ken Driscol	Novice - Intermediate
Sandcastle II	Workshop	3	* T-2-S2 Creating and Manipulating the Corridor	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 templates 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.	Bently	Kevin Jackson	Intermediate - Expert

2018 FLUG Training Forum

Descriptions - General Sessions and Hands-On Workshops

Wednesday - Oct 24

Room	Type	PDH Credits	Title	Description	Company	Speaker	Level
Sea Oates	General Session		FDOT directions for 3D Models in Planning, Design, Construction and Maintenance	Please join Vern and other FDOT staff in this informative session to discuss FDOT's directions for 3D Models in Planning, Design, Construction and Maintenance	FDOT	Vern Danforth	Novice - Expert
Sea Oates	General Session		FDOT CADD OFFICE Supported Platforms and FAQs	This presentation serves as an introduction to a course being developed for Information Technology support specialists and CADD managers to provide an overview of FDOTSS4 and FDOTC3D2018. Topics include installation, configuration, and troubleshooting common issues.	FDOT	Matt Sexton	Novice - Expert
Sea Oates	General Session	1	* Existing Feature Modeling	Learn the recommended workflow for building the Existing Feature Model on your project using FDOTSS4.	FDOT	Chris Thorp	Novice - Expert
Sea Oates	General Session	1	* Cross Sections & More in FDOTSS4	Learn the recommended workflow for creating Final Cross Section on your project using FDOTSS4.	FDOT	Chris Thorp/Todd Holt	Novice - Expert
Sea Oates	General Session	1	* Automated Quantities updates in FDOTSS4	This session will provide an overview of the latest updates including, pay items, DDB changes and features for Automated Quantities in FDOTSS4.	FDOT	Kandi Daffin	Novice - Expert
Dunes	General Session		Reality Modeling Goes Mainstream: What's New and What's Next in ContextCapture, Modeling for Your Mobile Device	With ContextCapture, Bentley is making Reality Modeling available to everyone. ContextCapture offers more formats and inputs, combines digital imagery and point-cloud data, and leverages mobile and cloud technology.	Bentley	Kurt Rasmussen	Novice - Expert
Dunes	General Session	1	* Reality Modeling for Transportation Projects	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.	Bentley	Kurt Rasmussen	Intermediate - Expert
Dunes	General Session		WorkSpaces and WorkSets in MicroStation CONNECT Edition	This course contains a set of exercises to master the use of WorkSpaces and WorkSets in the MicroStation CONNECT Edition. We will work with the delivered "Examples" WorkSpace and its associated WorkSets as well as create a new WorkSpace and WorkSet.	Bentley	Steve Rick	Novice - Expert
Dunes	General Session		Creating WorkSpaces in MicroStation CONNECT Edition	In this course, Administrators will learn to create and edit the configuration file. The configuration file is a text file containing assignments and other processing instructions that are used to populate the look-up table.	Bentley	Steve Rick	Intermediate - Expert
Dunes	General Session		MicroStation CONNECT Edition - Ask the Instructor	Discuss various topics that are important to you in MicroStation (SELECTseries 1, 2, 3) with Bentley Instructors. Live training courses are very interactive. Students will continually engage with the instructor to ensure a successful learning outcome that includes a course assessment.	Bentley	Steve Rick	Novice - Expert

Sawgrass	General Session		What's New in 2018/2019 Civil 3D	Join Shawn Herring of ProSoft as they investiagte the great new features and tools in 2018/2019 Civil 3D.	ProSoft	Shawn Herring	Novice - Expert
Sawgrass	General Session		Civil 3D in a MicroStation World	In this presentation we will discuss the challenges and lessons learned of working in a Microstation environment implementing Civil 3D for the first time. We will explore the options available to work between the 2 platforms and how you can use them to go from the .dgn to the .dwg world. We will examine the basics of braking barriers and allowing Bentley users the opportunity to have a smooth transition coming into Autodesk software. •Understand the difficulties in implementing Civil 3D in a Microstation-dominant environment. •Learn to use the Data Translator, including its pros and cons, to convert data between the two platforms. •Understand key differences between the two platforms.	Infrastructure Engineers	Oscar Castaneda	Intermediate - Expert
Sawgrass	General Session		Hydrology & Hydraulics in Civil 3D	Autodesk, Inc., has given us a variety of water resource tools in the AEC Collection software. If you are a manager or a designer, you need to know if you can stop paying maintenance on competing software and move your organization forward with a single suite of tools. You want to know what is in the suite for someone who does what you do and if it can do the things you need it to do. In this class you'll get a better understanding of what equations are being used in which applications and how to find the right fit for the project requirements that are being passed on down to you. We will review Storm Sewers, Hydrographs, Express Tools, SSA, and River Analysis. You'll also learn some tips and tricks from those who are already familiar with these tools. Key Learning •Discover which tools are available to you in the suites •Learn how to determine which tool will best suit the design requirements being asked of you •Decide if you can terminate some competitive products and save your organization some money •Learn how to use some tips and tricks for facilitating the delineation of watersheds and catchment areas	Applied Software	Ken Driscol	Novice - Expert
Sawgrass	General Session		Planes, Trains and Automobile with Vehicle Tracking – How to use Vehicle Tracking	Autodesk Vehicle Tracking is much more than just vehicle swept path analysis. Come join us in this presentation to find out for yourself how Vehicle Tracking in Civil 3D and InfraWorks can improve your project decision making. Vehicle Tracking allows even beginner users to make educated decisions concerning their individual projects. During this lab, we'll explore all the functions of Vehicle Tracking and design the following: starting a project in InfraWorks and then importing it into Vehicle Tracking to design a parking lot ; ensure our project design meets city standards; utilize the Vehicle Tracking information for detailed grading design; create a roundabout within the project; and much, much more. After this hands-on lab, you will have gained new skills that you can take back to the office and show others the many different ways to use Vehicle Tracking software, Civil 3D and InfraWorks. This session features Vehicle Tracking, AutoCAD Civil 3D and InfraWorks	Applied Software	Ken Driscol	Intermediate - Expert
Sawgrass	General Session	1	* Autodesk Civil 3D – Field to Finish	In the NEW presentation, Leo Lavayen will demostrate: o Show how filed collected data can be processed by Civil 3D o Explore the magic behind the configuration of a template o Demonstrate the Automation of Linework and Symbols o How to control point display via use of groups. o Existing Conditions terrain.	Advanced Solutions	Leo Lavayen	Intermediate - Expert
Starfish	General Session	1	* Why you Should be Using Subsurface Utilities and How to Get There	Can OpenRoads Subsurface Utilities design drainage systems like I currently do? Yes it can. Does OpenRoads Subsurface Utilities provide me additional capabilities and benefits? Yes it does. What do I need to know before implementing Subsurface Utilities? How do I ensure success when implementing Subsurface Utilities? Join us to answer these and other questions during this session.	Bentley	Christiana Holmes	Novice - Expert

