Transitioning to OpenRoads Technology

Presented by: Ernst van Baar
Transitioning to OpenRoads Technology

• This presentation provides instructions for transitioning standards and workflows and developing your implementation plans. Learn how to utilize the exciting new tools in SELECTseries 3 of the civil products. It is targeted for all Bentley Civil users.

• At the end of this training session, an assessment will be given. We will review all assessment questions and answers to see what you have learned.
Learning Objectives

After this session you will:

• understand how to run both SS2 and SS3 simultaneously.

• define which DGNLibs need upgrading.

• identify which resources need to be created new for SELECT series 3
What is OpenRoads?
OpenRoads is...

- the common technology for Bentley civil products that offers immersive interaction of survey, corridor modeling, geometry, terrain modeling, dynamic sections, and much more.

- immersive interaction of
  - Survey
  - Geometry
  - Terrain modeling
  - Corridor modeling
  - Dynamic cross sections
  - Civil cells
  - Design intent
  - Design-time visualization
I’m not a user..

What is SELECTseries 3 (in 25 words or less)?
SELECTseries 3 is....

intuitive design that exceeds civil engineering’s rigorous demands, real-time 3-D modeling with instant feedback that captures design intent and persistence, all in DGN files.
Bigger picture

SS2 files
- Roadway
- Sites
- Geometry
- Surfaces
- Templates

SS3
- Terrain
- H & V Geometry
- Design standards
- Corridor definitions
- Super Elevation
- Curve Widening
- Site modeling
- Civil Cells
- Dynamic profiles
- Cross Sections
- Evaluation & reports
- Volumes

SS2 plan production
- Geometry
- Surfaces
- Profiles
- PnP generator
- Labeling
- Printing
SELECTseries 2
SELECTseries 3
What is the hype about “civilized” cells?
What are Civil Cells

- Build your own digital “Lego”

- Automate design processes

- Combine civil cells with civil cells
CIVIL cells
Why Are CIVIL Cells Important?

Repeatable geometric modeling

- Organizations can create civil cells to reflect design standards

- User can re-use previously stored geometric configurations, but adjust for project specific details
Good News About Civil Cells

• Very powerful addition to Open Roads technology
• Sample libraries provided with installation package
• Best Practice:
  – Keep it simple!
  – Get familiar with Open Roads – geometry and corridor modeling
  – Review standards to earmark potential candidates
  – Poll users on usability and prioritize
Workshop Using Civil Cells

Wednesday 9:00am – 16:00
Ian Rosam, Product Manager, BSW - Development, Civil Design
Can I run SS2 and SS3 on the same machine?
Installation Considerations

SELECTseries 2 TO SELECTseries 3 OR BOTH?

– SELECTseries 3 dependency on MS 08.11.09.397
– Set-up / testing - Both can be loaded on same workstation
– Power products great alternative!
– Caution using resources in both versions
What kind of training do I need?
Training Options

No training – Not recommended!

Convert SELECTseries 2 training - Just “picture swapping”

Successful SELECTseries3 Training = Effective, Productive User
There’s a lot of set-up to any software upgrade. What can I reuse and what do I have to recreate?
Resource Usage

Reuse:
- MS levels, fonts, cells, line styles
- Element templates
- DGN Libraries
- Survey TIW files
- XIN, PSS, DDB, SMD (XML)
- XSL style sheets (reporting)

Create:
- Element templates
- Graphical filters
- DGN libraries
- Project settings
- Civil cells

Upgrade:
- Template library – add superelevation flag
- Design Standards – add vertical
Lecture Understanding Features

Tuesday  13:30 – 14:20
Ernst van Baar
Design Standards - Review horizontal and vertical
Design Standards – validate local standards
Superelevation Standards

- SEP and SRL are supported.
- Superelevation tables – do you have your standards currently set up and in production?

![Superelevation Standards](image)
Workshop Superelevation in the OpenRoads Environment

Tuesday 10:30-12:20 O’Clock
Maria Persson
I downloaded and installed the software and I’m thoroughly overwhelmed. Where do I start?
Transitioning to SELECTseries 3

1. Create or review workspaces.
2. Create MicroStation resources.
3. Review coordinate systems.
4. Set up or modify seed files.
5. Review configuration variables.
6. Address features in DGN Lib.
7. Define project settings & standards within DGN Lib(s).
8. Pre-deployment Testing
9. Sample Projects
10. Deployment
What is a *MicroStation Workspace*?

- A custom MicroStation environment or configuration.

- By selecting a defined workspace, you customize MicroStation for a specific discipline, project, task, or standard.
Advance Preparation - MicroStation

- Review current MicroStation resources – are they in DGNLibs or can they go there? How are XIN, DDBs and PSS affected?
- Development of MicroStation element templates and graphical filters (such as for terrain models)
- Review CAD standards – changes due to Corridor Modeling, geometry, use of reference files
Advance Preparation - Civil

• Review Design File Settings within Seed Files – Determine default settings for Civil Formatting

• Review Workspace Preferences – View Options > Civil

• Review new configuration variables

• Review new workflows and determine which areas may be moved forward to new methods.

• Are there any customized workflows that need to be integrated?

• Review reports; determine defaults, deficiencies
Advance Preparation - Engineering

• Review horizontal and vertical design standards – validate local standards.

• Superelevation tables
  – Do you have your standards currently set up and in production?
  – Do you follow Danish standards or use customized standards?
Should partially completed projects be moved to SELECTseries 3 or completed in SELECTseries 2?
Considerations

• Has 3D corridor modeling started in earnest?
  – Built in transitions, supers, target aliasing…
  – IRD is not upward compatible
Should I stay on SELECTseries 2 or move to SELECTseries 3?
Advantages of Moving Ahead

• SELECTseries 3 the first release on the OpenRoads technology – more to come!
• Slowly transition by project or functional group
• Great new tools for productivity enhancement!
Native Product Changes

• Roadway Designer modeling application removed and replaced by OpenRoads modeling technology

• Removed Site Modeler commands / application – superseded by OpenRoads modeling technology

• Roundabout tools removed and replaced by OpenRoads technology

• Install procedure allows SELECTseries 3 to be installed concurrently with SELECTseries 2.
Native Product Changes - InRoads

• Cross section commands moved to OpenRoads technology

• Improved integration between ProjectWise and the geometry database (.ALG)
Native Product Changes - GEOPAK

• Corridor modeling application removed and replaced by OpenRoads functionality.

• Ability to cut cross sections from a .DTM file was removed from the Draw Cross Sections application.

• Improved integration between ProjectWise and the geometry database (.GPK)

• Added new Cross Section Drawing, Earthwork and Sheet ing capability through the OpenRoads tools.
Should I bypass SS3 and just wait for SS4? Or SS27? Or SS56?
BEYOND SELECTseries 3
E V O L U T I O N  O F  C I V I L  M O D E L  T O  I N F O R M A T I O N  M O B I L I T Y
Learning Paths: Ready-Made Training Plans

Choose from:
- Bentley recommendations
- Configure your own
  - Organizational
  - Personal

Select:
- Product(s) and version(s)
- Language
- Training type

Enroll team members in:
- One learning path
- Multiple learning paths
This Session’s Learning Path:

Here’s the name and link to a short learning path that includes this session and recommended modules that you may share with your colleagues:

V8i (SELECTseries 3) OpenRoads Technology Learning Path

http://learn.bentley.com/app/Public/ViewLearningPathDetails?lpId=104292#.UYkxZxK2r9s.email
Demo....
Questions?

Thank you!