

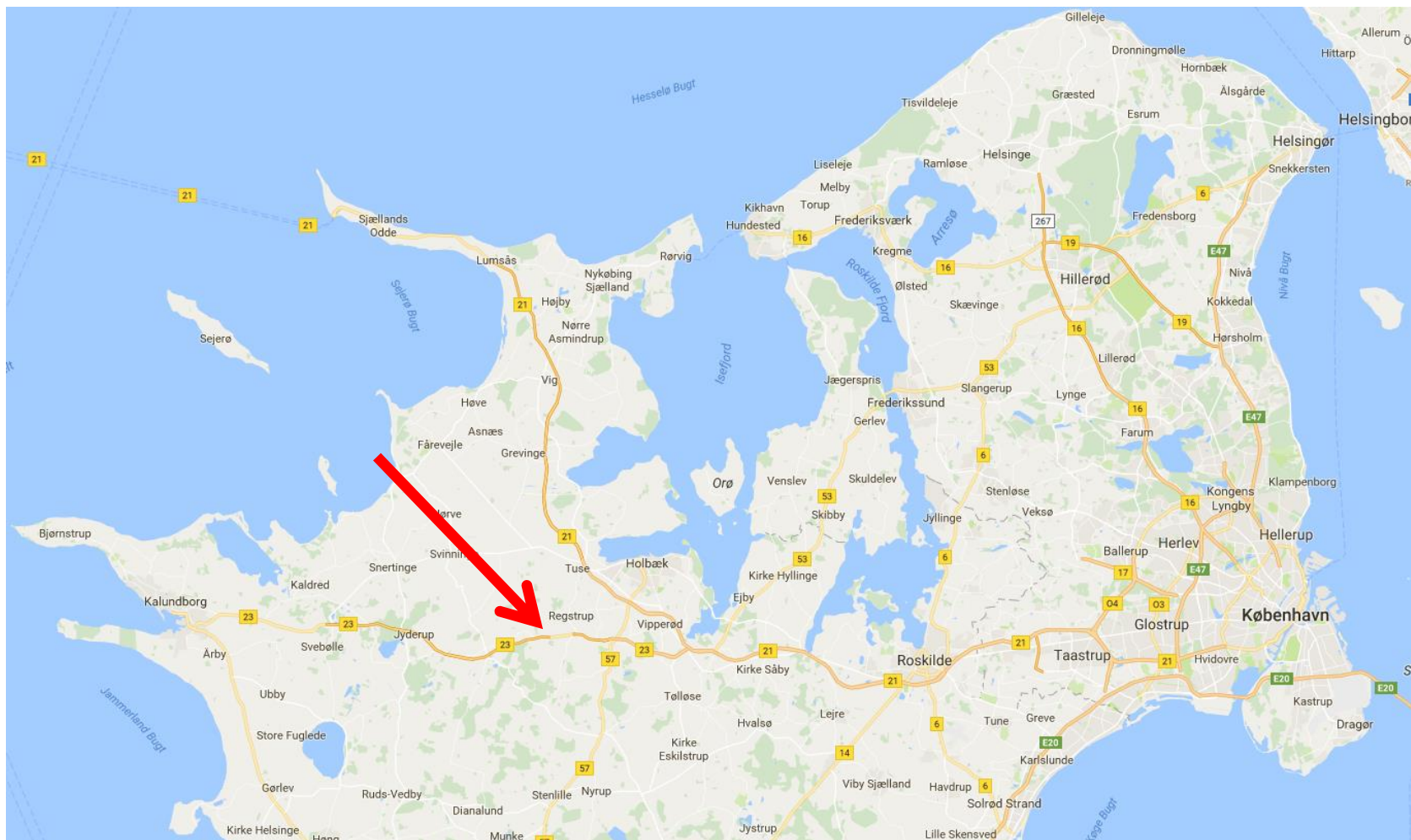
Erfaringer med workflow med OpenRoads i et motorvejsprojekt

Bentleyuser årsmøde tirsdag d. 8. nov.