Starfish	General Session	1	* Under the Surface with Subsurface Utilities	Building a drainage model is fast and easy, but a LOT happens under the surface when you click Subsurface Utilities buttons. This presentation digs into how OpenRoads and StormCAD unite to provide a comprehensive drainage and utility solution. What happens when you click Place Node? or Place Conduit? or Compute? How do you confirm the results you got? Where did those newly designed pipe sizes come from? How do you constrain the design to your needs? Join us as we answer these questions.	Bentley	Ray Filipiak	Novice - Expert
Starfish	General Session	1	* QuickStart - Evaluating Subsurface Utilities in OpenRoads Designer	Learn to Evaluate a design file with Subsurface Utilities in it.	Bentley	Christiana Holmes	Intermediate - Expert
Starfish	General Session	1	* Including Geotechnical Data in an OpenRoads Designer Model	gINT Civil Tools provide the civil designer an easy way to include geotechnical and other data from a gINT database in their OpenRoads Designer model.	Bentley	Ray Filipiak	Novice - Expert
Starfish	General Session	1	* Using Subsurface Utility Quality Control Tools to Ensure 100% Confidence	The Haestad storm water algorithms have been accurately designing projects for decades. How do you KNOW your project is correctly modeled? Subsurface Utilities has extensive Quality Control tools. In this presentation we will explore the built-in tools and what is set up for Quality Control in the delivered workspace. Be ready! Be confident!	Bentley	Ray Filipiak	Novice - Expert
Sand Dollar	General Session		What's New in Bluebeam Revu 2018	Whether you are new to Bluebeam® Revu®, just recently upgraded to Revu® 2018, or you're deciding if you should update your existing license, join us for an in-depth look at Revu's latest enhancements. Revu® 2018 puts the focus on your work by putting the tools you need right where you need them. Discover why Revu® 2018 is more than just a new UI.	Bluebeam	Matt Beaumont	Novice - Expert
Sand Dollar	General Session		BIM for Transportation and Transit Projects	AECOsim Building Designer is a scalable, multi-discipline building design application that enables BIM workflows to develop and design buildings of any size or complexity from office buildings, DOT maintenance and support buildings, above and below ground rail stations, to multiple building mega-projects such as Airports. Bentley's federated BIM approach allows quick design alternative exploration and adaptive re-use.	Bentley	Mark Enos	Novice - Expert
Sand Dollar	General Session		3D Deliverables for Automated Machine Guidance (AMG)	This session will demonstate the steps for creating 3D deliverables AMG files for construction contractors and verifying with Trimble Business Center	FDOT	Todd Holt	Intermediate - Expert
Sand Dollar	General Session		Value Engineering with Trimble Quantm & Business Center - HCE	With the increasing number of Design-Build projects across the state, identifying shared savings in alignments present unique opportunities for Design Consultants & Contractors to optimize existing designs, reducing construction cost & environmental impacts. This seminar will cover the fundamentals of using Trimble's Quantm optimization technology paired with Trimble Business Center - HCE to optimize 3D alignments, calculate detailed earthworks, structure quantities & costs, along with the 3D construction workflow.	Trimble	S. Bridges/A. Patane	Novice - Expert
Sand Dollar	General Session		Project Management for 3D Engineered Models including Quality Control Checklist	The latest design scope templates and hour forms require that the design of roadway projects be completed through the use of 3D engineered models. This new method requires special engineering management to ensure projects are carried out according to design and production standards. This course will provide Project Managers and Engineers of Record the details and structure needed to direct the development of 3D models for roadway projects. There are currently three main guidelines for the development of 3D Engineered models in traditional roadway design projects. These are the FDM, the CADD Manual and the Standard Scope for Road Projects. This presentation will incorporate the guidelines and requirements of each of these documents into quality control checklists and elements for each of the design submittals (Phase I, II, III, IV, and Final).	FDOT	Vern Danforth	Intermediate - Expert
Sundial	General Session		Family Manipulation in Revit	Join the Advanced Solutions experts as they demonstrate Manipulating Manufacturer or OOTB Content	Advanced Solutions	Jamie Owens	Novice - Expert

