



# Migrating existing Oracle data to AIMS TB Format

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## GS1452 Supplementary Handout

### Topobase

TOPOBASE component of AIMS requires a comprehensive preparation and formatting process of existing data on both geometry and attribute tables.

Primary migration and development stages are;

1. Creating a new ORACLE schema
2. Converting new schema to an Industry Model
3. Creating Enterprise Industry Model Structure
4. Establishing relationships between Industry Model tables
5. Configuring user environment
6. Setting up Autodesk Infrastructure Studio and publishing

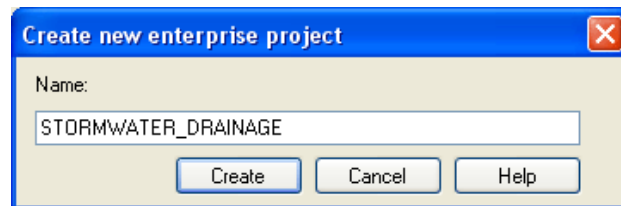
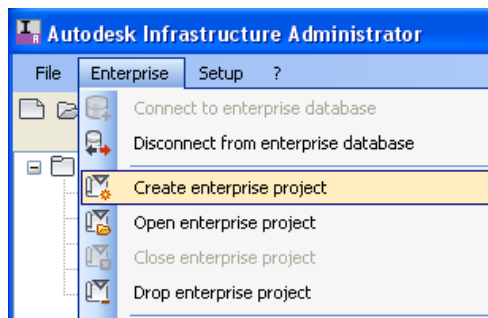
### Creating a new ORACLE schema

In this first step it would be better to copy the data schema and rename it so that it would not be interfered with by the production system.

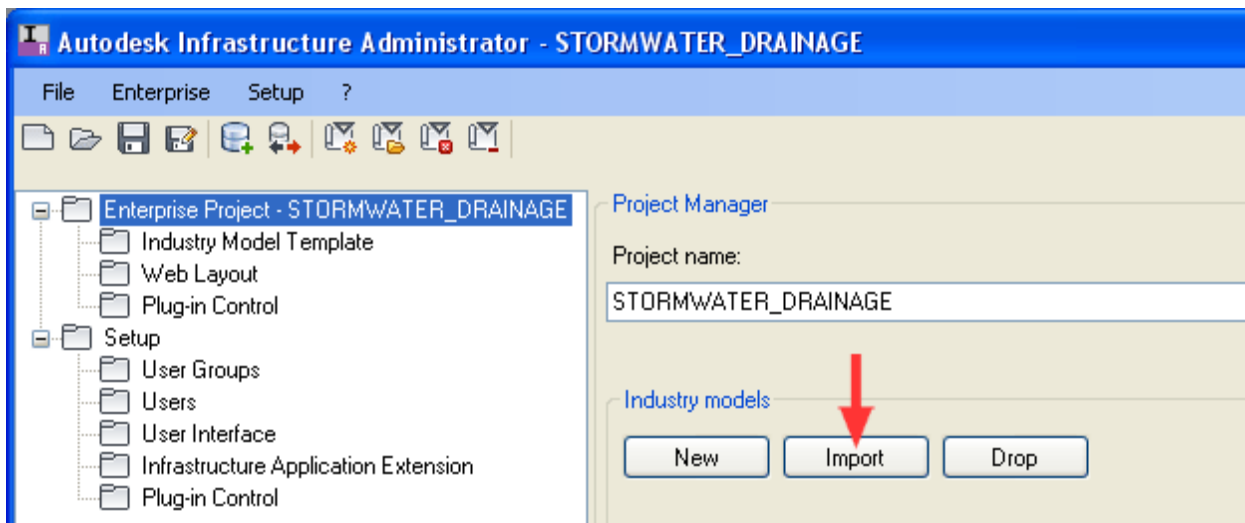
Industry Model requires all geometric and spatial data to be converted to 2D.

### Converting new schema in to an Industry Model

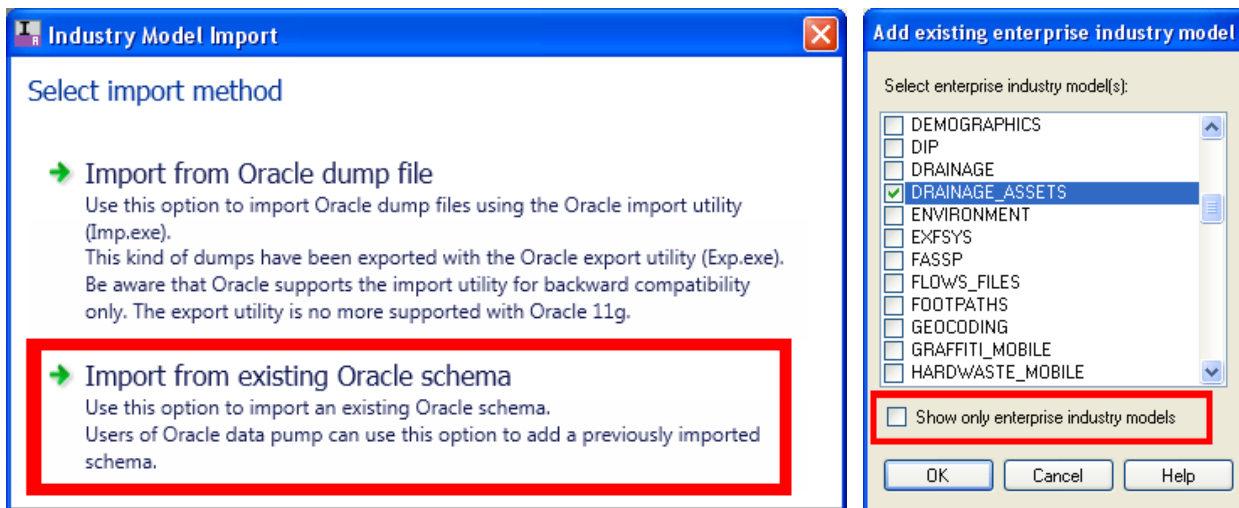
Using Infrastructure Administrator create an Enterprise project



Import new schema in to this Project

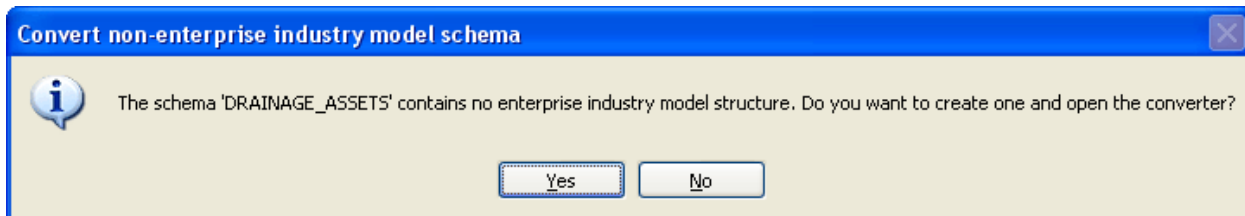


Select “Import from existing Oracle schema” and un-tick “Show only enterprise industry models” in order to view all existing schema in database.



