CIVIL PROFILES and ALTERNATING PLANS AND PROFILES

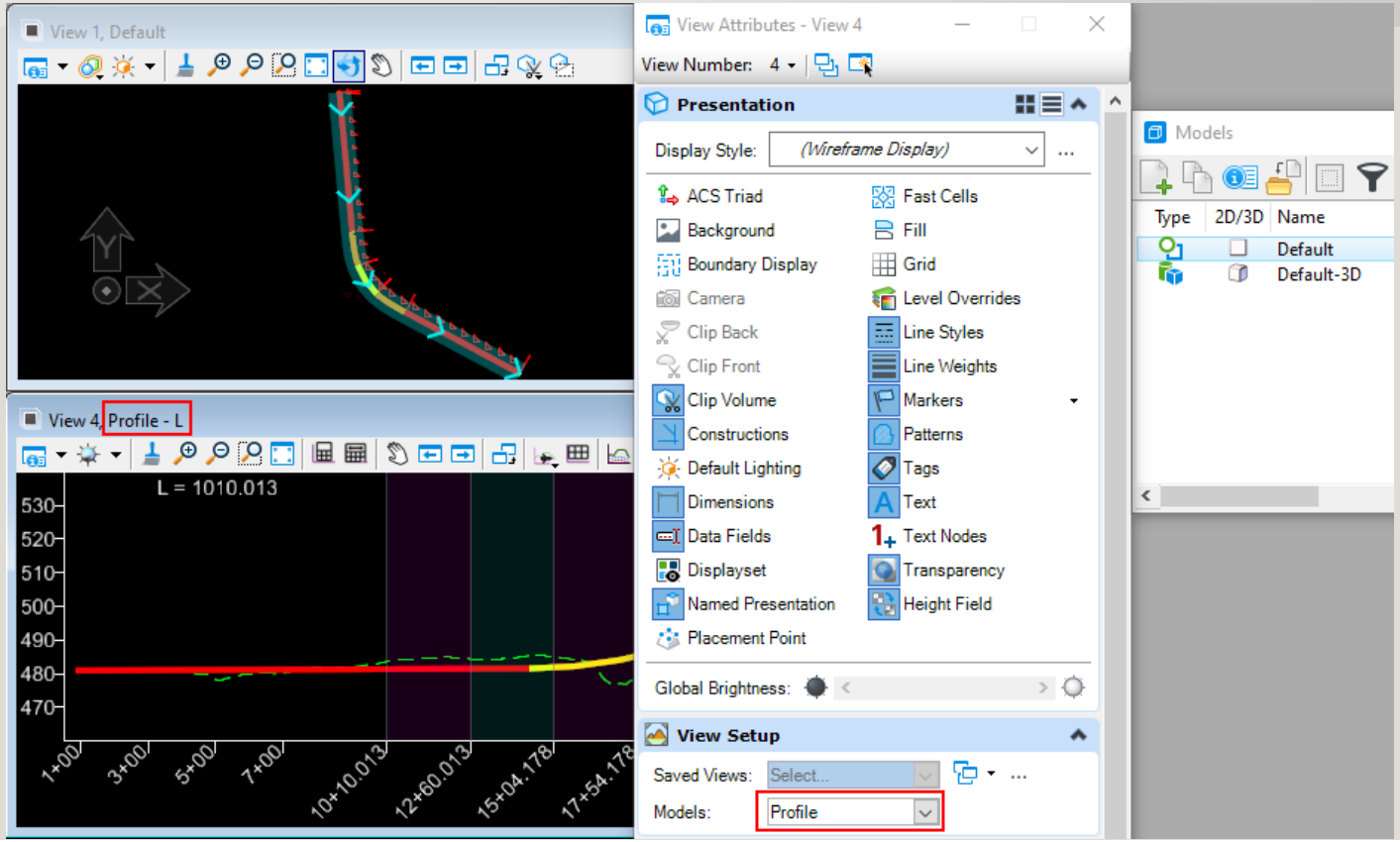
CONNECT PLANS PRODUCTION PROCESSES USING MICROSTATION CONNECT

TOPICS

- What's special about Profiles?
- Civil Profile Named Boundaries
- What are Linked Profile Named Boundaries and Do You Have to Use Them?
- Diverting Sheet models to Other DGN Files on the Create Drawing Dialog - DT, PL, PF, PP

WHAT'S SPECIAL ABOUT PROFILES?