Sundial	General Session		Parameters and Schedules	Join the Advanced Solutions experts as they demonstrate how parameters work within a family, project and schedules. Creating various different types of schedules	Advanced Solutions	Jamie Owens	Novice - Expert
Sundial	General Session		Family Creation in Revit	Join the Advanced Solutions experts as they demonstrate the basics of creating a family from scratch, including the various MEP Connections	Advanced Solutions	Jamie Owens	Novice - Expert
Sundial	General Session		Conceptualizing your BIM Model	Join the Advanced Solutions experts as they demonstrate using FormIt to generate a conceptual model and bringing that model in Revit	Advanced Solutions	Jamie Owens	Novice - Expert
Sundial	General Session		Linking Files into Revit	Join the Advanced Solutions experts as they demonstrate linking in AutoCAD and MicroStation files into Revit and what can be done with them.	Advanced Solutions	Jamie Owens	Novice - Expert
Horizon	Workshop	5	* W-1-H FDOTSS4 3D Roadway Modeling	Participants will be introduced to Bentley PowerGEOPAK V8i SELECT Series4 (SS4) OpenRoads Technology Civil Tools; specifically Corridor, Surface Terrain, and Linear Template tools for creating 3D Roadway Design models using the Florida Department of Transportation FDOTSS4 Workspace. Workshop Exercises include: • Create a Terrain Element from the existing surface TIN file to be used as a reference for the project. • Develop Existing Feature 3D model to be shown on cross sections and used in earthwork calculations. • Create 3D Corridor Models of the proposed Roadways for both New Construction and Re-Surfacing. • Add 2D Civil Geometry features as references to the Corridor Models for use as design model control lines. • Apply Parametric Constraints for varying template conditions along the corridor. • View Cross Sections for review, updates, and design checks along the project. • Apply Superelevation to the Corridor Model. • Create an animated drive through of the project.	Bentley/FDOT	A. Griffiths/T. Holt/M.Sexton	Intermediate - Expert
Seahorse	Workshop	2	* W-1-D2 Intersection Modeling: Adding Elevations (3D) to 2D Geometry	In this course, we are re-designing one leg of an existing at-grade intersection to accommodate the extensive widening and re-design of the existing roadway. This course teaches tools and techniques that can be used to vertically define an at grade intersection. It will focus on creating the vertical definitions for horizontal elements using OpenRoads methods. It is recommended that users have some prior experience using OpenRoads Technology.	Bentley	Chuck Lawson	Intermediate - Expert
Seahorse	Workshop	3	* W-2-D2 Intersection Modeling in OpenRoads	In the course, you will learn techniques that can be used to model an intersections. You will learn how to use several of the vertical geometry tools, create terrain from elements, apply a linear template, create a delta terrain, and use surface templates. It is recommended that users have some prior experience using OpenRoads Technology.	Bentley	Bob Rolle	Intermediate - Expert
Sandcastle I	Workshop		W-1-S1 Introduction to MicroStation CONNECT Edition (Repeat)	This course will help a MicroStation user become familiar with the MicroStation CONNECT Edition. This will be done from the point of view of a designer or drafter working at a design firm and has been awarded a design project that they will be involved with. During this course you will learn basic navigation of the MicroStation CONNECT user interface, creating and working with MicroStation design files, design file settings, and more.	Bentley	Dave Mayer	Novice - Expert
Sandcastle I	Workshop	3	* W-2-S1 Modeling and Designing a PC Bridge with OpenBridge Modeler and Leap Bridge Concrete	This hands-on workshop will introduce you to the world of OpenBridge Modeler where you will learn how to create a model for a prestressed concrete girder bridge. This course will be taught using the OpenBridge Modeler CONNECT Edition software.	Bentley	Alex Mabrich	Intermediate - Expert

Sandcastle II	**Workshop**	**2**	*** W-1-S2 FDOTC3D Automated Quantities**	**This workshop will provide exercises using the FDOT Civil3D 2018 State Kit to step through the recommended workflow for the automation of plan quantities, this workshop will cover creation of Summary of Pay Item Sheets, Linking the Spreadsheet reports to the design files, editing the reports, & best practices.**	**FDOT**	**Randy Roberts**	**Novice - Expert**
Sandcastle II	**Workshop**	**3**	*** W-2-S2 FDOT RRR Design using Civil 3D**	**Learn the tools for evaluation, analysis and correction of existing roadway cross slopes, Creating cross sections using the Existing Features Assembly, and design modeling capabilities for milling, resurfacing, and overlay projects.**	**FDOT**	**Mike Racca**	**Novice - Expert**

2018 FLUG Training Forum

Descriptions - General Sessions and Hands-On Workshops

Thursday - Oct 25

Room	Type	PDH Credits	Title	Description	Company	Speaker	Level
Sea Oates	General Session		Moving to OpenRoads Designer - Where to Start (Repeat)	During this session, we will consider the migration path options for moving to OpenRoads Designer from InRoads, GEOPAK, MXROAD, and PowerCivil SELECTseries 2, 3, and 4 software. Learn what can be done, the minimum that must be done, and what Bentley resources and services are available to assist you.	Bentley	Bob Rolle	Novice - Expert
Sea Oates	General Session	1	* Conceptualize and Communicate Your Road Design with OpenRoads ConceptStation	OpenRoads ConceptStation helps you jump-start your projects by rapidly creating conceptual models that allow you to evaluate design alternatives and estimated costs faster, resulting in improved project decisions. Use OpenRoads ConceptStation's powerful modeling capabilities to model roads, rail, intersections, bridges, tunnels and more. Continuously updated estimated project costs make it easy to evaluate design alternatives and options. The conceptual models are easily shared with the public and stakeholders using the built in realistic visualizations capabilities.	Bentley	Bob Rolle	Novice - Expert
Sea Oates	General Session	1	* 4D Modeling for Roads with Bentley Schedule Simulation	The Bentley Schedule Simulation tool enables you to visualize a schedule by integrating 2D or 3D engineering data with a project schedule. It is designed to help in the planning, design or construction stages of a project so that you can get a visual representation of the required tasks and prevent spatial conflicts. For the engineer or contractor it can aid in determining constructability and sequencing of a project. This session will focus on how we can take an OpenRoads Designer 3D model plus a construction schedule and create a 4D model to show construction sequencing/phasing.	Bentley	Jimmie Prow	Intermediate - Expert
Sea Oates	General Session	1	* Enhanced Engineering Model Attribution for OpenRoads Designer	Learn how model attribution can be used to assign and harvest engineering attributes throughout your workflow. You will learn how to assign states (existing, proposed, abandoned), attach pay item definitions, asset tags, and more. Then learn to query the attributes to control what is displayed, calculate quantities, create property driven annotation, run reports, or to create tables.	Bentley	Jimmie Prow	Intermediate - Expert
Sea Oates	General Session	1	* Using Reality Models During Your Design Process	This presentation covers how a design engineer can quickly create a reality model to use during the design process. From snapping a few photos in the field with a cell phone to a 3D model you can use in the design in a few easy steps using ContextCapture.	Bentley	Kevin Jackson	Intermediate - Expert
Sea Oates	General Session	1	* Modeling Techniques - Roundabouts	Join Bentley experts as they share techniques to model roundabouts in OpenRoads Designer.	Bentley	Kevin Jackson	Intermediate - Expert
Dunes	General Session		Employing your 3D Models into Visualization Applications	See how your 3D mesh of existing condition be transformed into your design. Quickly create images, videos and real-time presentations of Architecture, Landscape, Urban and Infrastructure Designs. With LumenRT, you will 'Tell a Better Story'. Win business through more engaging user experiences while still working in Your Design System. Nothing to learn! Quickly bring your scenes to life using tools you know. Enjoy high quality graphics with real-time natural lighting.	Bentley	Kurt Rasmussen	Novice - Expert
Dunes	General Session		Utilizing Drone and Aerial Photos	See how the use of aerial imagery can improve your 3D mesh models. Learn how you can merge your aerial and ground imagery to create one cohesive mesh model.	Bentley	Kurt Rasmussen	Novice - Expert
Dunes	General Session	1	* Leveraging Reality Modeling in Civil Design	Geared towards students and educators, civil engineers doing site, road, and rail design can benefit greatly from applying new techniques in photogrammetry to create 3D models of real world conditions that can be seamlessly integrated into civil engineering workflows.	Bentley	Kurt Rasmussen	Intermediate - Expert

