

ACTIVITY 963
CREATING DELIVERABLES, PRECONSTRUCTION
TO CONSTRUCTION, TBC MODEL CREATION

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Overview

Overview of the process.

Process Provenance

- Date of development: 12/18/2023
- Revision date: N/A
- Application/Tool(s): Autodesk Civil 3D
- Version(s): 13.4.2429.0 Civil 3D 2022.2.5 Update
- Environment(s): MDT Civil 3D State Kit r2022 v1.23
- Author: [MDT Engineering Workflow Steering Committee](#)

Statement of Need

The following guide is to be used when creating the deliverable(s) for Activity 963. The preconstruction design team will provide deliverables to construction for use in building the Trimble Business Center model. This will include the pertinent information from corridors, alignments, profiles, surfaces, and point layout. For more information, please see the 963-activity description.

Process Description and Examples

Section I. Exporting alignments and surfaces – Autodesk Civil 3D

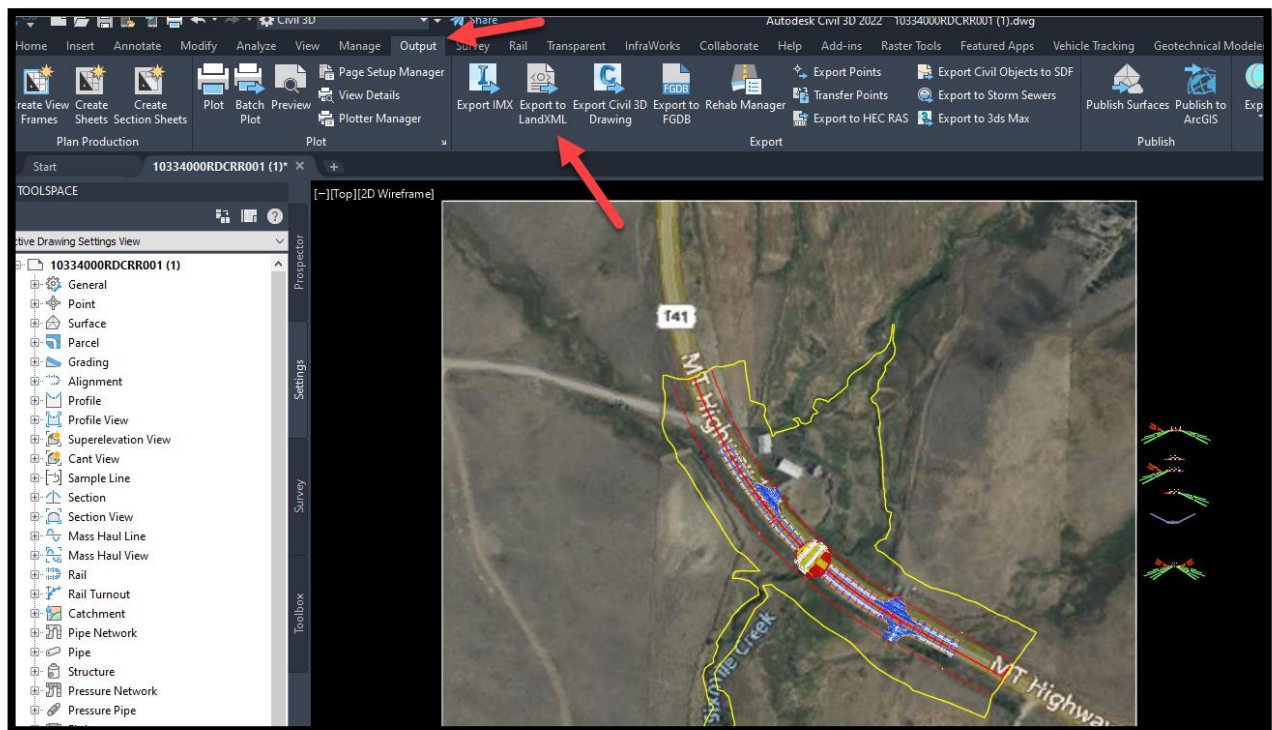
Procedure –

1. Step 1.

Open drawing with alignment and profile. (Alignment and profile source drawing or another drawing that alignment and profile is data shortcut to.)