- Alignment profile data is *displayed* by ORD in a dynamic model in the GEOM file
- Dynamic models cannot be attached as references



The screenshot above shows the View Attributes for the Profile – L model in a Geometry file. The Profile model is a dynamic model and not attachable as a reference because it does not appear in the list of permanent models in the Models dialog on the right.

HOW DO WE DISPLAY PROFILE INFORMATION FOR CONTRACT PLANS?

Use OpenRoads Designer to create models that may be attached as references.

OPNP and **XSEC_bas** files are design deliverables.

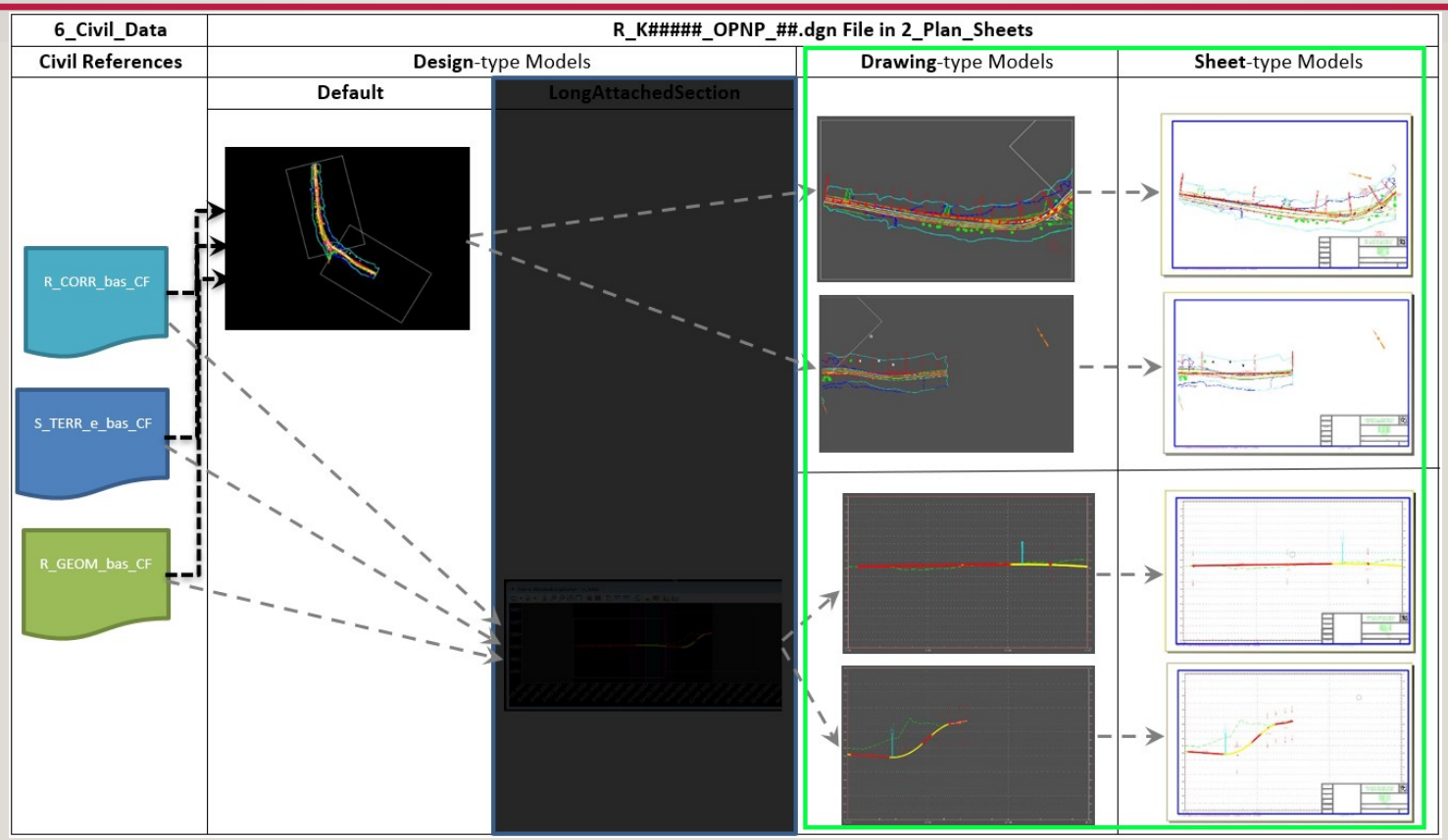
OpenRoads Designer User Guide:

"Because OpenRoads Designer **does not functionally allow permanent profile graphics to be accessible** to the ODOT plans production process other than in a model created by the OpenRoads Designer, the ORD Standards Committee has agreed that the OpenRoads Designer Plans and Profiles file **(OPNP) should be created in all projects** as a container for the project civil design for inclusion on contract plans."

from Design Deliverables for Plans Production

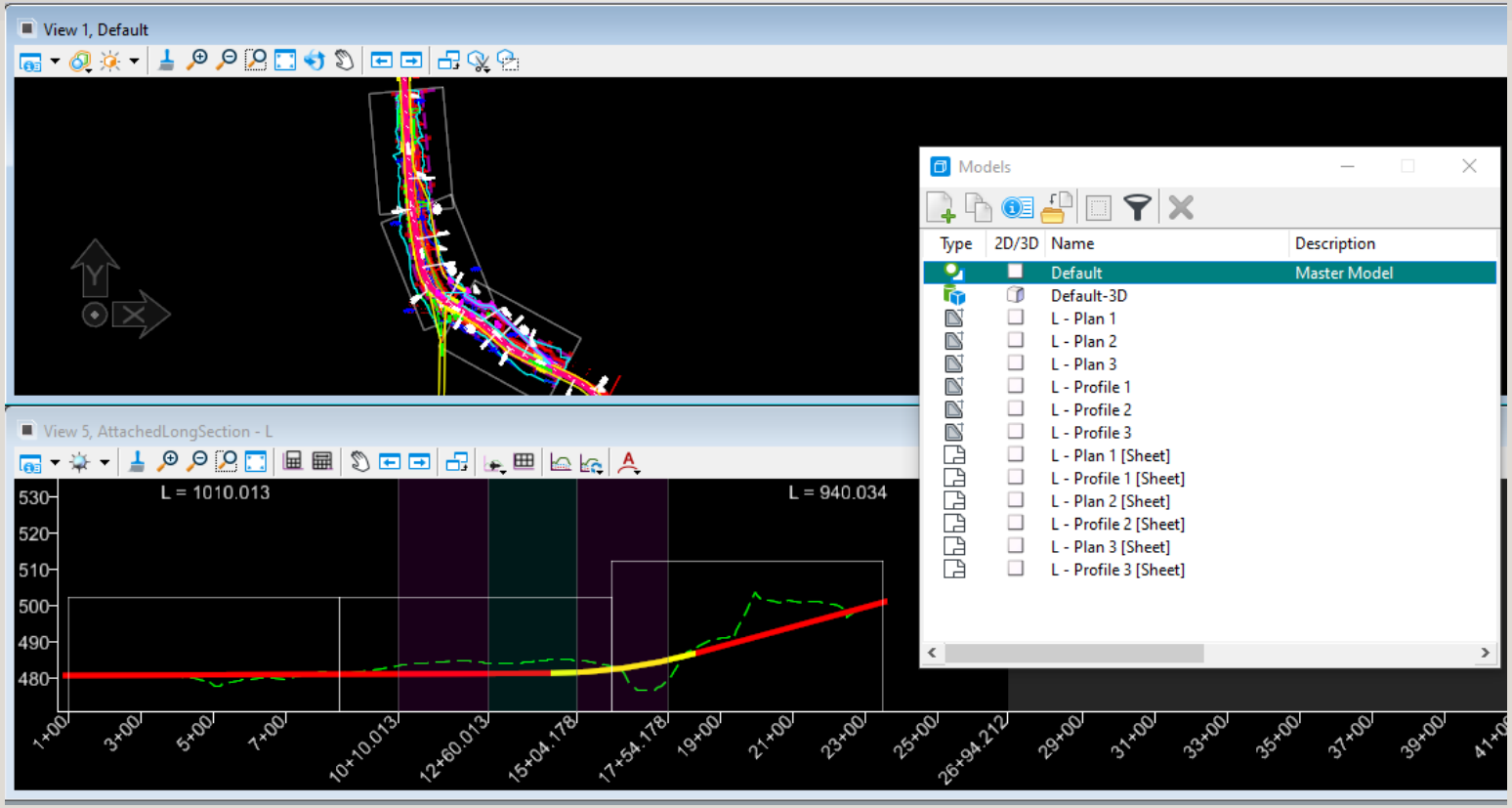
Designers work with dynamically displayed data and can create the **OPNP** file very early in the design process to display profile information for other disciplines to use in their design, as well as for the plans production process.