Dunes	General Session		Drawing with MicroStation for Civil Designers	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 course, 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.	Bentley	Dave Mayer	Novice - Expert
Dunes	General Session		Manipulating and Modifying Elements	Existing elements often need to be manipulated and modified. You may need to move or copy them, or you may need to extend or trim. The MicroStation CONNECT Edition provides many tools to help you manipulate and modify existing elements. You can group multiple elements for manipulation and modification. In this course, you will utilize a variety of manipulate and modifying tools to construct the site plan's features. Such as the proposed curbing and line striping that will make up the parking.	Bentley	Dave Mayer	Novice - Expert
Dunes	General Session		Controlling the Display of Designs for Civil Designers	In the MicroStation CONNECT Edition, there are many ways you can control how you view your designs. In this course, 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 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.	Bentley	Dave Mayer	Novice - Expert
Sawgrass	General Session	2	* Autodesk Civil 3D - Tips, Tricks and Troubleshooting	Whether you're an AutoCAD Civil 3D novice or guru, there's always opportunity for improvement. During this session, learn productivity enhancing tips and tricks you can apply to your daily Civil 3D workflows.	Advanced Solutions	Leo Lavayen	Intermediate - Expert
Sawgrass	General Session		From Flight to Finish – The latest in Drone Technology w/ 3DR site scan - FLIGHT	Join us as we explore the latest in drone technology and how it can benefit Architecture, Construction and Engineering (AEC) firms of an size. UAV/Drone capture data is in quickly becoming the go to tool on projects ranging from traditional survey/ALTA, large scale topo, construction management and many more aspects. Come see some of the latest trends on hardware and software for UAV reality capture needs. We will explore project case studies, best practices and tips and tricks we have learned along the way. In the first session as we map out a flight plan and fly the convention center with the 3DR SiteScan & DJI M200 UAV. This session will be hands on as we look at some of the best practices in the field while flying this project. We will successfully fly the aircraft in several modes showing just how diverse of a workflow you can provide for your customers.	Prosoft	Shawn Herring	
Sawgrass	General Session		From Flight to Finish – The latest in Drone Technology w/ 3DR site scan - FINISH	The second session will be a follow up to the field work. We will process our flight, tie it to survey control and look at all the functions and features of SiteScan. We will view our results within several different products including Civil 3D, Infraworks and others. We will generate topo, volumes and just about everything else you need to be successful from flight to finish!	Prosoft	Shawn Herring	
Sawgrass	General Session	1	* Lifecycle of a Civil 3D Construction Model	As the horizontal construction world continues to catch up with vertical world, we will dive into the use of 3D heavy civil construction models and some workflows associated with the benefits of the 3D model. • Learn why building 3D models for the life of the project are important • Discover why laser scanning is used to supplement field data procurement • Discover benefits of 4D modeling and virtual simulation	Applied Software	Ken Driscol	
Sawgrass	General Session	1	* InfraWorks 360 Roadway Design – Fasten Your Seatbelt	Understand the capabilities of Roadway Design for InfraWorks 360 software. Learn how to create, edit, and stylize roads using the tools in Roadway Design for InfraWorks 360	Applied Software	Ken Driscol	
Starfish	General Session		FDOTSS4 Design Survey Deliverables for 3D Modeling	The FDOT Design Survey Workflow has concentrated on the basics of the new workflow. This is an advanced session that will concentrate on details for cleaning up the Design Survey to meet the conditions that will be needed for 3D Modeling. SURVRD File: Know your customer - Field Book vs DGN Graphics. TOPORD: Hard surfaces have historically been a problem area - delineating surface features with a sub-base. PAVEMENT MARKINGS: What to pick up and why. UTILITIES: FDOT ownership vs Utility Company assets BASELINE SURVEY: Where it resides and how to use the ALGNRD file.	FDOT	John Hazlip	Novice - Expert