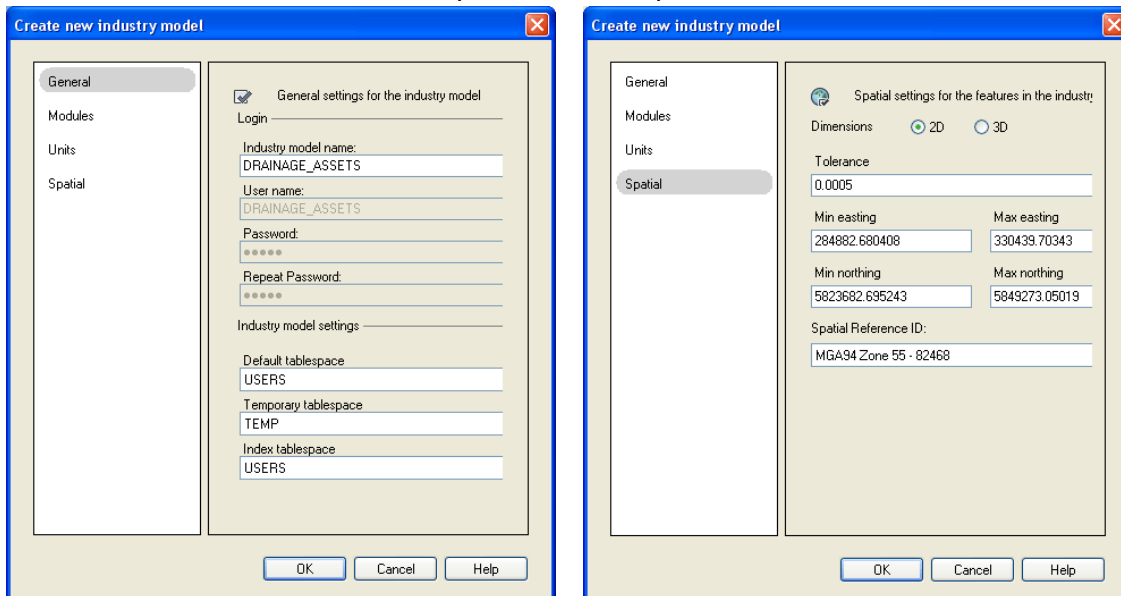
### Creating Enterprise Industry Model Structure

Select “Yes” when Conversion window appears



Select USERS for Default and Index tablespace on General tab of Industry Model Creation window

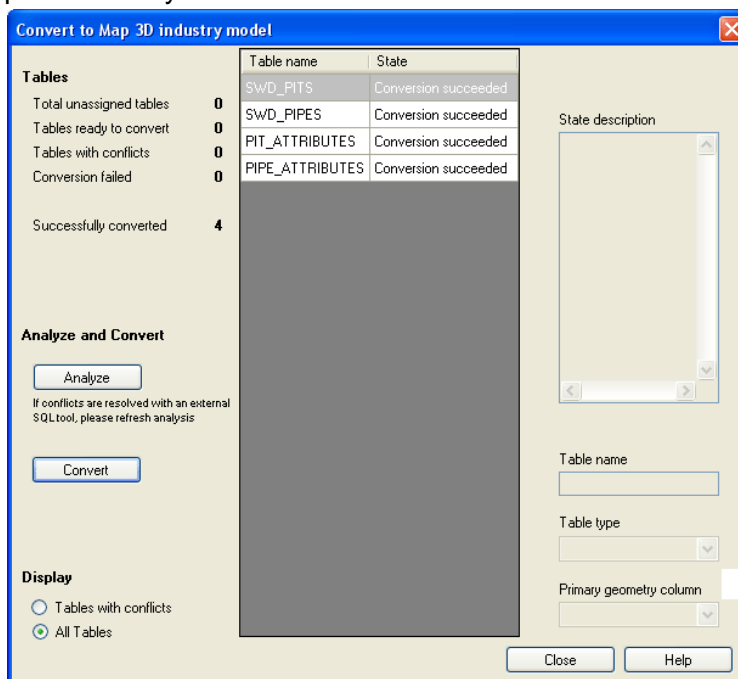
Enter all relevant coordinates on 'Spatial' tab then press OK



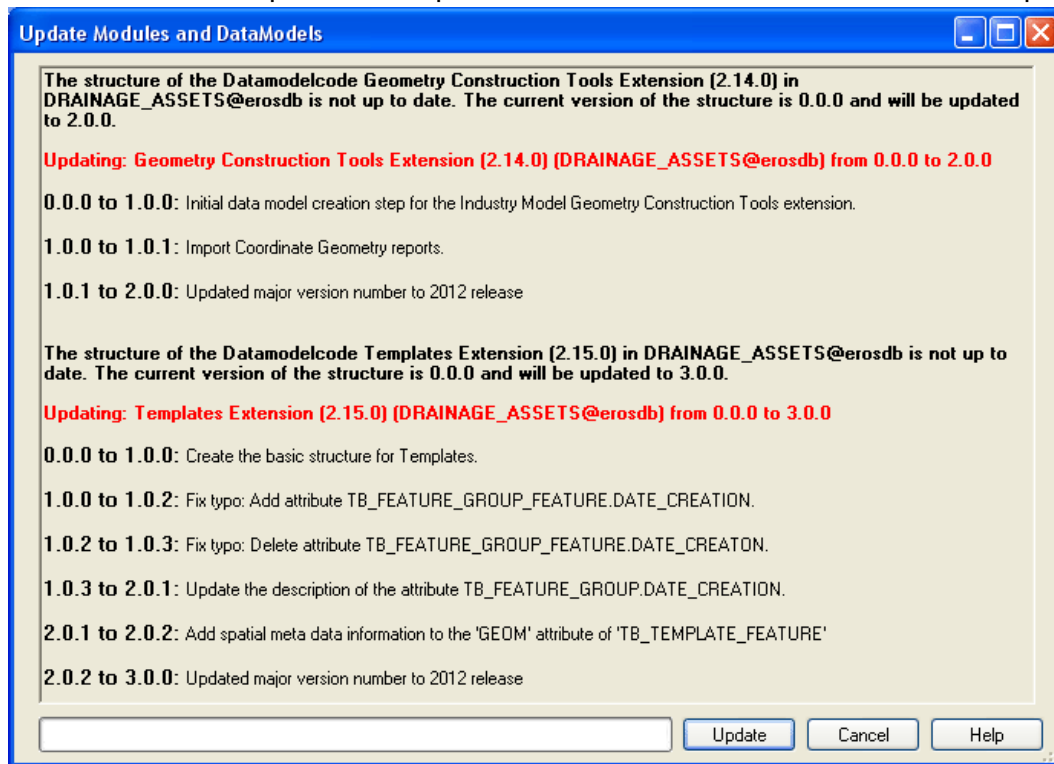
Resolve all conflicts. If there is more than one Geometry Table choose relevant one.