THE OPNP FILE – DRAWING AND SHEET MODELS



Like the GEOM file, the OPNP file will display a dynamic profile model in ORD for placing named boundaries. The dynamic profile model is not available for direct reference attachments but is used to display the profile information for drawing production or other discipline design. The drawing- and sheet-type models outlined in green should be used for plans.

THE OPNP FILE – CIVIL PLAN AND CIVIL PROFILE NAMED BOUNDARIES



The OPNP file displays a dynamic profile model in ORD for placing named boundaries. The dynamic profile model is not available for direct reference attachments but is used to display the profile information for drawing production or other discipline design. The LongAttachedSection – L model is not found in the Models dialog shown at the right.

DESIGN DELIVERABLES INFORM PLANS PRODUCTION

The Plans Production Process and Design Deliverables

The OpenX and CAD Standards Committees have been working on efficient methods for using both MicroStation and the Bentley civil CAD software to produce contract plans. The following documents explain methods to create the files that display the design using OpenRoads/OpenSite Designer and methods of assembling that data into sheets using MicroStation.

- Design Deliverables for Plans Production
- Plans Production Process
- Using OpenRoads Designer and the ODOT Drawing Boundary Seeds
- Civil Drawing Boundary Sizes
- ORD and MS for Plan and Profile Sheets

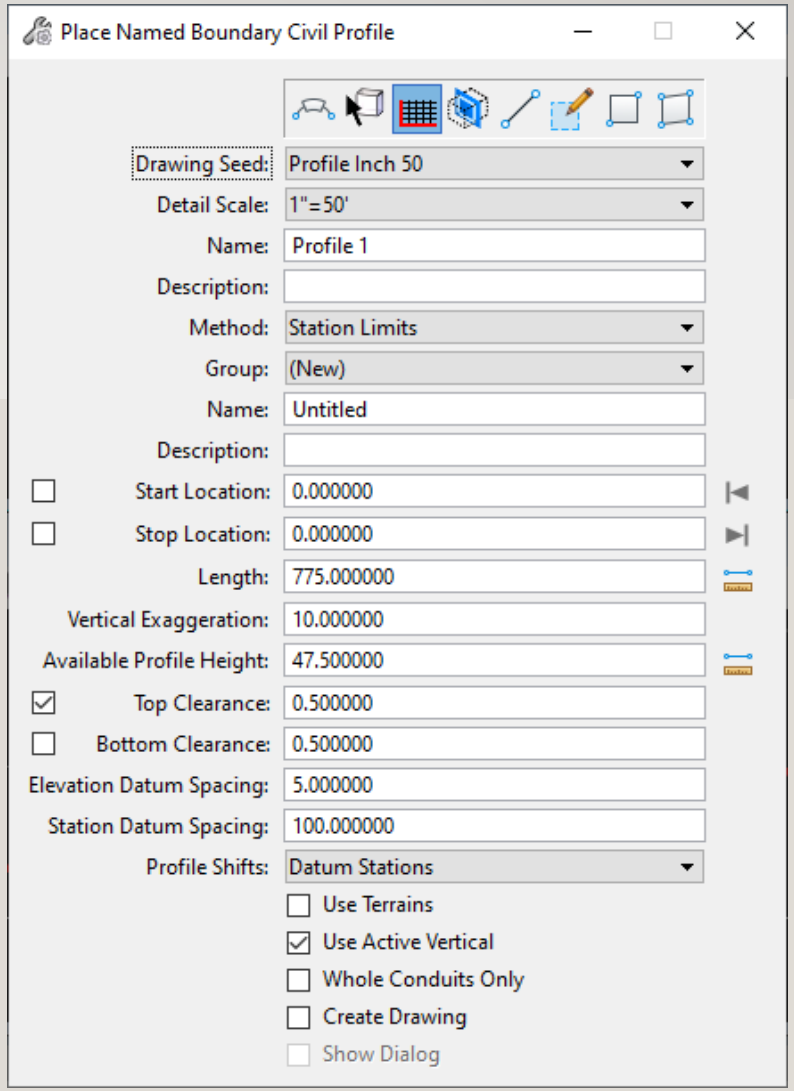
The ODOT OpenRoads Designer User Guide and the ODOT MicroStation User Guide both contain a section about how ORD is used to create models that can be attached as references for plans production and other discipline design work.