2. Step 2.

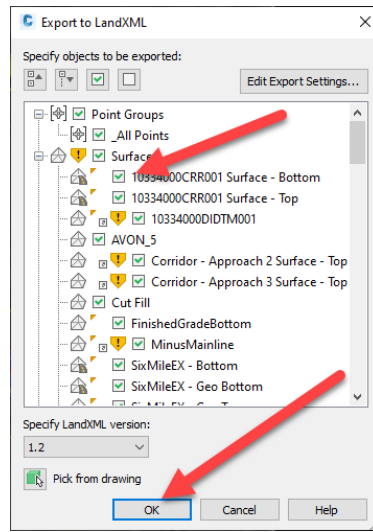
Click on the Output tab, then Export to LandXML.



3. Step 3.

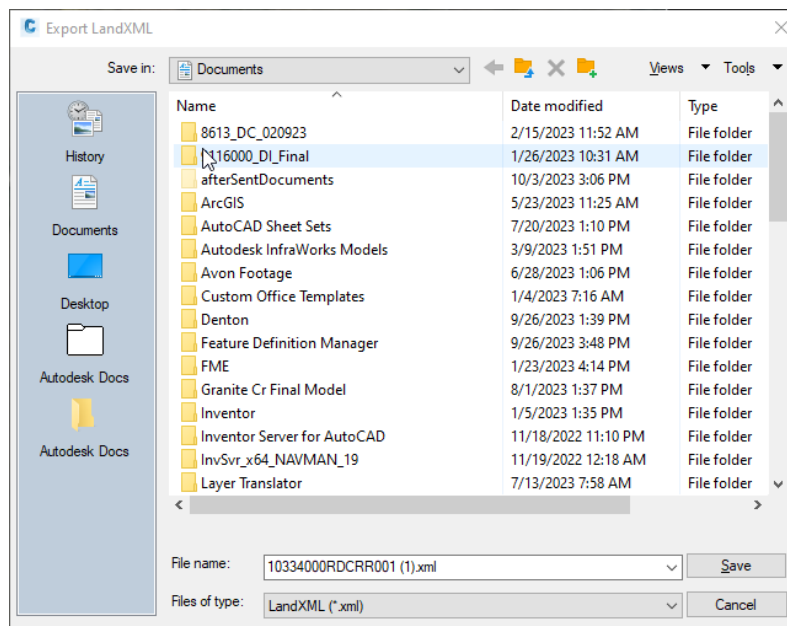
Select the surfaces, alignments with accompanied profiles, pipe networks, or offset alignments desired for deliverable. Then click OK.

Note on versions: Trimble seems to import 1.2 versions, but exports a version previous to 1.2