Non Geometry tables can either be selected as “Convert to Attribute Feature Class” or “Domain Tables”

Then convert to Map 3D Industry Model.

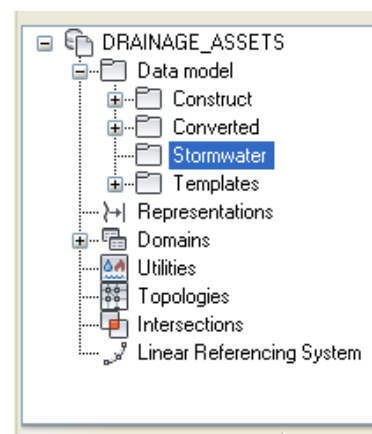
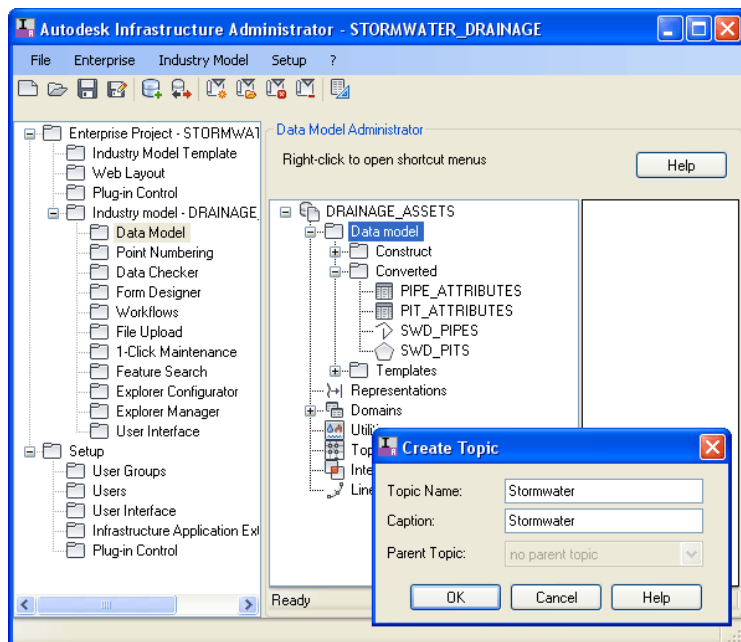


Once all conversion process completed Data Models and Modules should be updated



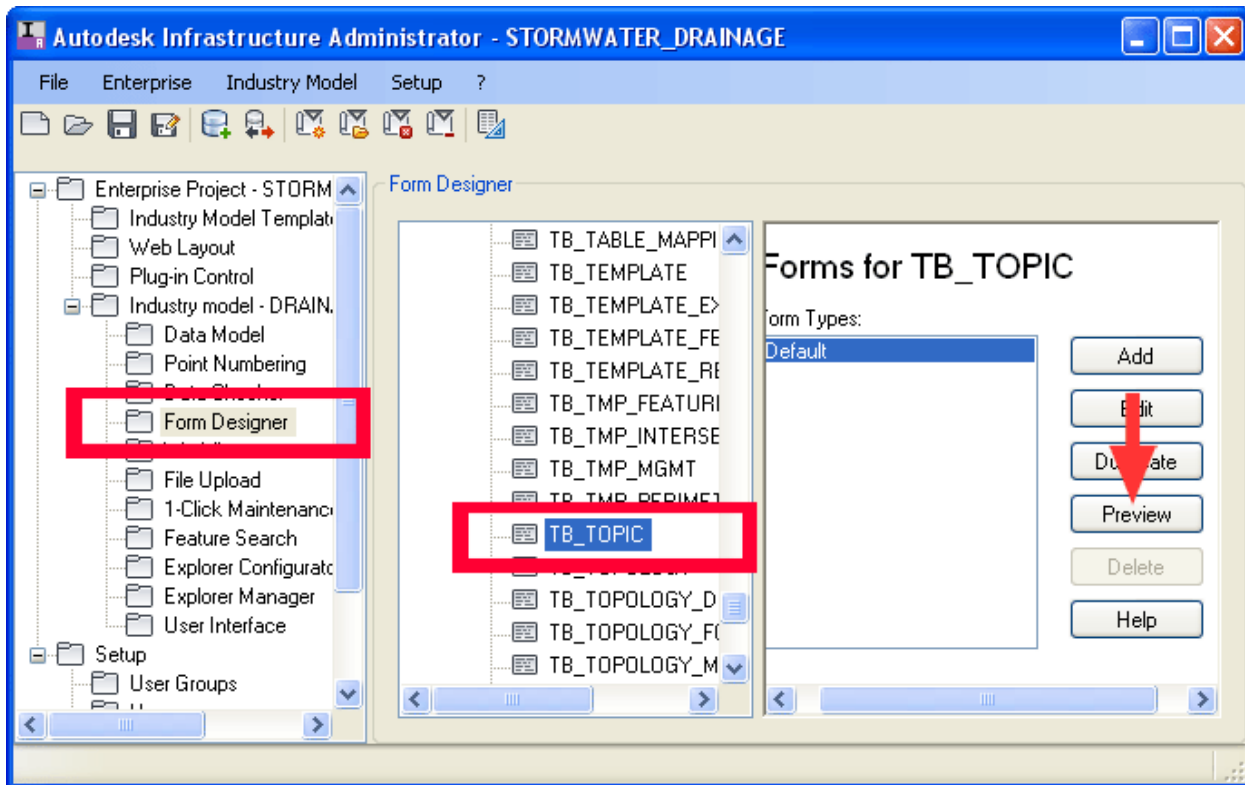
Temporarily all the Features are in a Topic labeled “Converted”

Next step is to create a topic named “Stormwater” in order to move all the Features from converted to this Topic.