CIVIL PROFILE
NAMED BOUNDARIES

Must have a profile window open

Pick a Drawing Seed

Use “Station Limits”

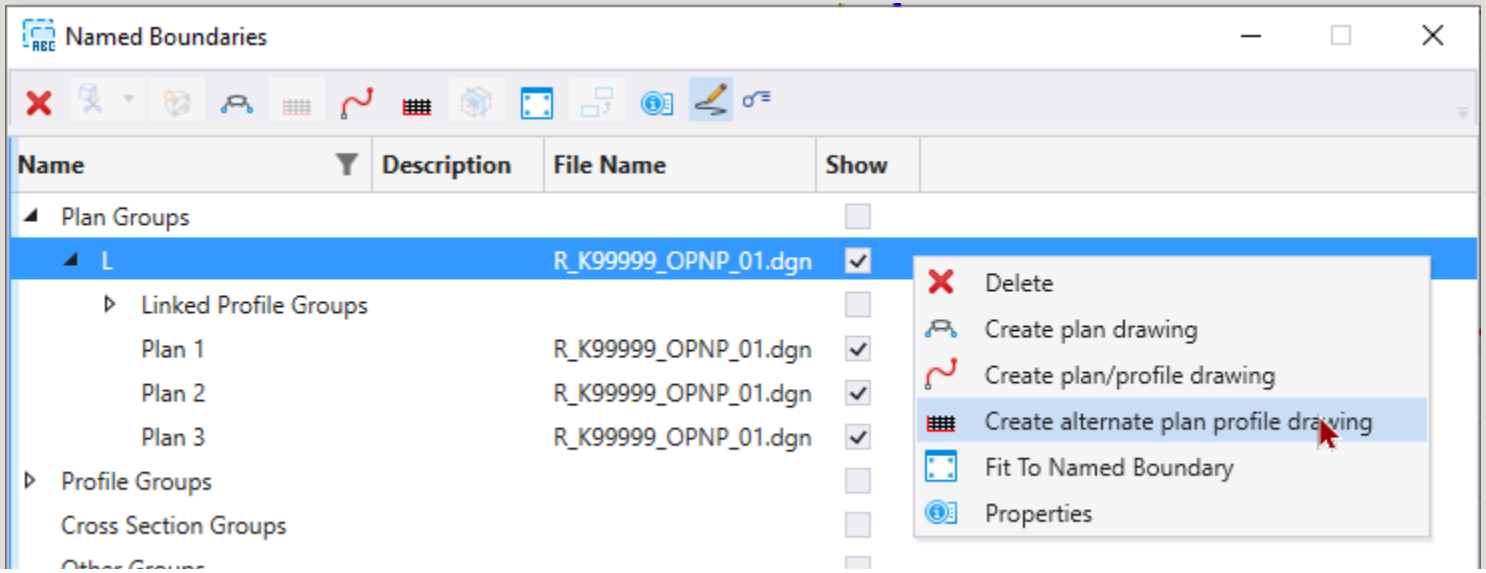


Place Named Boundary Civil Profile > Identify Profile View

Civil Plan boundaries are not required if the method for Civil Profile is set to use Station Limits.

