

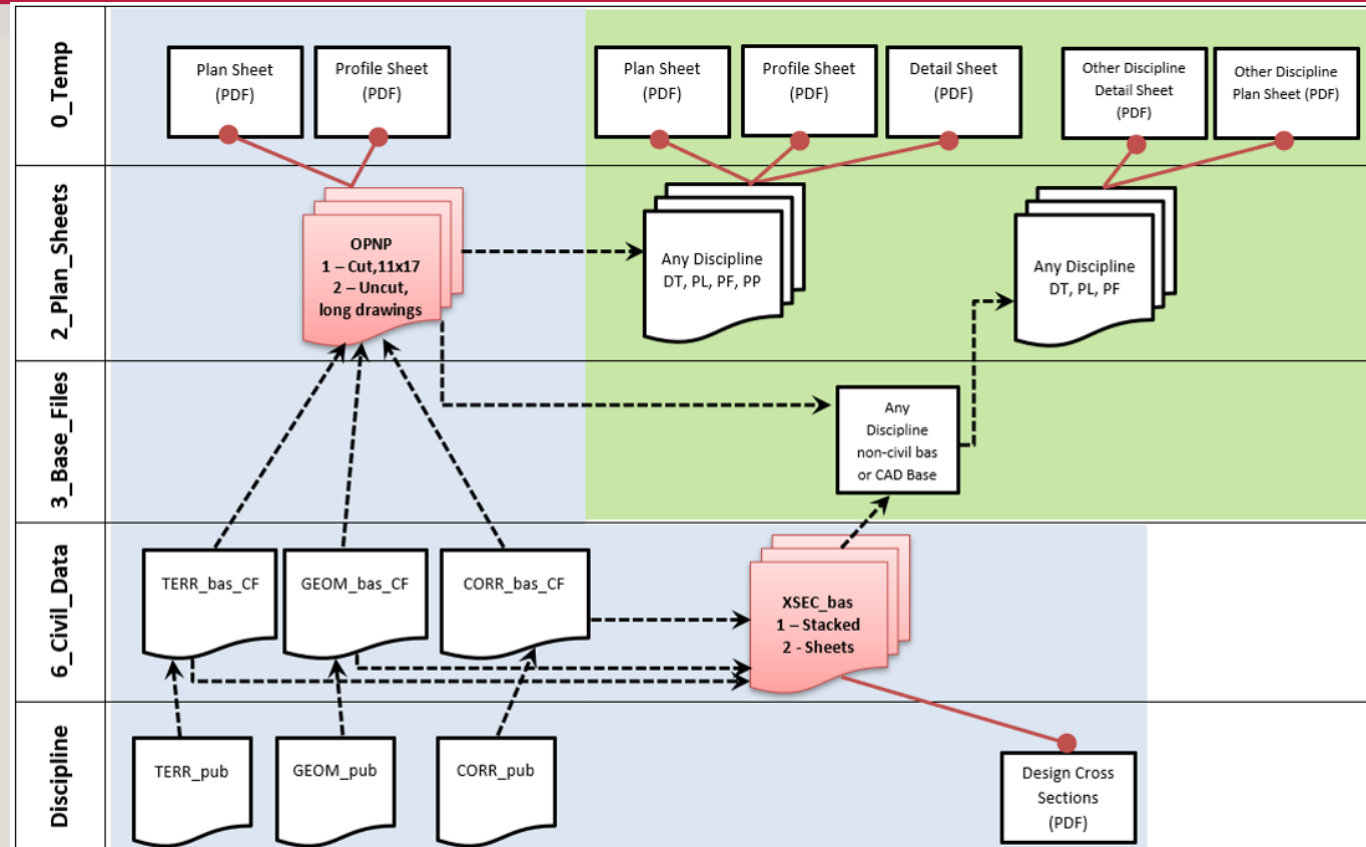
PLANS PRODUCTION USING MICROSTATION



TOPICS

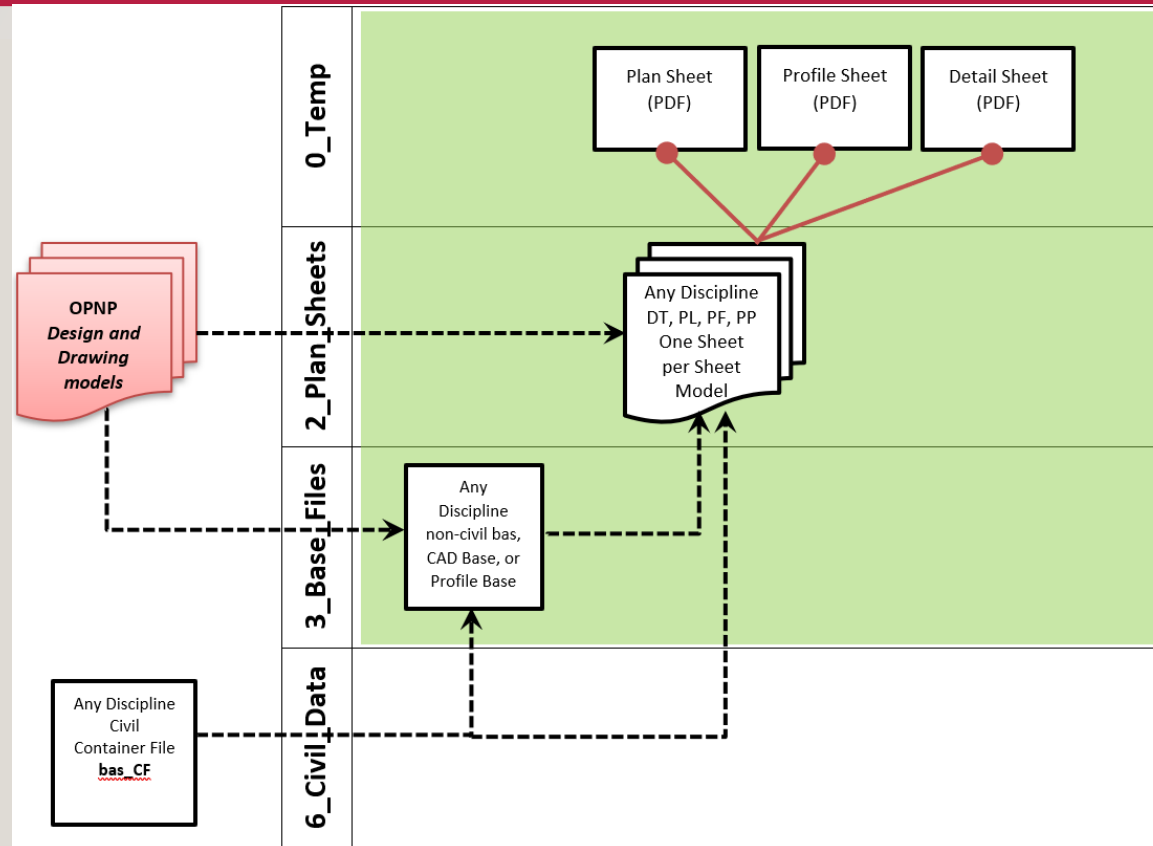
- Design Deliverables to the Plans Production Process
 - ProjectWise storage folder location determined by content and usage
 - OPNP file contents
- Plans Production using MicroStation (using Named Boundaries & Create Drawing)
 - Plan and Detail Sheet Creation
 - Profile Sheet Creation

Design Deliverables in ProjectWise



The ProjectWise swim lanes show how civil data is combined using reference attachments for inclusion in the plans production process. The OPNP file is located in the 2_Plan_Sheets folder to streamline the CAD process of creating drawings. The CAD Plans Production process creates one sheet per sheet-type model.

Plans Production Process in ProjectWise



The ProjectWise swim lanes show the detail of how civil data is assembled into plan sheets using reference attachments. Using the Plans Production workflows in MicroStation and ORD (Named Boundaries and Create Drawing) while having the OPNP file located in the 2_Plan_Sheets folder, reduces navigation time while referencing and browsing.

What's in OPNP files?

HORIZONTAL DESIGN ONLY

- Default model: reference attachments to project design: GEOM, CORR, TERR
- Named Boundaries in the Default model
- Cut, 11x17 plan drawing models
- *Cut, 11x17 plan sheet models
- Uncut, Long plan drawing model
- Uncut, Long plan sheet model

VERTICAL DESIGN

- Default model: reference attachments to project design: GEOM, CORR, TERR
- Named Boundaries in the Default model & in a dynamic profile model
- Cut, 11x17 plan drawing models
- *Cut, 11x17 plan sheet models
- Cut, 11x17 profile drawing models
- *Cut, 11x17 profile sheet models
- Uncut, Long plan drawing & sheet models
- Uncut, Long profile drawing & sheet models

A project may have more than one OPNP file depending upon the type of work and different disciplines involved.

*Sheet models may be created in a different file.

Why use Named Boundaries and Create Drawing to Create Sheets?