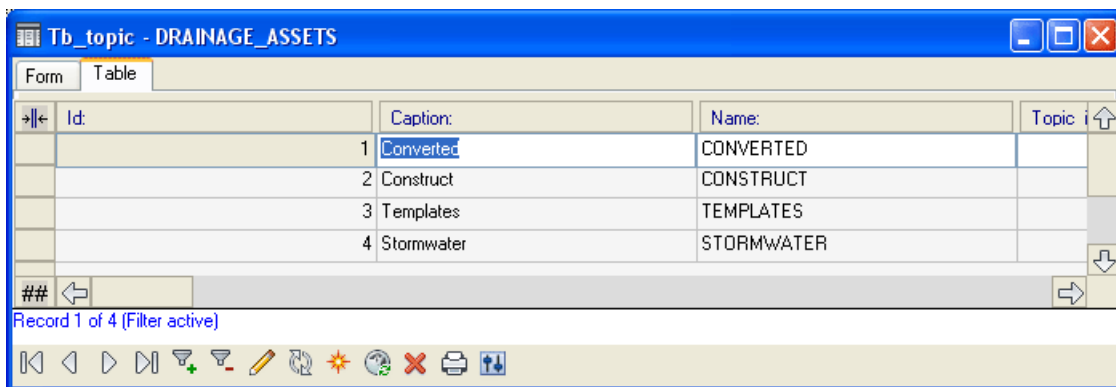


Stormwater topic is now created

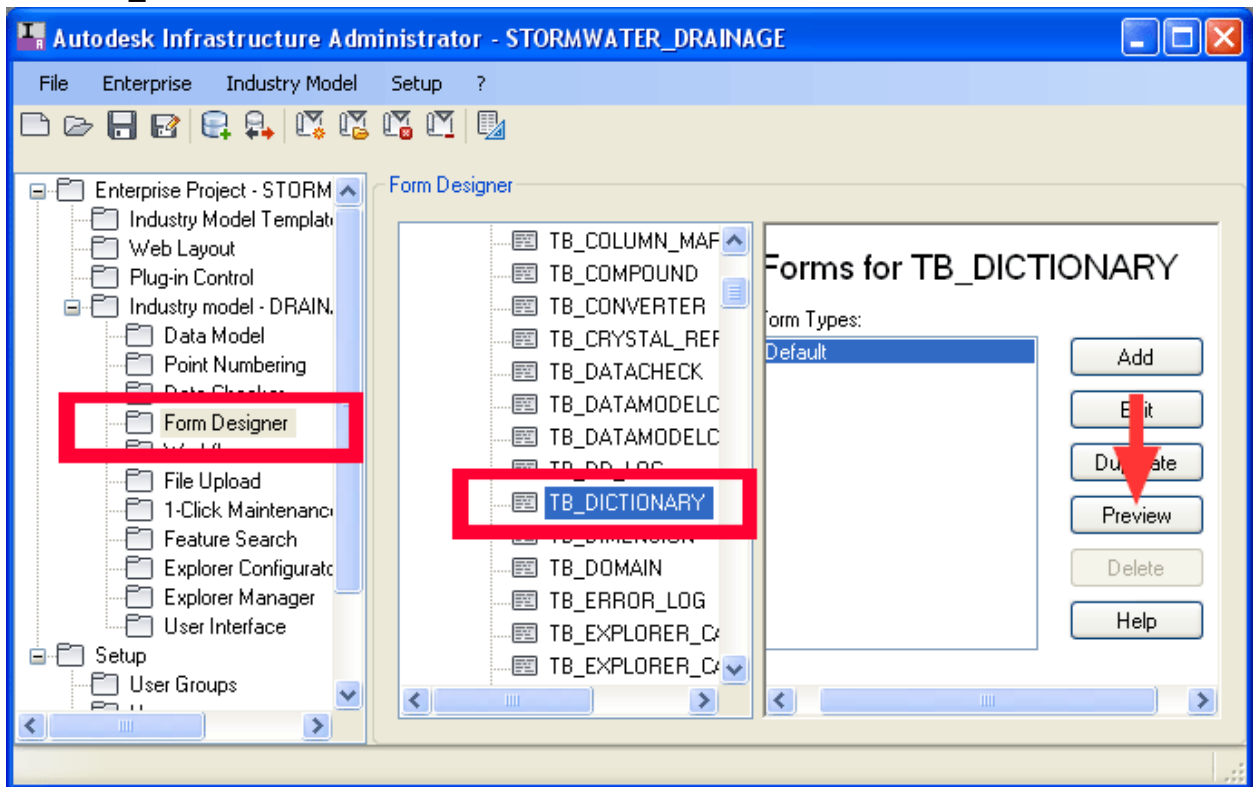
Select “Form Designer” from Industry Model then select TB\_Topic from System Tables and “Preview”