Dagsorden

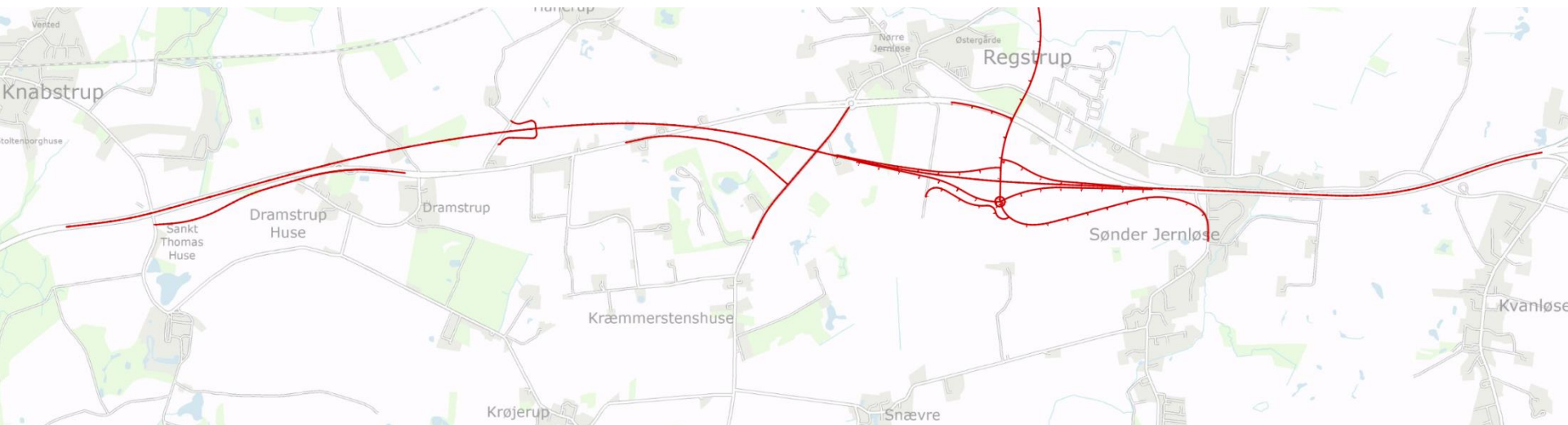
- Præsentations af projektet Syd og Regstrup
- Vejdirektoratets erfaringer med OpenRoads
- Templates
- Civil Cells
- Workflow
- Det vil Vejdirektoratet gerne med OpenRoads

Motorvejs projektet Syd om Regstrup



Motorvejs projektet Syd om Regstrup

- 5 km MV over åbent land
- 1,5 km opgraderingsstrækning
- 5 skærende veje
- 4 ramper
- 1 rundkørsel
- 1 sti