LINKED PROFILE NAMED BOUNDARIES

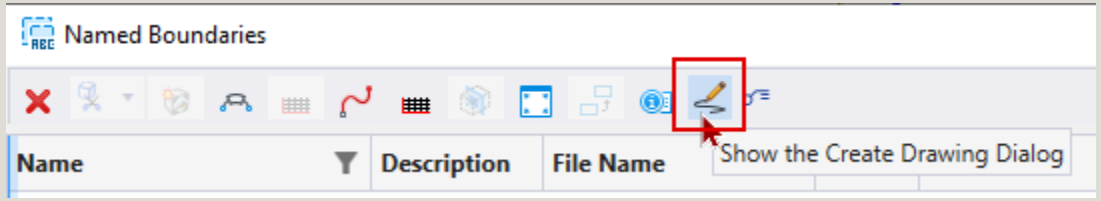
- Linked to Plan Stationing for initial placement
- Use Method of "From Plan Group"
- Linked to the Plan Group for Alternating Plan and Profile Drawing Creation



You are not required to create alternating plan and profile drawings. Using the method of "From Plan Group" when placing the civil profile named boundaries gives you the "alternate" option later. You can also create individual drawings of only plan or only profile.

DIVERTING SHEET MODELS TO OTHER DGN FILES

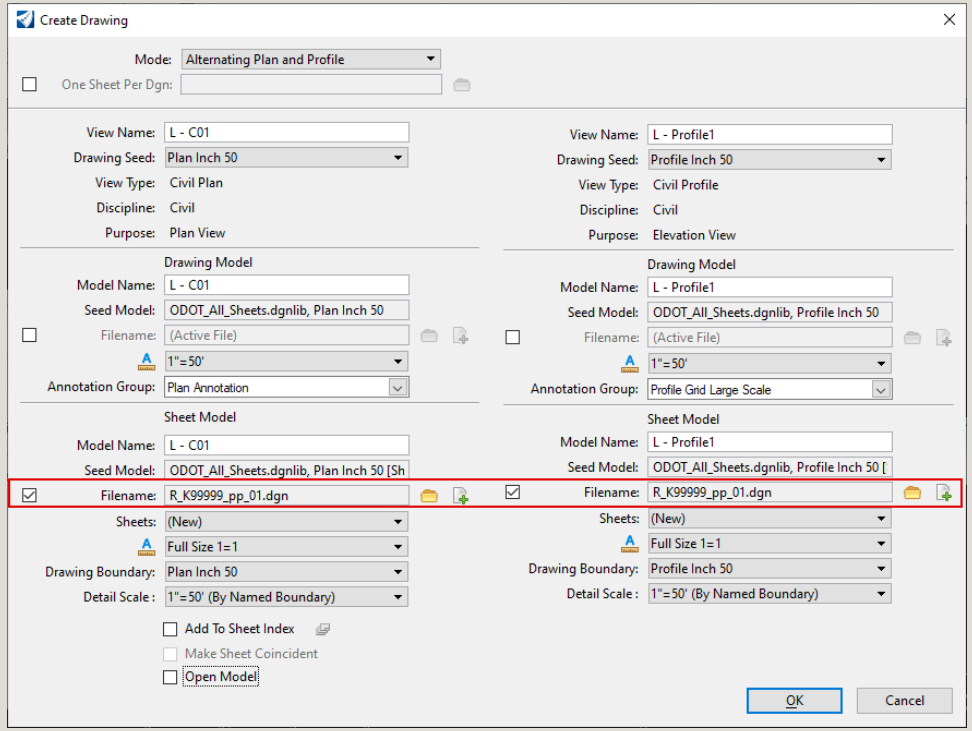
1. Create a DGN in 2_Plan_Sheets first
2. Always toggle on the "Show the Create Drawing Dialog" pencil icon.



The "Show the Create Drawing dialog" or Pencil icon provides all options including model name seeds and whether or not to create the models in a different file.