TB\_Topic Table tab displays Converted = 1 and Stormwater = 4



Select TB\_DICTIONARY and “Preview” the form

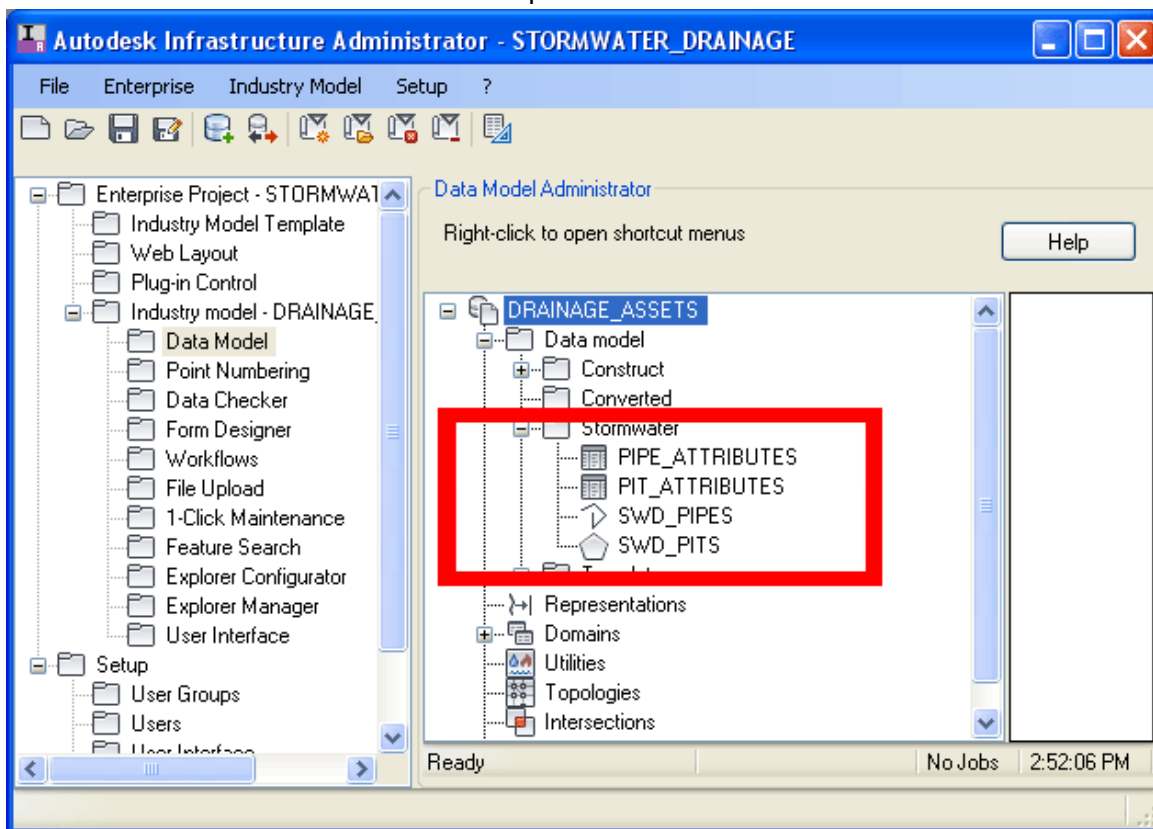


Convert each Topic ID = 1 to Topic ID =4

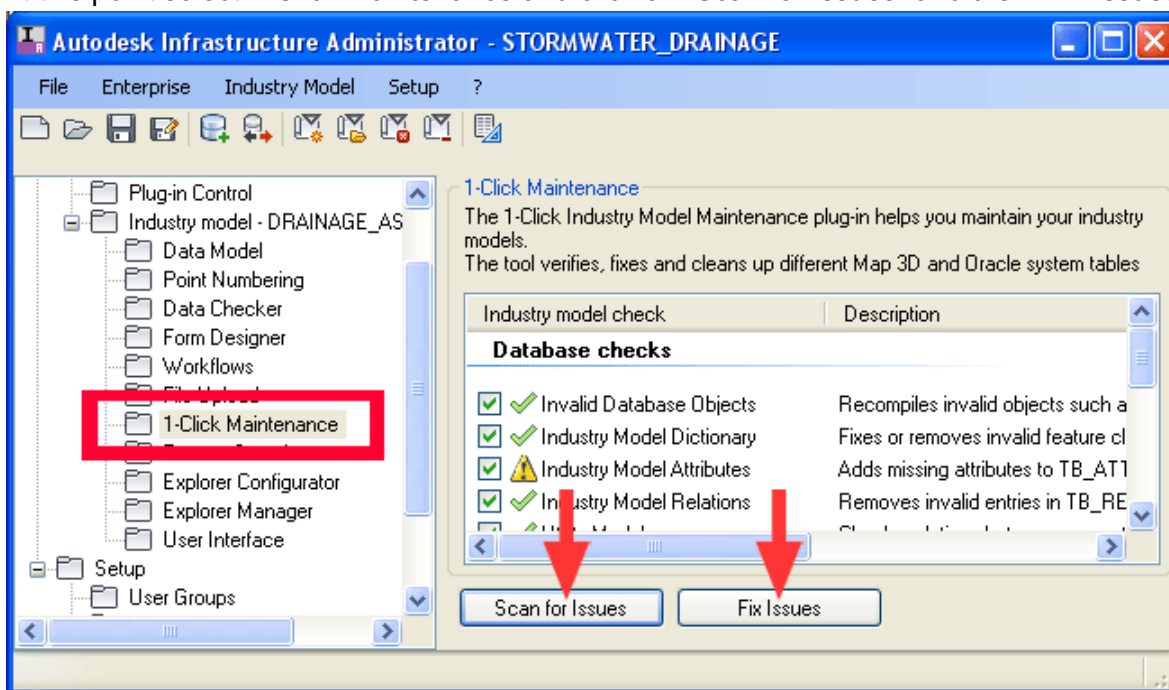
Form	Table	Tolerance:	Topic id:	User defined elevation:
		0.00050000	4	No
		0.00050000	4	No
		0.00050000	4	No
		0.00050000	4	No
		0.00050000	2	No
		0.00050000	2	No
		0.00050000	2	No
		0.00050000	2	No
		0.00050000	2	No
		0.00050000	3	No
		0.00050000	3	No

Record 1 of 11 (Filter active)