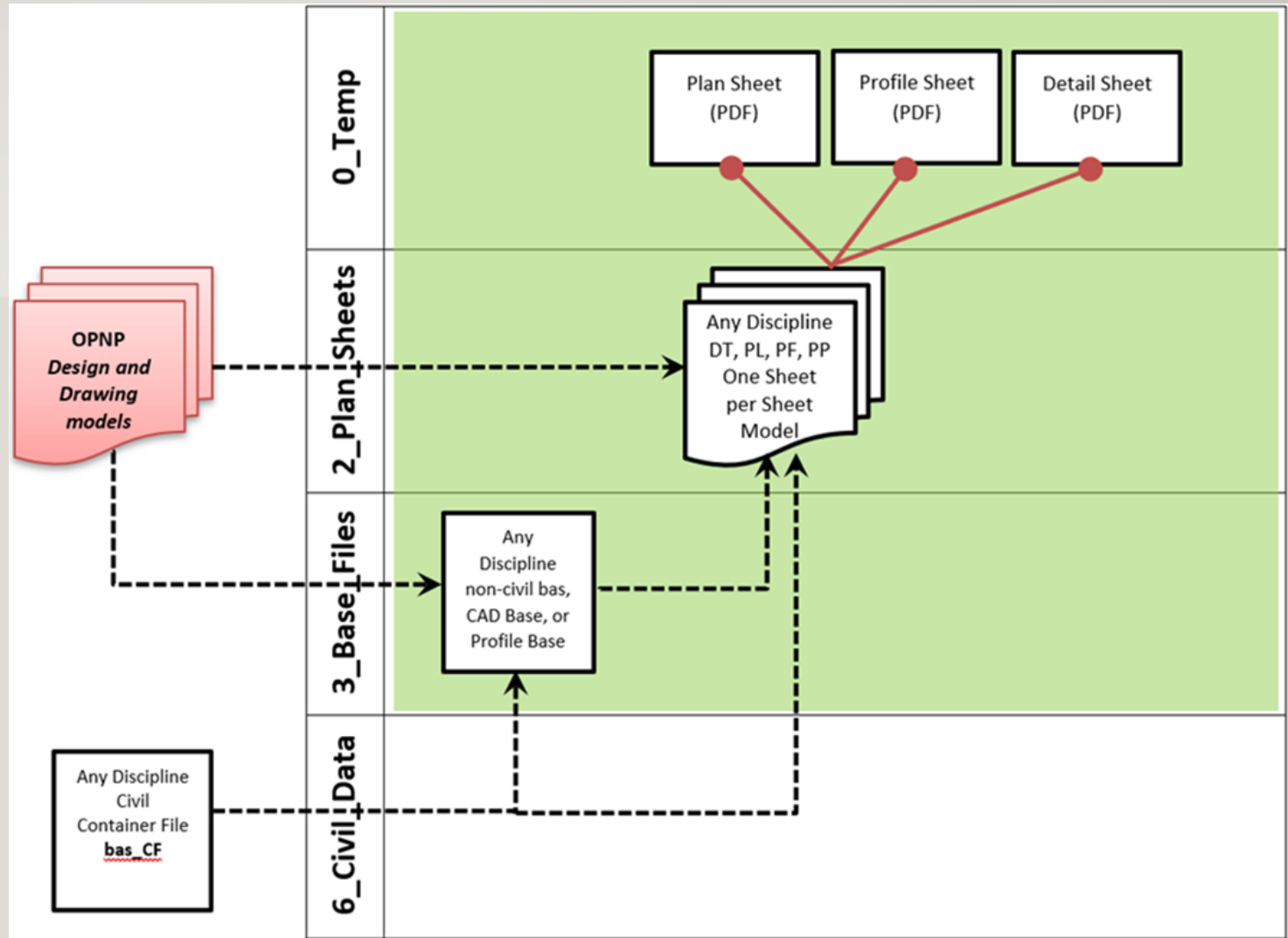
- Print Styles and Print Organizer are optimized for managing Print Definitions in Sheet Models - reduce time spent managing a print set, which is not data
- Drawing Creation tools in MicroStation can create hundreds of drawings in a matter of minutes - reduce time spent on repetitive tasks of making reference attachments, clipping and rotating
- Streamlines access to dynamically updated design data - reduce time spent updating static graphics or copies of design work
- Reduce errors and delays in maintaining multiple files with potentially different graphics

DEMO

Use ProjectWise to create a PL file and a PF file.

Use MicroStation in PL file; attach reference to OPNP, Default; place named boundaries along a path; Create Drawings in same PL file.

Use MicroStation in PF file; create sheet model; attach reference to profile sheet model in OPNP file.



First part of the demo will use Place Named Boundary and Create Drawing in MicroStation to create plan or detail sheets. Second part of the demo will use the profile sheet (or drawing) model created by the designer.

Questions?

More Information:

MicroStation User Guide

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](#)
- [Create Plan Sheets Using MicroStation](#)
- [Using OpenRoads Designer and the ODOT Drawing Boundary Seeds](#)
- [Civil Drawing Boundary Sizes](#)
- [ORD and MS for Plan and Profile Sheets](#)

Steps to Create an OPNP or XSEC_bas Design Deliverable

- [OPNP File Creation](#)
- [XSEC_bas File Creation](#)
- [Hydraulic Drainage Profile Creation in OPNP](#)