DIVERTING SHEET MODELS TO OTHER DGN FILES

3. Check the box to use a different file and [Browse] using the folder icon.



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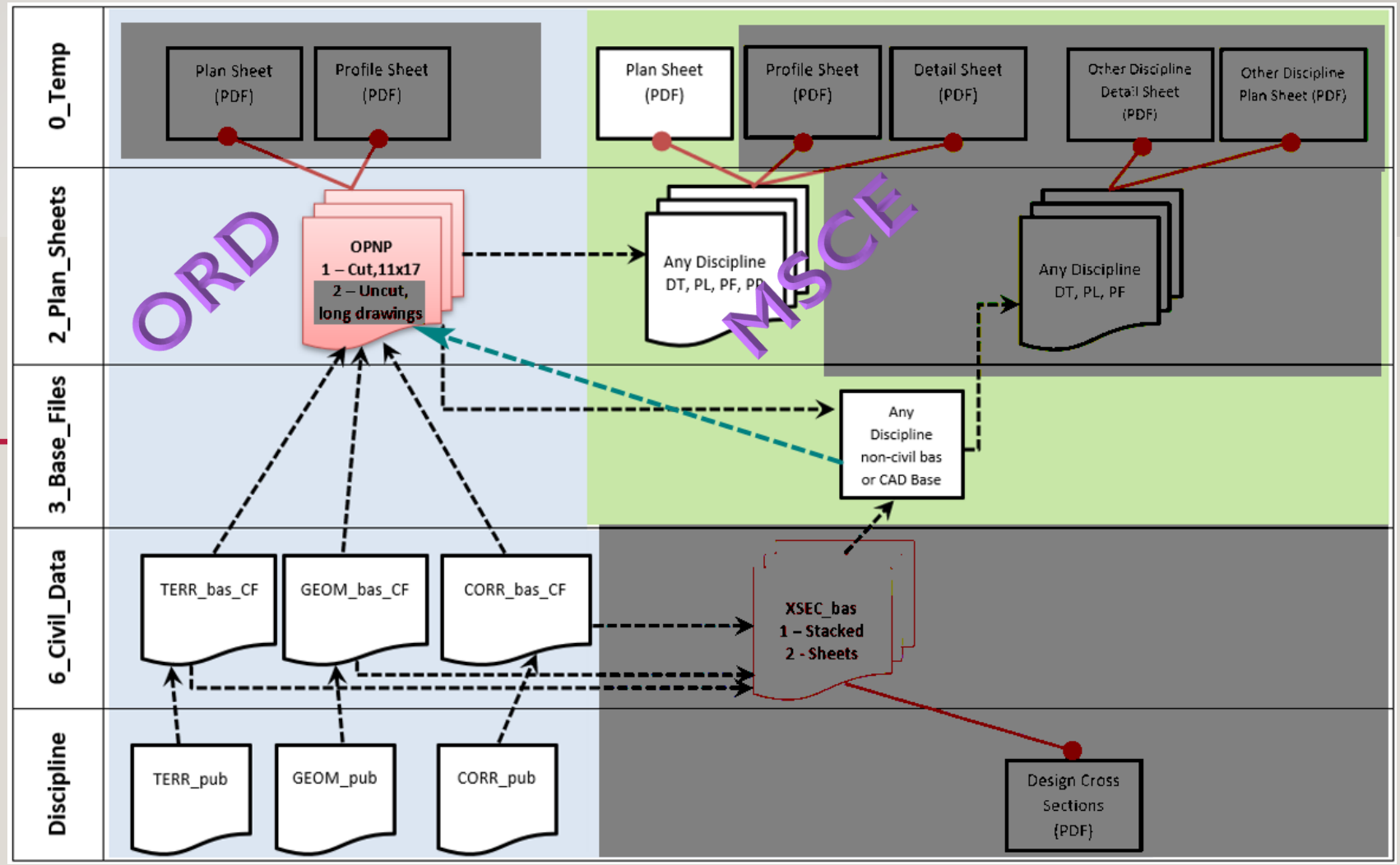
DEMO

Use ProjectWise to create a PP file.

Use ORD in OPNP file; verify the Civil Plan named boundaries created earlier; place Civil Profile boundaries; divert drawings to PP file.

Use MicroStation in a PP file to create PDF.



QUESTIONS?
A LOOK AHEAD

November 16 - CAD Plans Production Processes using MicroStation

- Design Deliverables - OPNP/XEC_bas, TERR_CF, CORR_CF, GEOM_CF
- Plan Sheet Creation with Source Data from OPNP File or XSEC_bas File
- How to create a named boundary model containing a sheet layout of clip shapes