Contents of Converted now moved to Topic “Stormwater

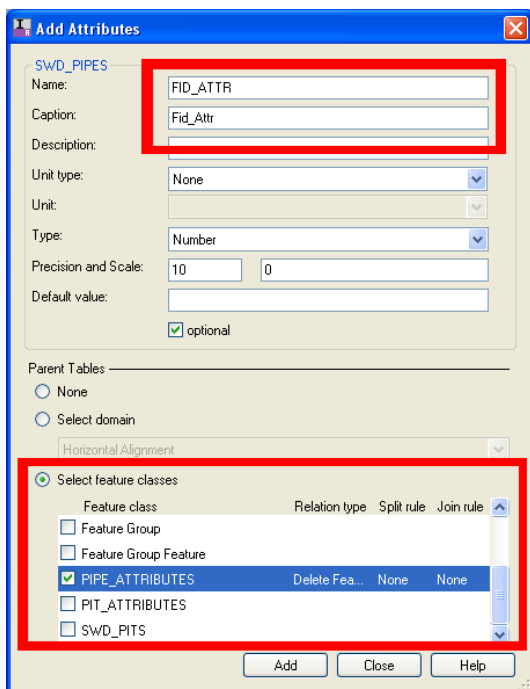
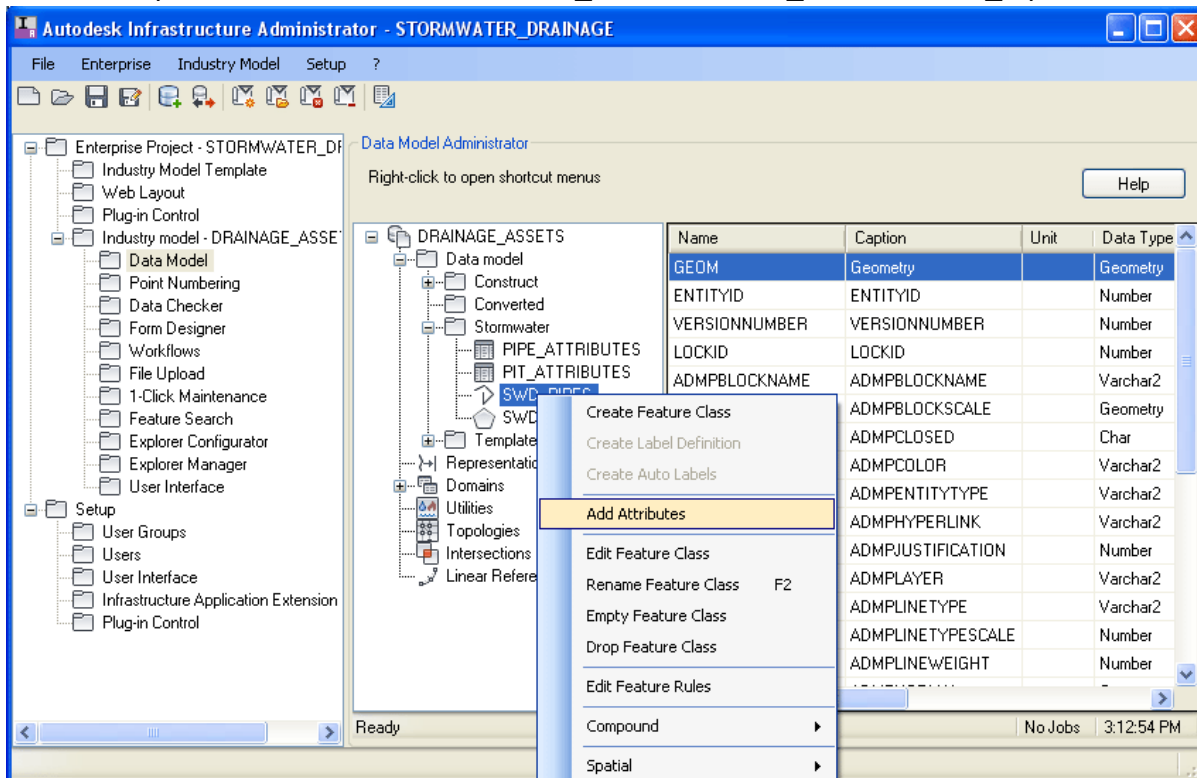


At this point select 1-Click Maintenance and click on “Scan for Issues” and then “Fix Issues”



### Establishing Relationship between Industry Model Tables

Data relationship needs to be established between Attribute Tables and the Geometry Table. The first step is to add an Attribute field “FID\_ATTR” to SWD\_Pits and SWD\_Pipes



In the “Add Attribute” window create a name FID\_ATTR to SWD\_PIPES.

Tick “Select feature classes” and select PIPE\_ATTRIBUTES to establish a relationship between Pipes Geometry Table and Pipes Attributes Table.

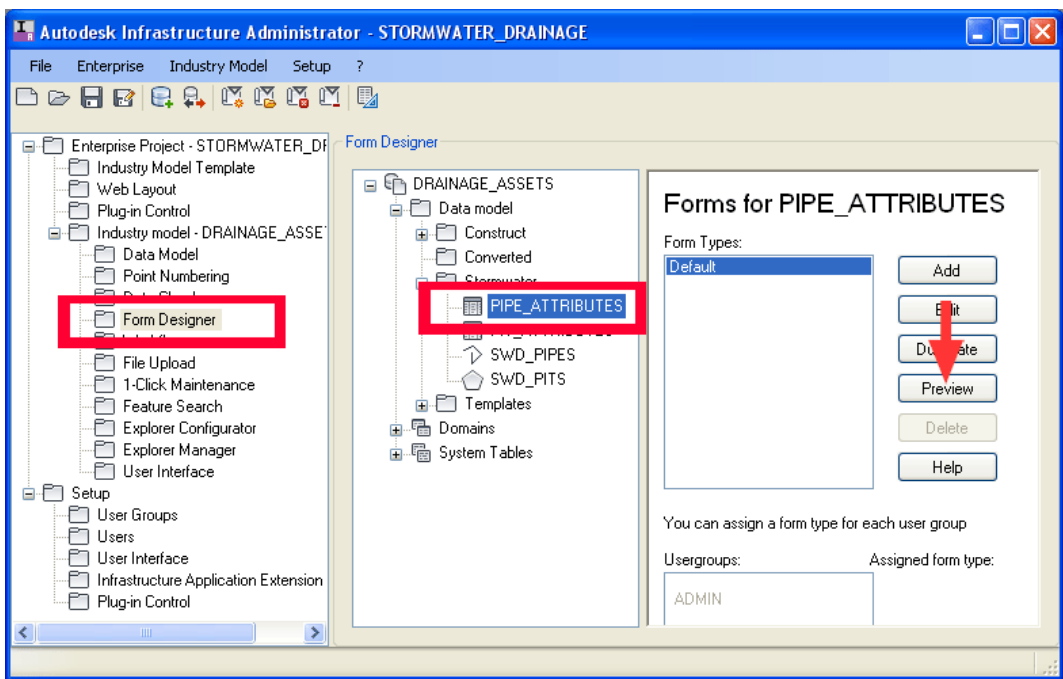


In order to populate these FID\_ATTR fields run following query in SQL Developer for both SWD\_PITS and SWD\_PIPES;

```
UPDATE swd_pits SET fid_attr=
(SELECT pit_attributes.fid FROM pit_attributes
WHERE pit_attributes.entityid=swd_pits.entityid) ;

UPDATE swd_pipes SET fid_attr=
(SELECT pipe_attributes.fid FROM pipe_attributes
WHERE pipe_attributes.entityid=swd_pipes.entityid) ;
```

“Preview” the result on attribute forms



Below is the report window for PIT Attributes. Clicking arrow below will display the report window for PIT Geometry.