4. Step 4.

Select File path for XML



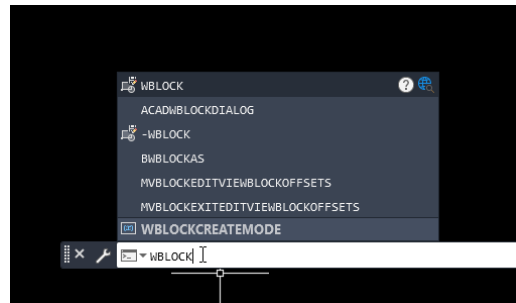
Section II. Exporting CAD Lines

Procedure –

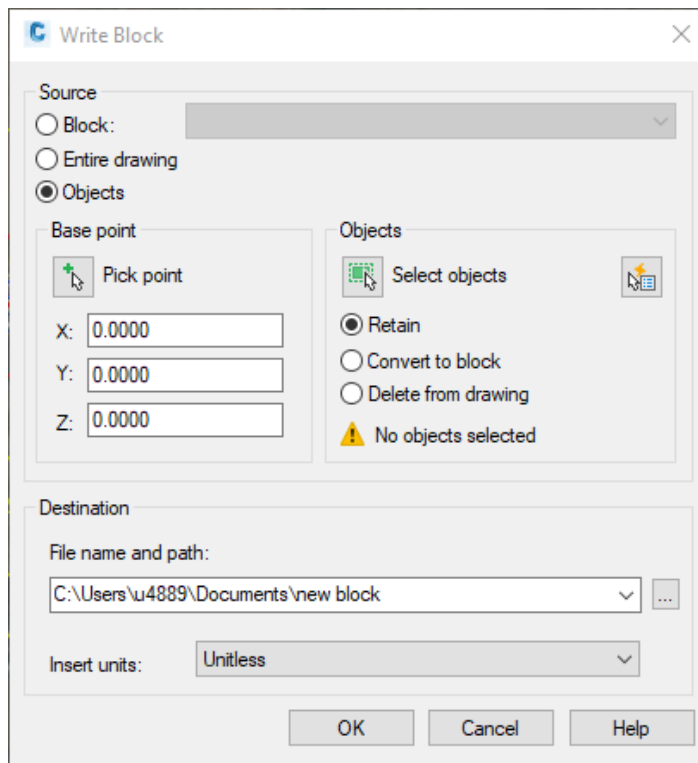
1. Step 1.

Open the drawing file that contains the desired linework.

2. Step 2.



In the command bar – type **wblock**



Leave **Base point** at 0,0,0.

Toggle **Retain**

Click on **Select objects** icon button.

Highlight the dataset you wish to export, then press **space bar**.

Designate **file path** and click **OK**.

Section III. Exporting Break Lines from the Corridor

(This process will evolve with as new workflows are created)

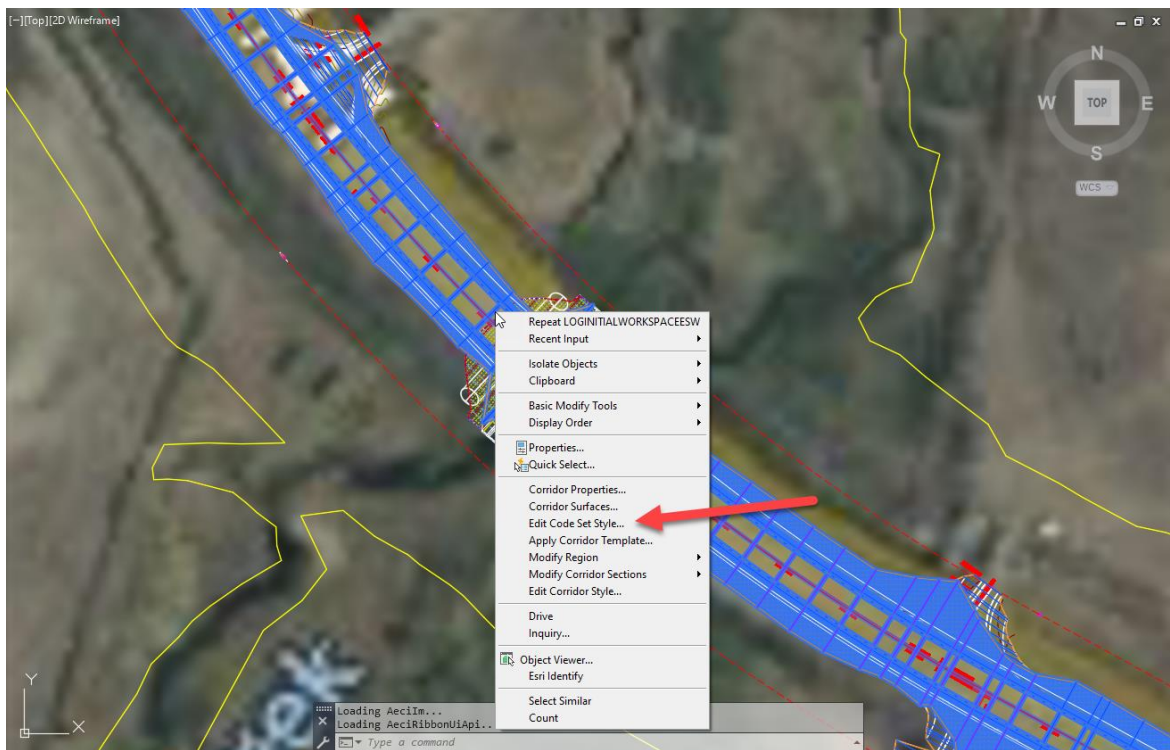
Procedure –

1. Step 1.

Using Civil3D, open the drawing file that contains the desired corridor.