Sawgrass	General Session		FDOTSS4 Design Survey Complex Terrain Models for 3D Design	Working with and understanding the characteristics of multiple Terrain Models in Bentley's SS4 Open Roads 3D Civil Models. EXAGGERATING TERRAINS: With a temporary model. ALTERNATE TERRAIN MODELS: What to expect when creating or Importing TIN/LandXML files with and without breaklines included. COMPLEX TERRAIN MODELS: Creating a single Terrain Model out of multiple overlapping Civil Terrain Models, TIN files, and LandXML files.	FDOT	John Hazlip	Intermediate - Expert
Starfish	General Session		QuickStart for Survey	An introduction to surveys in OpenRoads Designer. Most projects begin and end with survey. This course will get you started processing data files, reviewing the resulting data and simple edits. We will also discuss the project tree, how the terrain is linked to the processed data and how to produce final a final package for delivery.	Bentley	Ray Filipiak	Novice - Expert
Starfish	General Session		QuickStart for Terrain Display	Learn how to display terrain model features including the boundary, triangles, and contours using feature definitions, and how to modify the default display parameters. You will also learn how to label terrain contours, spot elevations and slopes.	Bentley	Ray Filipiak	Novice - Expert
Starfish	General Session		Importing Field Data	Learn how to process a point list file, set import parameters, Import an observation file and edit a field code.	Bentley	Ray Filipiak	Intermediate - Expert
Starfish	General Session		Editing Field Book Data	Learn how to review, and edit data contained in RAW Survey data files using OpenRoads Survey. Such data includes Setups, Instrument Heights, Horizontal & Vertical Angles, Rod Heights, and Slope Distances.	Bentley	Ray Filipiak	Intermediate - Expert
Sand Dollar	General Session		QuickStart to OpenRail Designer	This presentation covers the Bentley's latest design solution for the rail industries. The presentation will cover rail specific design tools including regression, turnouts, cant and more.	Bentley	Kevin Jackson	Novice - Expert
Sand Dollar	General Session		QuickStart to OpenRail ConceptStation	OpenRail ConceptStation is one of Bentley's newest offering for conceptual rail layout and cost estimates. Automated turnouts, crossings, road intersections, overhead traction power and tunnels. OpenRail ConceptStation allows you to conceptualize your design, visualize it in a photo realistic environment and estimate project costs.	Bentley	Kevin Jackson	Novice - Expert
Sand Dollar	General Session		Get Control Over Your CONNECT and V8i Reference Files!	Remove the time and frustration of dealing with MicroStation reference attachments and their settings, using Axiom's RefManager	Axiom	Eiren Smith	Novice - Expert
Sand Dollar	General Session		Integrating LiDAR & Image data for Analyzing ADA Ramps and other Features, in the Bentley Environment	Learn uses of LiDAR data beyond GIS and survey applications. Point cloud data analysis has become an integral part of design and construction. We'll demonstrate Analysis of ADA Ramps, grade & cross slope analysis, Pavement Condition Index (PCI) analysis, speed advisory analysis, clash detection techniques and much more.	Certainty 3D	Mike Cook	Novice - Expert
Sand Dollar	General Session		FDOT 3D Modeling - Best Practices for OpenRoads	This session will cover Best Practices for 3D modeling using OpenRoads and the FDOT software. Discussion will include information on subjects ranging from the OpenRoads tools, FDOT resources, to recommended file management.	Stantec	Denise Broom	Novice - Expert
Sand Dollar	General Session		Road Work Ahead - New techniques for road reconstruction using Civil 3D 2019 (Repeat)	With 80% of road construction budgets are going towards road rehabilitation, is "mill 2/overlay 2" the best that can be done? This class will explore the new Road Rehab tools in Civil 3D and show how they can be used reduce milling, reduce material costs and produce a smoother final road surface. We'll explore the new tools as well as how to incorporate mobile LiDAR in to your design process to identify potential problems in design instead of the field. We'll also look at how the techniques in these new tools are being used at a US DOT.	5D Consulting	Peter Funk	Novice - Expert
Sundial	General Session		AECOsim Building Designer CONNECT Edition Update	Explore the improved interface, enhanced tools, and exciting new capabilities that will help you improve your interoperability, collaboration, personal productivity, and information sharing. Recent enhancements include LumenRT Designer, which is available to AECOsim CONNECT subscribers without the need of an additional license and produce stunning scenes and animations. Also, see how you can explore the new personalized learning and tips without leaving the product experience with CONNECT Advisor, the new AECOsim Building Designer QuickStart sessions, and new Adaptive Learning offerings.	Bentley	Mark Enos	Novice - Expert

Sundial	General Session		BIM for Owners: Easily Manage Spaces and Assets	Owners are faced with the challenge of easily managing spaces and assets beyond design and construction and into operations to successfully sustain and manage buildings and campuses ranging from Retail, Office, Lab/Healthcare, Transportation, and Airports. This session will cover how building information modeling (BIM) can enable you to create, manage, report, track, and import data on spaces, furniture, fixtures, and equipment (FF&E) across multiple building models. Learn how interoperability between BIM tools plays a major role in referencing and consuming building data in formats such as Revit, Sketchup, IFC, RFA, and COBie to reduce risks. See how you can leverage existing facilities data by promoting legacy 2D CAD graphics to intelligent building spaces and assets for space planning without modeling the entire facility in 3D, as well as how to combine drawings, maps, and models to create a common data environment of your campus. Learning Objectives 1. Discover the concept of "spatial containment" and the relationship between spaces and assets, and how it is used to schedule, locate, compare, and classify FF&E by rooms, across multiple building models. 2. Recognize the importance of interoperability to extend and re-use building information from multiple formats and classification systems. 3. Observe the ability to promote legacy 2D CAD graphics into intelligent objects that can be compared and analyzed with similar type objects in other BIM models. 4. Investigate the ability to link external documents such as warranty and maintenance information to any BIM object in the models and/or drawings.	Bentley	Mark Enos	Novice - Expert
Sundial	General Session		AECOsim Enhancements: Drawings, Sheets and Reports	It will include sheet Indexing (setting it up, creating the Sheet Index table, and reorganizing the sheets), and placing a schedule using a table . This is all new material.	Bentley	Mark Enos	Novice - Expert
Sundial	General Session		BIM for Transportation and Transit Projects (Repeat)	AECOsim Building Designer is a scalable, multi-discipline building design application that enables BIM workflows to develop and design buildings of any size or complexity from office buildings, DOT maintenance and support buildings, above and below ground rail stations, to multiple building mega-projects such as Airports. Bentley's federated BIM approach allows quick design alternative exploration and adaptive re-use.	Bentley	Mark Enos	Novice - Expert
Sundial	General Session		BIM enlivened – AECOsim Building Designer & LumenRT	Enrich your AECOsim Building Designer models to make them look more realistic with LumenRT. Rendering with LumenRT not only saves your time but also provides a huge library of 3D content to add more innovative features to your model. Immerse buildings within a real-time visualization environment populated with moving people, wind-swept plants with seasonal foliage, rolling clouds, rippling water, and animated vehicles. Easily share interactive, immersive 3D presentations with any stakeholder using Bentley LumenRT LiveCubes. (Interior Architecture models will also be explored)	Bentley	Mark Enos	Novice - Expert
Horizon	Workshop		TH-1-H Complete workflow from a CAD model to the GPS machine control system using Trimble software	SITECH, TRIMBLE's construction distribution partner, will demonstrate how to take FDOT data (CAD files, XML DATA, IMODEL data and more) and export the data to the field for GPS machine control applications. We will walk through a workflow of exporting the data, inspecting the data for accuracy, and then sending it to a machine for GPS field grading. There will be office software and field emulators loaded on the computers to give you a complete understanding of the entire workflow process of what a Contractor must do to prepare data sets so they are ready to be used on a jobsite. Software includes Trimble Business Center and Machine control software programs.	SITECH	Mike Eason	Novice - Expert
Horizon	Workshop	3	* TH-2-H Reality Modeling - Integrating Acute 3D Models into your Workflow	This course contains exercises for you to learn all about Acute 3D, .3mx files and more importantly, how to include them in MicroStation based workflows. Master attaching .3mx as local reference files, learn to attach them geographically as well as by key-in. Navigate around the 3D models using various view tools. Master reference tools such as Clip Boundary and Mask. Integrate Acute 3D Models with Google Earth and print Acute 3D Scene files to a 3D PDF. Printing to a 3D PDF is a great way to communicate your existing and proposed design. You will learn to control how Acute 3D file accuracy is defined when exported, dropped or printed from MicroStation. As an optional exercise, you will learn to attach a Bing Map to our design geometry and Acute 3D Model.	Bentley	Kurt Rasmussen	Intermediate - Expert