PIPE\_ATTRIBUTES - DRAINAGE\_ASSETS

Form Table

Entityid: 1564992

Maintenance\_works:

Titles\_issue\_date:

Pipe\_material: R.C.P. Class X(2)

Pipe\_diameter: 450mm

Pipe\_location: UNDER PAVEMENT

Drawing\_no: 3197

S\_number: 0

Year\_of\_construction: 1/1/1993 12:00:00 AM

Year\_of\_come\_off\_maintenance: 1/1/2001 12:00:00 AM

Address: RUTHERFORD WAY

Suburb: ROXBURGH PARK

Upstream\_pit: 0

Downstream\_pit: 0

Pipe\_length: 12.31

Pipe\_offset: 0

Pit\_no\_1:

Pit\_plan\_no:

Surface\_level:

Invert\_upstream:

Invert\_downstream:

Is\_new: 0

Is\_edit: 1

Qsyncdate: 1296475601

Comments:

Feature ID: 1

Swd\_pipes: >

Record 1 of 100 (Filter active)

SWD\_PIPES - DRAINAGE\_ASSETS

Form Table

Entityid: 1564992

Versionnumber: 2

Lockid:

Admblockname:

Admpclosed:

Admpcolor: BYLAYER

Admpentitytype: AcDbLine

Admphyperlink:

Admpjustification:

Admplayer: SWD\_Pipes

Admplinetype: ByLayer

Admplinetypescale: 1

Admplineweight: -1

Admpolypatcolor:

Admpolypattype:

Admpplotstyle: ByLayer

Admprotation:

Admptextcontent:

Admptextheight:

Admptextstyle:

Admptthickness: 0

Admpwidth:

Objectno: 8700

Feature ID: 121157

Length of the line:

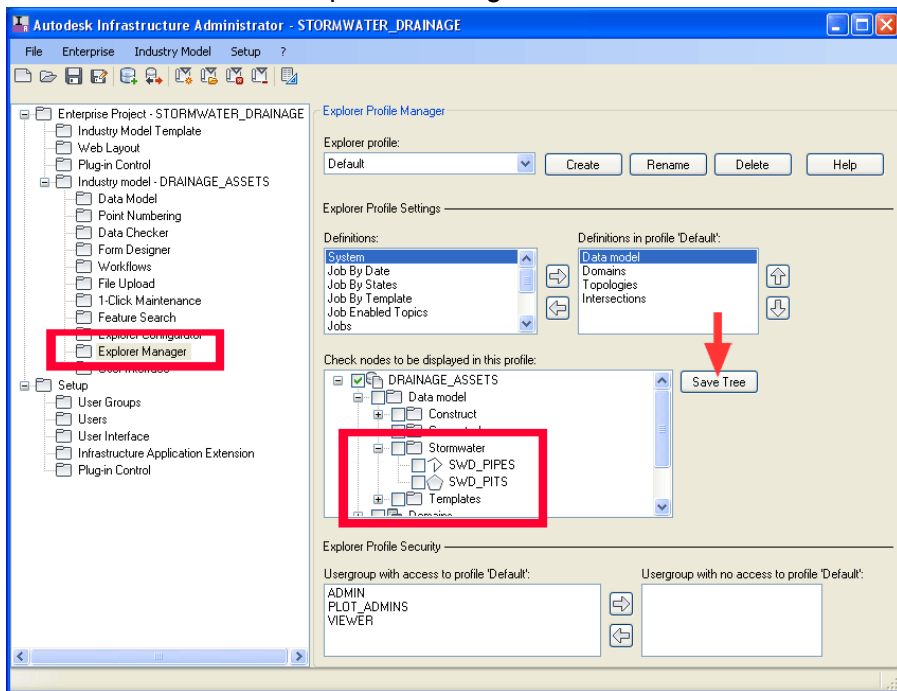
Fid\_Attr: 1

Record 1 of 1 (Filter active)

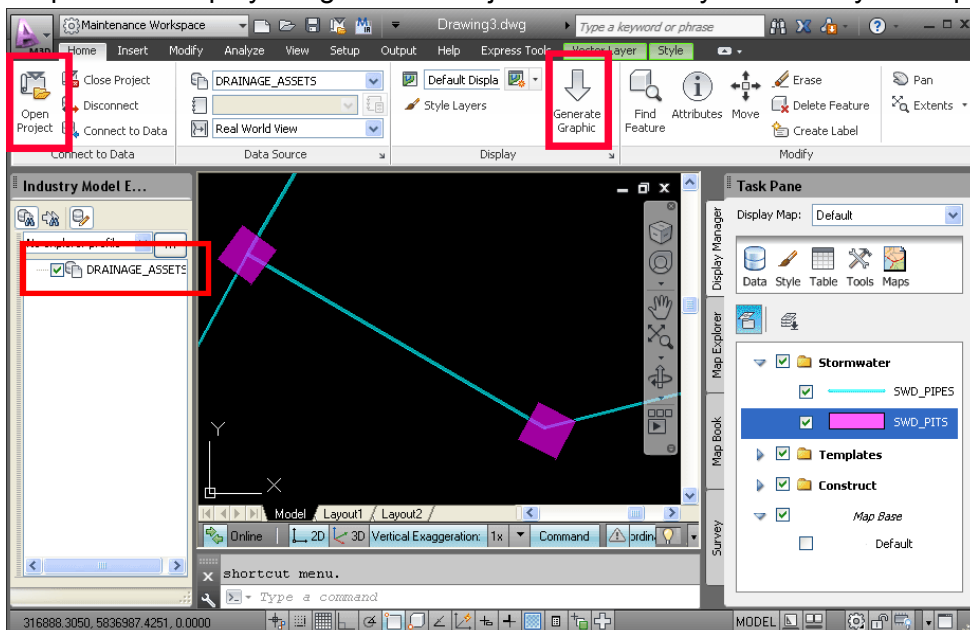
### Configuring User Environment

In order to have the custom Industry Model displaying in the Industry Model Explorer the “Standard” user environment should be edited. Industry Model Explorer used by both Map 3D and AIMS Infrastructure Application Extensions.