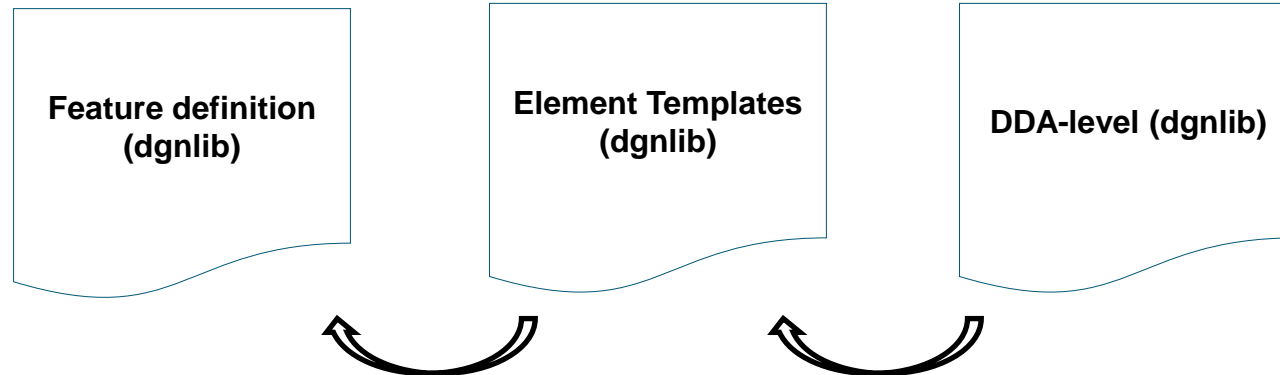


Erfaringer fra SS4



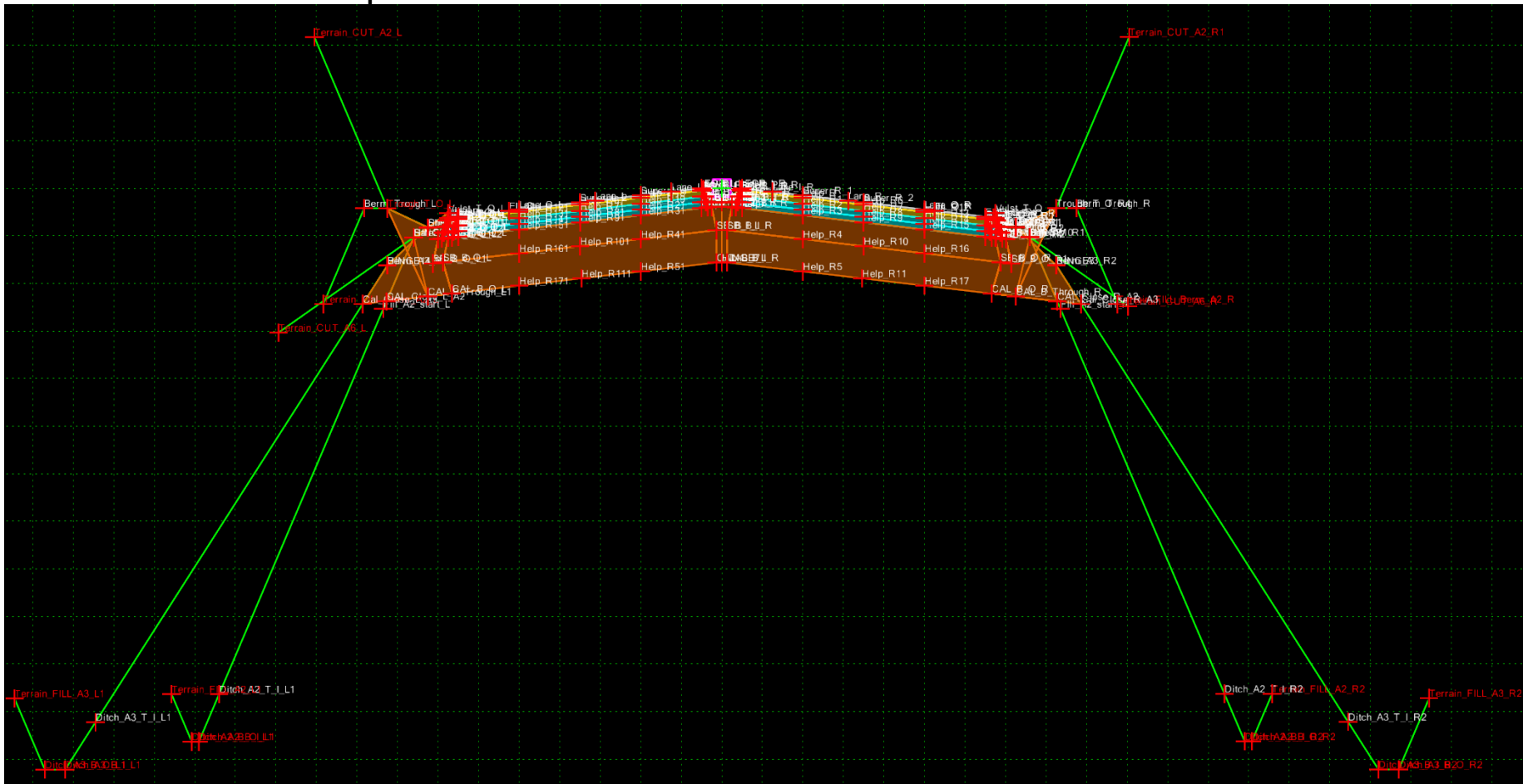
- Vejdirektoratets dilemma med MX og ss4
- Hvad er en PCF-fil
- Hvad er en Feature definition
- Hvad er en Element template