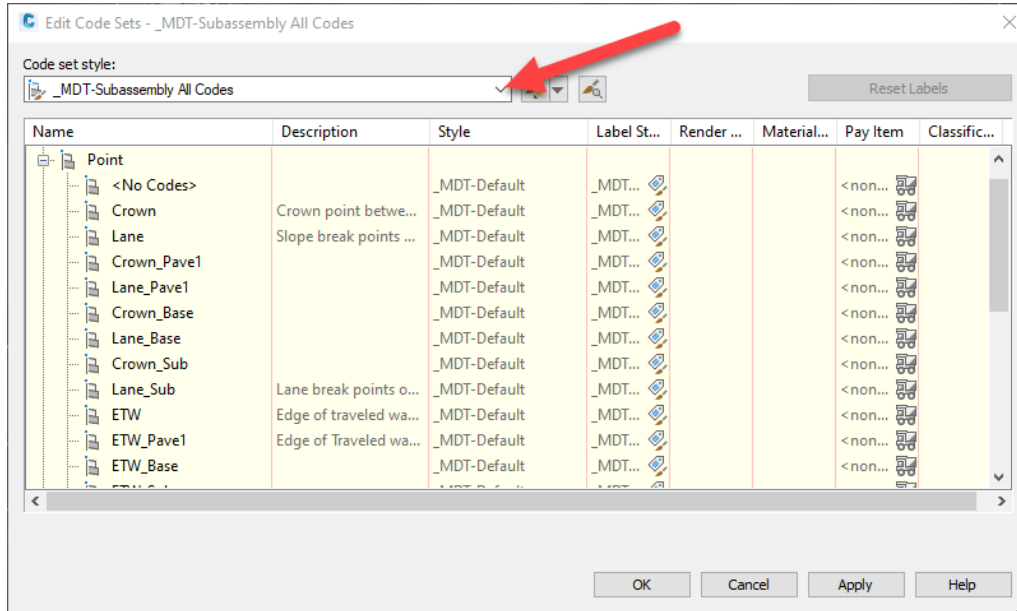
2. Step 2.

With the drawing open, place your mouse on the corridor, then right click. Select **Edit Code Set Style**.



3. Step 3.

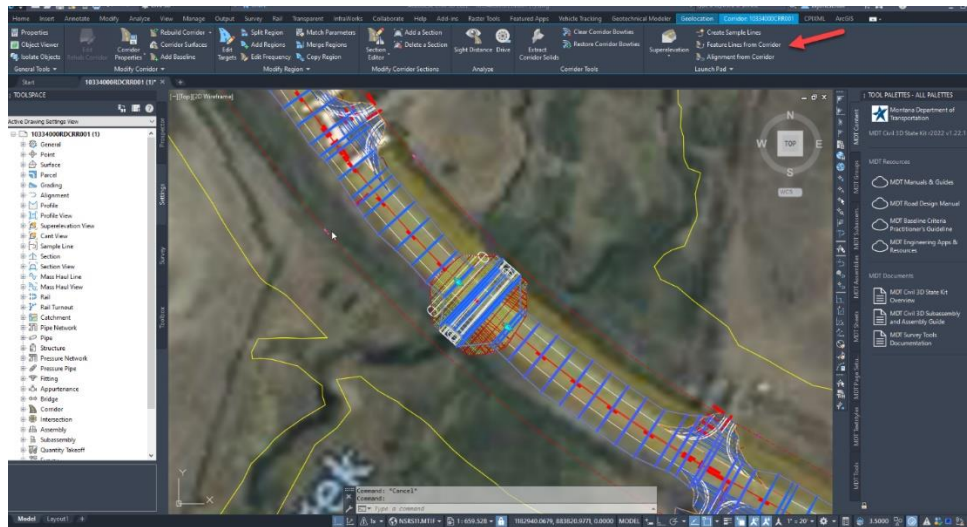
The Edit Code Sets dialog box will be open.