Seahorse	Workshop		TH-1-D2 Basic Workspace Development	This course is designed to show you how create a workspace by examining configuration files. The workspace consists of many configuration files that are read in a specific order to point to locations for files and setup the way MicroStation handles those files.	Bentley	Steve Rick	Novice - Expert
Seahorse	Workshop	3	* TH-2-D2 Creating and Manipulating the Corridor (Repeat)	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 templates 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.	Bentley	Christiana Holmes	Intermediate - Expert
Sandcastle I	Workshop	2	* TH-1-S1 Creating Terrain from Lidar Data	In this course, you will learn how to process large LiDAR data sets to a manageable terrain model suitable for use within a project.	Bentley	Christiana Holmes	Intermediate - Expert
Sandcastle I	Workshop	3	* TH-2-S1 Modeling and Designing a Steel Bridge with OpenBridge Modeler and Leap Bridge	This hands-on workshop will introduce you to the world of OpenBridge Modeler where you will learn how to create a model for a steel girder bridge. This course will be taught using the OpenBridge Modeler CONNECT Edition software.	Bentley	Alex Mabrich	Intermediate - Expert
Sandcastle II	Workshop		TH-1-S2 Autodesk Civil 3D: Site Grading – Practical Ways To Grade Without Stress	Tired of seeing an AutoCAD Civil 3D software grading demonstration of a rectangular building pad? In this class, you learn how to use the Civil 3D grading tools to build common things that are great practical applications for most grading designs. We look at walls, driveways, berms, swales, and many other things. We also look at how to combine these smaller designs into 1 large final design. Key Learning •Use Civil 3D feature lines, grading objects, and surfaces to build common grading design components •Apply grading design workflows to many types of designs •Recognize the appropriate grading tools to use for the type of design that is required •Combine several small grading designs together into 1 large design • Pond Grading ▯ Volume metrics – Cut/Fill Evaluation • Parking Lot Grading ▯ Drainage Surface ▯ Curb Surface • Misc. Grading	Applied Software	Ken Driscol	Intermediate - Expert
Sandcastle II	Workshop	3	* TH-2-S2 Autodesk Civil 3D: Advanced Subassemblies – Using General & Conditionals	Description: This NEW course will cover many topics, which include: o Ditch / Channel o Roadway: Shoulders and Medians o Cut/Fill options o Land Development DESCRIPTION: This course is intended for Experienced and Advanced users that want to maximize Corridor creation. The Focus will be the use of the Conditional Subassemblies. These often overlooked subassemblies work as “If / Than” statements. Used correctly, a Corridor can automatically choses layout options based upon configuration. You will learn how to Crate, Control and Understand these amazing tools in multiple scenarios.	Advanced Solutions	Leo Lavayen	Intermediate - Expert

2018 FLUG Training Forum

Descriptions - General Sessions and Hands-On Workshops

Friday - Oct 26

Room	Type	PDH Credits	Title	Description	Company	Speaker	Level
Sea Oates	General Session		FDOT Traffic Plans	During this session learn helpful information about the tools available for developing traffic plan designs, quantities, and production. Tools cover will include D&C Manager, Draw Sign, Draw Cell/Cell Group by Feature, LDM, Civil Features.	Stantec	Denise Broom	Novice - Expert
Sea Oates	General Session	1	* FDOT Roadway Design - Back to Basics	Whether you're new to using MicroStation or have been using it for years, join this session to discover helpful tips and tricks to make your design experience more productive.	Stantec	Denise Broom	Novice - Expert
Sea Oates	General Session		Project Management for 3D Engineered Models including Quality Control Checklist (Repeat)	The latest design scope templates and hour forms require that the design of roadway projects be completed through the use of 3D engineered models. This new method requires special engineering management to ensure projects are carried out according to design and production standards. This course will provide Project Managers and Engineers of Record the details and structure needed to direct the development of 3D models for roadway projects.	FDOT	Vern Danforth	Intermediate - Expert
Sea Oates	General Session		Updated FDM/GB Design Criteria for FDOTSS4 and FDOTC3D2018 (Repeat)	This session will review the configuration and demonstrate the ability to checking/applying Florida Design Manual, and Florida Green Book design criteria on projects	FDOT	John-Mark Palacios	Novice - Expert
Sea Oates	General Session	1	* Earthwork Calculation Methods (Repeat)	How to calculate earthwork volumes with average end area tools and other methods in C3D and SS4	FDOT	John-Mark Palacios	Novice - Expert
Sea Oates	General Session		Utilizing Drone and Aerial Photos (Repeat)	See how the use of aerial imagery can improve your 3D mesh models. Learn how you can merge your aerial and ground imagery to create one cohesive mesh model.	Bentley	Kurt Rasmussen	Novice - Expert
Dunes	General Session		Changing the Display of Elements with Display Rules in MicroStation CONNECT Edition	In this course, you learn how to will display existing landscape elements in a different look than how they were drawn. For example in a landscape plan, you have numerous trees and shrubs that have been installed. The cells for trees, shrubs and ground cover need to be isolated, in this case you will need to display just the shrubs and "gray scale" the trees, ground cover, and existing roadway geometry. You will create Display Rules that are applied to a Display Style. Here we have several landscape elements, ground cover, several types that we need to maintain by irrigation and watering. In the design you will need to identify them based on their Item Type Properties, including those that are less than a specific square footage. Also you have been given data that was created on the correct level and it displays correctly for the specific group that created it, however we need it to display differently in our construction plan.	Bentley	Steve Rick	Novice - Expert
Dunes	General Session		Understanding Georeferenced Coordinate Systems and Point Cloud Tools	Come explore Georeferenced Coordinate Systems and the LiDAR tools under the reality modeling tab in OpenRoads Designer. We will take a look into what a Georeferenced Coordinate System is and why setting the correct one is critical for your project's success. We will also explore the tools available for processing Point Cloud data. You will learn to build a terrain model from unclassified LiDAR data and remove the first return shots (foliage) resulting in a more accurate representation of the ground's surface. Do you want to try it yourself? This session is also offered on Tuesday as a hands-on workshop.	Bentley	Christiana Holmes	Novice - Expert
Dunes	General Session		Using Terrain in MicroStation CONNECT Edition	In this course, you will learn to visualize imported point data on the earth surface and display Contours, Triangles, Voids, Islands, Flow Arrows and many other Terrain Features. You also will learn to label Contour and Spot Elevations.	Bentley	Steve Rick	Novice - Expert
Dunes	General Session		MicroStation CONNECT Edition - Ask the Instructor (Repeat)	Discuss various topics that are important to you in MicroStation (SELECTseries 1, 2, 3) with Bentley Instructors. Live training courses are very interactive. Students will continually engage with the instructor to ensure a successful learning outcome that includes a course assessment.	Bentley	Steve Rick	Novice - Expert