Opsætningsfil til
workspace →
styre nødvendige
ressource filer



Templates

- Standard templates



Templates

- Standard for navngivning af:
 - Point
 - Components
 - Shapes

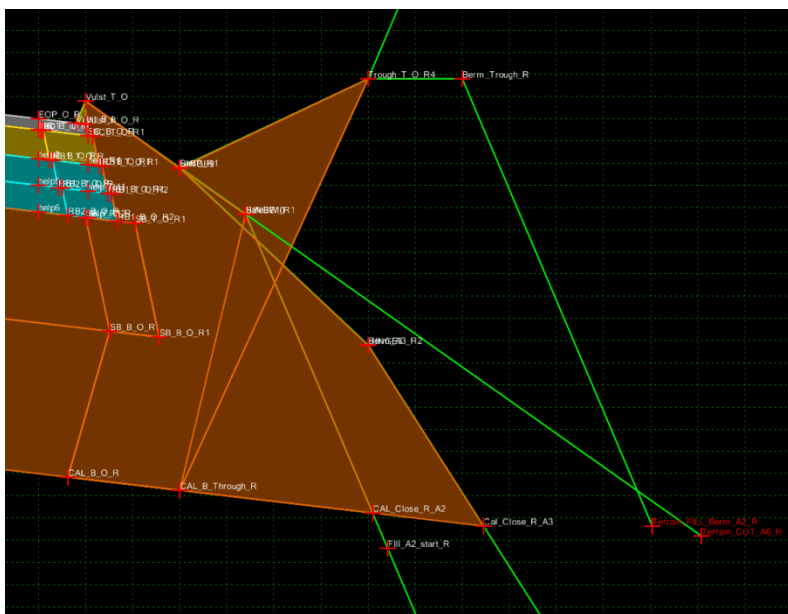
Syntax for navngivning

Points i vej-kassen
(1)_(2)_(3)_(4)

(1): Materiale
(2): Vertikal Placering T/B
(3): Horizontal placering O/I
(4): Horizontal placering R/L
Eks. RB_B_O_R

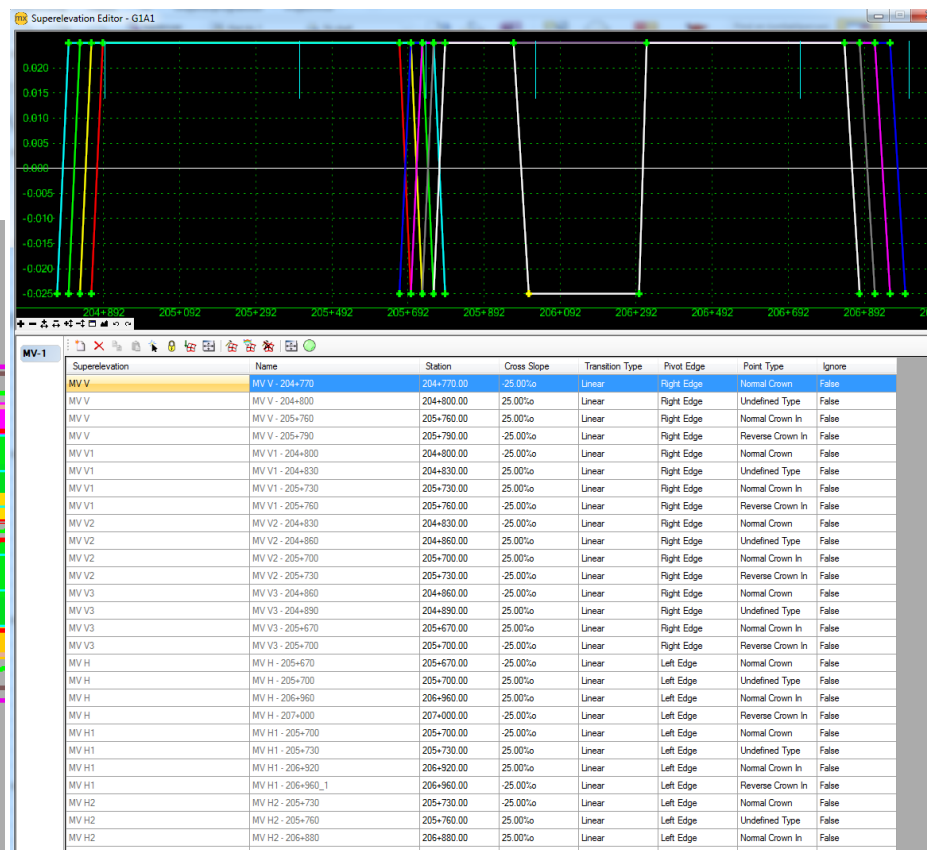
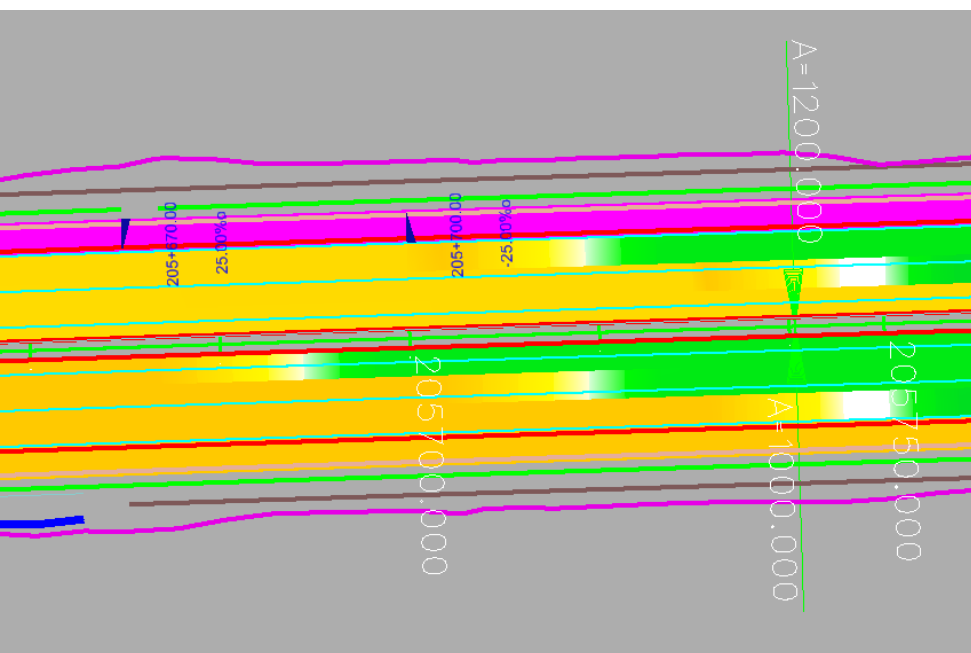
Components uden for vej-kassen
(1)_(AX)_(2)