Change the Code set style: to “**MDT-Subassembly ALL Codes**” and select OK as shown above.

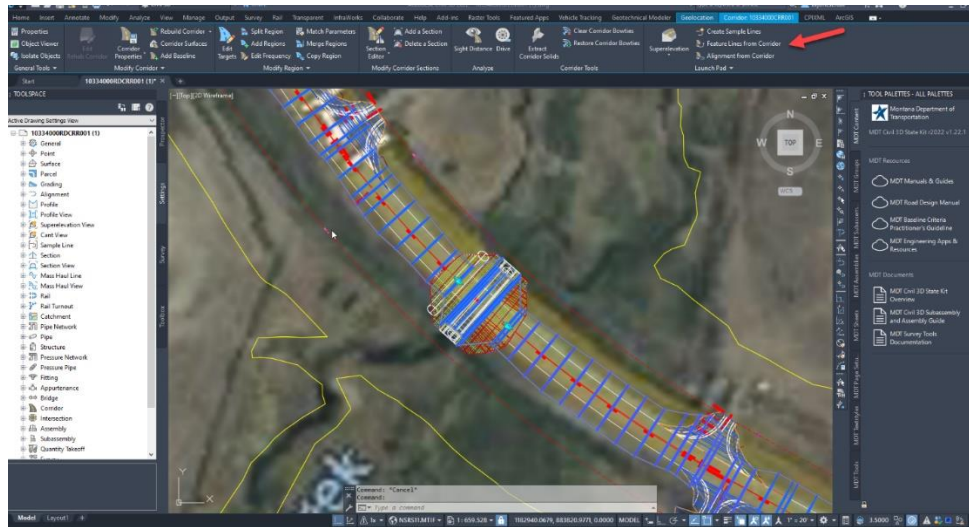
4. Step 4.

Click on the corridor again, then **Feature Lines from Corridor** in Contextual Ribbon.



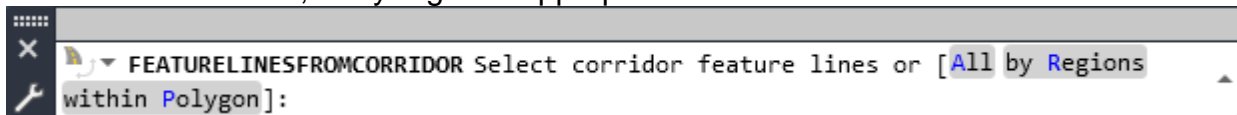
5. Step 5.

Click on the corridor again, then **Feature Lines from Corridor** in Contextual Ribbon



6. Step 6.

Then select All, or by region if appropriate.



Toggle Join feature lines in adjacent regions. Press Settings..., then select **MDT-Subassembly All Codes** again for the code set style.

Press OK.

Section IV. Deliverables to Construction:

- 1.1. Export all alignments with associated profiles as .XML files.
(UPN000COALN001.XML)
 - 1.2. Export all design surfaces as .XML files. (UPN000CODTM001.XML)
 - 1.3. Export all table coordinates and point features as .CSV [Point name, Northing, Easting, Elevation, Description]. (UPN000CONEZ001.CSV)
 - 1.4. Export roadway features as break lines from corridor as .DWG or .DXF file types. (UPN000COCRR001.DWG)
 - 1.5. Export Right of Way limits shown as CAD linear features as .DWG or .DXF file types. Export Right of Way limit breaks as a point files as .CSV (UPN000COBRK001.DWG) (UPN000COBRK001.CSV)
 - 1.6. Export Culverts shown as CAD linear features as .DWG or .DXF file types.
(UPN000COCLV001.DWG)
 - 1.7. Readme with all the supplied file names and what data is included in each file. Input explanation for each file uploaded in the comment column of PCMS. (UPN000CORME001.TXT)
1. Place files in **PCMS under the CO** “Construction” folder.
 2. Host Pre-Construction-Construction meeting to discuss parameters of design files as they pertain to the Construction model.