“Save Tree” button on Explorer Manager will allow the tables to be accessed by Map 3D.

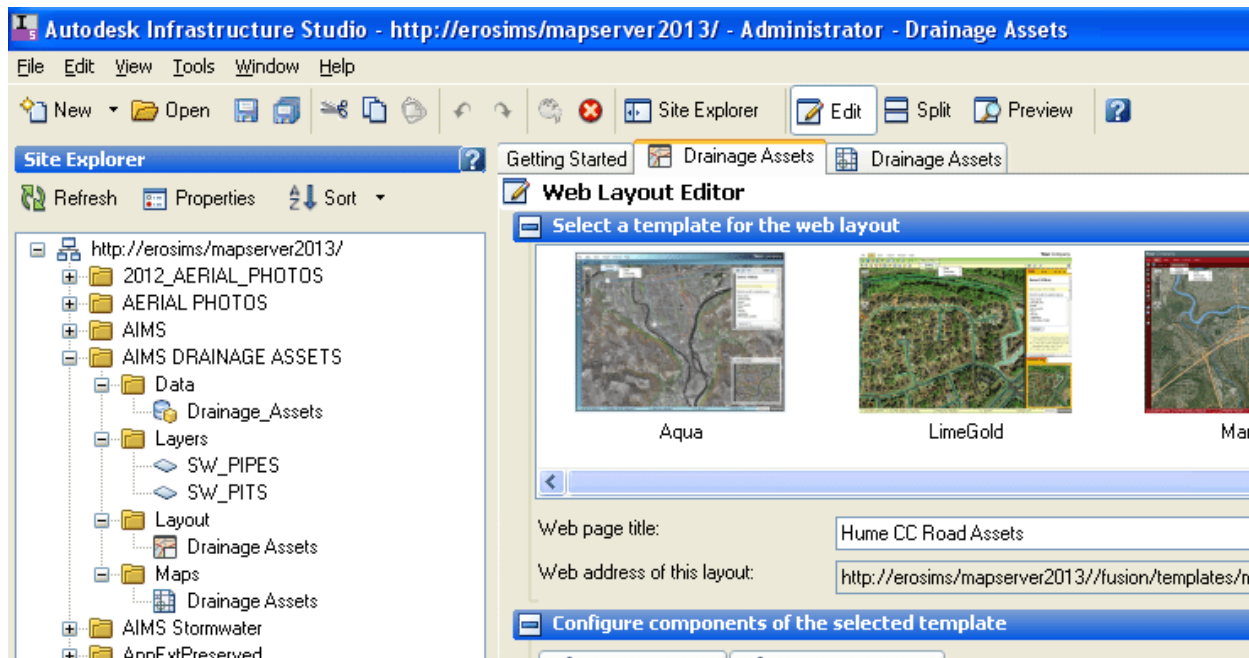


Maintenance Workspace of Map 3D will allow open the Enterprise project and “Generate Graphic” will display the geometric objects. Further stylization may be required.

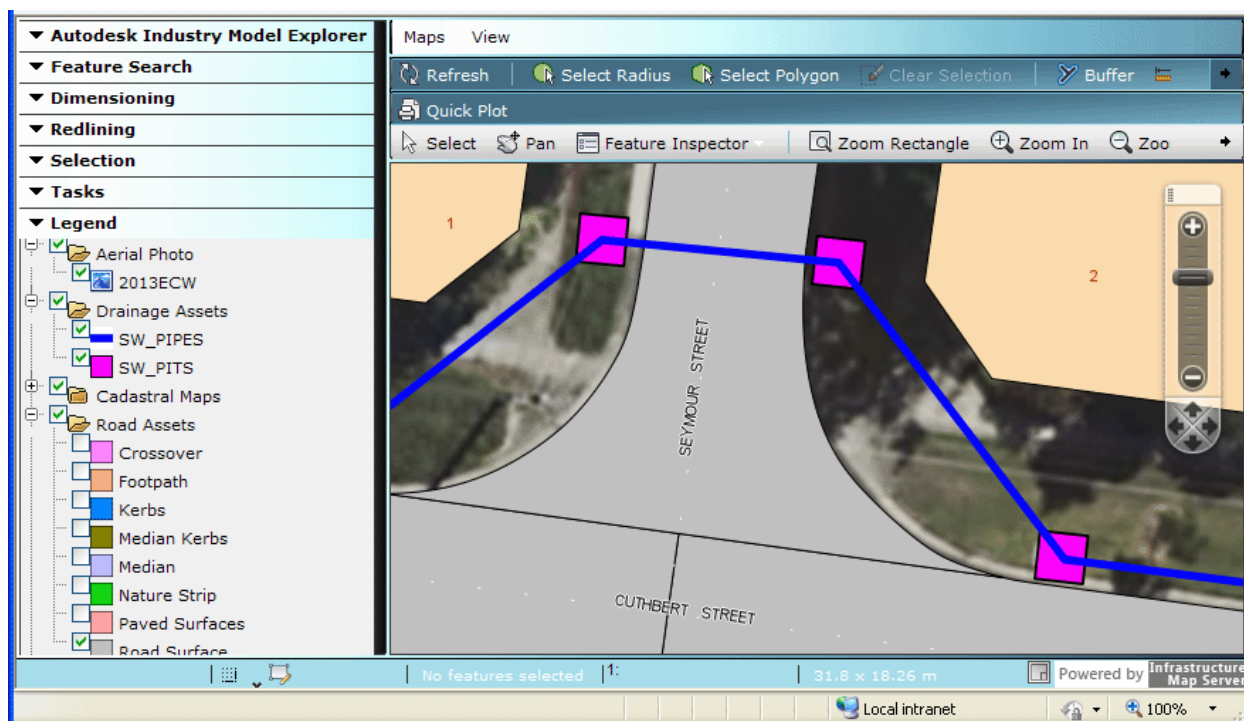


### Setting up Autodesk Infrastructure Studio and Publishing

The first step of publishing is to set up all the necessary components such as Data Source, Layers Maps and Layouts in Autodesk Infrastructure Studio.



Then review web version of map area.



# Using the Power of AIMS and Autodesk® AutoCAD® Map 3D to Manage Assets and Facilities