Sawgrass	General Session	1	* Roadway Island Modeling with FDOTC3D (Repeat)	Walk through the process of developing a 3D model of a Traffic Island at an intersection and learn some techniques that may be used in the FDOT Civil 3D State kit	FDOT	Mike Racca	Novice - Expert
Sawgrass	General Session		Updates to FDOTC3D Automated Quantities (Repeat)	This session will provide an overview of the new features included with takeoff manager, including the quantities by sheet which allows the user to do the summary of Pay Items for traffic plans. Will also show tips & tricks, and good practices when generating reports. This session will be using the 2018 version of the State Kit.	FDOT	Randy Roberts	Novice - Expert
Sawgrass	General Session		Pipe Networks In Civil 3D	Topics covered in this session will include: • Common use working with Pipe Networks • Understanding how Civil 3D handles Pipe Networks • Modeling Gravity Based Pipe Network • Tips and Tricks • Overview Hydraflow Extensions • Infrastructure Parts Editor (New)	Applied Software	Ken Driscol	Intermediate - Expert
Sawgrass	General Session		FDOT directions for 3D Models in Planning, Design, Construction and Maintenance (Repeat)	Please join Vern and other FDOT staff in this informative session to discuss FDOT's directions for 3D Models in Planning, Design, Construction and Maintenance	FDOT	Vern Danforth	Novice - Expert
Sawgrass	General Session		FDOT CADD OFFICE Supported Platforms and FAQs (Repeat)	This presentation serves as an introduction to a course being developed for Information Technology support specialists and CADD managers to provide an overview of FDOTSS4 and FDOTC3D2018. Topics include installation, configuration, and troubleshooting common issues.	FDOT	Matt Sexton	Novice - Expert
Starfish	General Session	1	* QuickStart - Laying out a Drainage Network in OpenRoads Designer	In this course, you will learn how to lay out a simple drainage network: place an endwall, inlets, pipes, and drainage areas.	Bentley	Christiana Holmes	Novice - Expert
Starfish	General Session		Building a Storm Network from SHP Files	In this course, you will learn how to create a Storm System from SHP files using ModelBuilder.	Bentley	Christiana Holmes	Novice - Expert
Starfish	General Session		Creating Storm Drainage from Excel Data	In this course, you will learn how to use ModelBuilder to import drainage networks from an Excel Spreadsheet.	Bentley	Ray Filipiak	Intermediate - Expert
Starfish	General Session	1	* Drainage Design Using StormCAD for OpenRoads	Explore the drainage design capabilities of StormCAD for OpenRoads. See how it can be used to layout of drainage networks, hydraulic analysis of surface inlets and underground piping networks, and see how the use of scenarios can help you explore options for your drainage design. We will also explore some advanced drainage capabilities.	Bentley	Jimmie Prow	Novice - Expert
Starfish	General Session	1	* Channel Modeling in OpenRoads	This lecture will teach you how to model a drainage channel in OpenRoads.	Bentley	Jimmie Prow	Intermediate - Expert
Sand Dollar	General Session		Introducing OpenBridge Designer	OpenBridge Designer is the new Bentley offering for bridge modeling and analytical calculation. As a single software installation in a dashboard, user can harness the power of OpenBridge Modeler, LEAP Bridge Concrete and LEAP Bridge Steel. Model you concrete or steel bridge with OpenBridge Modeler and calculate tendon layout, steel plate thicknesses and perform code checks with OpenBridge Designer interoperability with Bentley's LEAP Bridge solutions.	Bentley	Alex Mabrich	Novice - Expert
Sand Dollar	General Session	1	* Reports and Plans Production tools in OpenBridge Modeler	OpenBridge Modeler is incorporating a myriad of new reports, from geometry to quantities, as well more plans production capabilities. Cut typical sections, substructure sheets, plan elevation views directly from the OBM model and assemble them into your plans.	Bentley	Alex Mabrich	Intermediate - Expert
Sand Dollar	General Session		Bridge Products Update and Future development plans	This is a year-end summary of all the enhancements done on Bentley's Bridge product as well as sneak-peek on future development plans.	Bentley	Alex Mabrich	Novice - Expert

Sand Dollar	General Session		Collaborative Design Review in Bluebeam Revu and Studio	Design review, plan check and QA/QC are all processes that require many sets of discerning eyes to work together in a collaborative effort to move designs and drawings forward in the project lifecycle. Using Bluebeam Revu's customizable markup tools help improve clarity and standardization across teams, while Bluebeam Studio brings all eyes to the same documents. In this session, we will look at features and best practices to increase clarity, consistency and efficiency while decreasing the time required for reviews.	Bluebeam	Matt Beaumont	Novice - Expert
Sand Dollar	General Session		Pasting Excel and Word into Revit, MicroStation and AutoCAD!	Importing perfectly formatted — and linked — Excel and Word data into MicroStation, AutoCAD and Revit with Axiom's Microsoft Office Importer.	Axiom	Eiren Smith	Novice - Expert
Sundial	General Session		What's New in ProjectWise	Are you helping your project teams fully exploit ProjectWise? Learn how ProjectWise continues to advance well beyond work-in-progress document management. Catch up on the latest updates and services to connect the entire project team with digital workflows.	Bentley	J.P. Gauthier	Novice - Expert
Sundial	General Session		Simplify Administration with ProjectWise CONNECT Edition	Ready to save time and level-up your ProjectWise administration? Learn how the PowerShell capability in ProjectWise Administrator CONNECT Edition helps you quickly configure projects, manage users and access control, and connect your users to ProjectWise cloud services	Bentley	J.P. Gauthier	Intermediate - Expert
Sundial	General Session		Configuring Your Project for Success	Increase the value you deliver to your projects by understanding the power of a fully configured ProjectWise Work Area. Learn how resource definitions, permissions, workflows, standards, and more promote increased collaboration, efficiency, and consistency.	Bentley	J.P. Gauthier	Intermediate - Expert
Sundial	General Session		Under the Hood of ProjectWise Office 365 Integration	The new integration between ProjectWise and Office 365 will transform how your projects collaborate. Prepare yourself to guide and facilitate successful adoption by learning how to configure and use specific integrations with Microsoft Flow, SharePoint, and Teams.	Bentley	J.P. Gauthier	Intermediate - Expert
Sundial	General Session		Advancing Collaboration with ProjectWise Share	ProjectWise Share offers a new and secure way to access project information and share project files with external project participants. Learn how to start benefiting from Share today and the about the exciting enhancements on the way.	Bentley	J.P. Gauthier	Intermediate - Expert
Horizon	Workshop	5	* F-1-H FDOTSS4 3D Roadway Modeling (Repeat)	Participants will be introduced to Bentley PowerGEOPAK V8i SELECT Series4 (SS4) OpenRoads Technology Civil Tools; specifically Corridor, Surface Terrain, and Linear Template tools for creating 3D Roadway Design models using the Florida Department of Transportation FDOTSS4 Workspace. Workshop Exercises include: • Create a Terrain Element from the existing surface TIN file to be used as a reference for the project. • Develop Existing Feature 3D model to be shown on cross sections and used in earthwork calculations. • Create 3D Corridor Models of the proposed Roadways for both New Construction and Re-Surfacing. • Add 2D Civil Geometry features as references to the Corridor Models for use as design model control lines. • Apply Parametric Constraints for varying template conditions along the corridor. • View Cross Sections for review, updates, and design checks along the project. • Apply Superelevation to the Corridor Model. • Create an animated drive through of the project.	Bentley/FDOT	A. Griffiths/T. Holt/M.Sexton	Intermediate - Expert
Seahorse	Workshop		F-1-D2 CADD-GIS Interoperability for Right of Way Mapping	In this workshop the user will learn how to create GIS friendly lines, curves and closed polygons with native Bentley Map feature attributes that meet FDOT CADD/GIS Interoperability Standards for Right of Way Mapping projects. The products of this workshop will be FDOT Parcels, Alignments and Right of Way Lines and their associated attributes.	FDOT	J. Hazlip/R. Barber	Novice - Expert

Seahorse	Workshop	2	* F-2-D2 Modeling a Superelevated Divided Highway	In this course, you will learn to model a divided highway with superelevation in a corridor model.	Bentley	Kevin Jackson	Intermediate - Expert
Sandcastle I	Workshop		F-1-S1 The Latest TopoDOT Tools	This course will be divided into 3 One-Hour sessions. The topics covered include: Session 1: TopoDOT: Newer Tools and Important Tool Updates Abstract: This hands-on workshop will explore the latest techniques of feature extraction for topography mapping and asset collection using TopoDOT. Session 2: TopoDOT: Speed Advisory and Grade Analysis Abstract: Dive into point cloud data analysis tools using TopoDOT in this hands-on workshop. We will run tools for Surface Analysis, grade & cross slope analysis and more. Session 3: TopoDOT: Best Practices Q&A Session Abstract: We will answer your questions on processing with TopoDOT in this live Q&A session on best practices and feature extraction workflows.	Certainty 3D	Mike Cook	Intermediate - Expert
Sandcastle I	Workshop		F-2-S1 Annotating Designs	Annotation, such as text, dimensions, labels, patterns and hatching, help design features stand out. It is critical to a design by providing the means to communicate pertinent information and design intent. This course contains exercises that utilize methods to embellish a set of site plans. You will utilize tried and true annotation tools found from previous generations of MicroStation that have remained through the latest generation, the MicroStation CONNECT Edition. With the MicroStation CONNECT Edition, it continues to build upon an already broad and extensive portfolio of annotation tools. In this course, use annotation scale with a variety of tools to place text, dimensions and cells. You will utilize features such Text Styles, Fields, and Favorites. Place Notes, Callouts and Tables. As well as, place Hatching and Patterning.	Bentley	Dave Mayer	Novice - Expert
Sandcastle II	Workshop	3	* F-1-S2 Autodesk Civil 3D: Composite Terrains & Volumes	This NEW course will cover many topics, which include: o Pasting Surfaces o Composite Volumes o Tin Volume Surfaces (Dashboard) o Sectional Volumes o Earthwork o Corridor Materials o Reports / Exports DESCRIPTION: In this session we will be digging into working with Civil 3D Terrain. The two surface type that will be used will be TIN Surface and TIN Volume Surfaces. Intended to show known behaviors of Terrains, the Creation of Composite Surface and use of other little known tools.	Advanced Solutions	Leo Lavayen	Intermediate - Expert
Sandcastle II	Workshop	2	*F-2-S2 Let's go to REHAB!! Advanced Corridor Modeling in Civil 3D	Join us in this hands on advanced session as we take a deep dive into Civil 3D. This tool works great for optimizing the cross slope of existing roadways or enhances your design of new roadways that just need a bit more detailed design to them. However, the workflow to create a rehab corridor is slightly different from the standard workflow used to create other corridor models. This session will review the new Rehab Corridor options in Civil 3D and how this may help your daily workflow.	ProSoft	Shawn Herring	Intermediate - Expert