(1): Type
(AX): Anlæg
(2): Horizontal placering R/L
Eks. FILL_A3_R



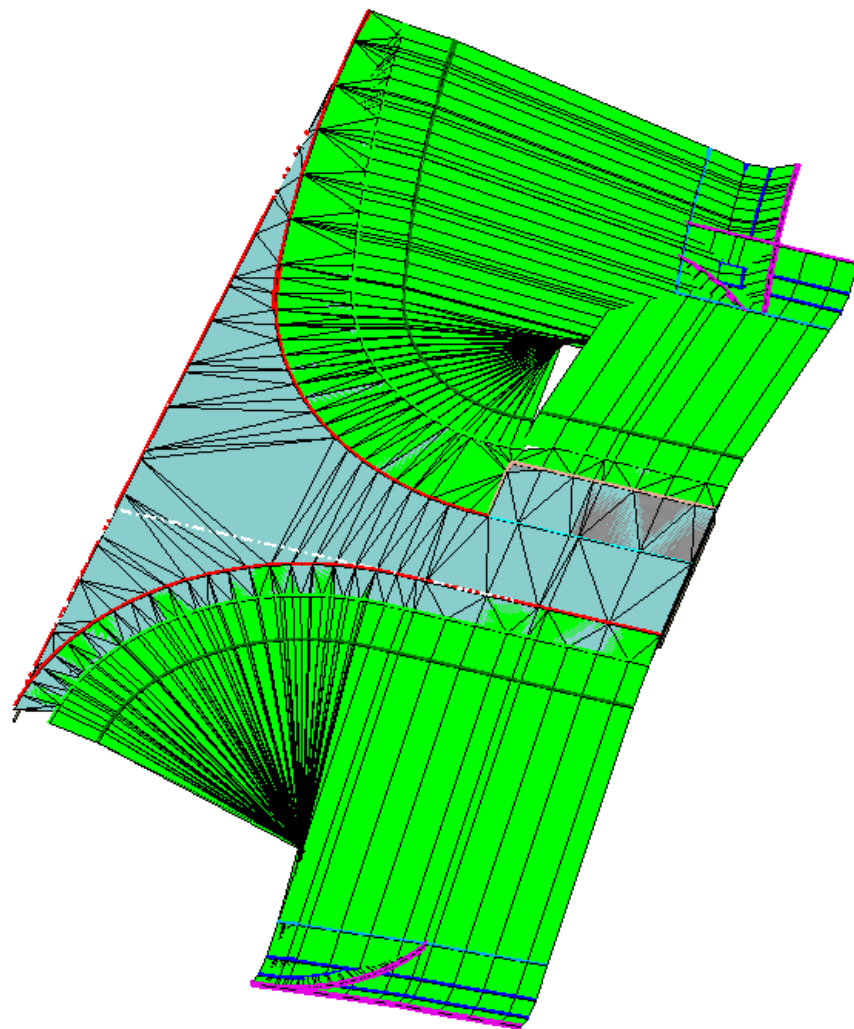
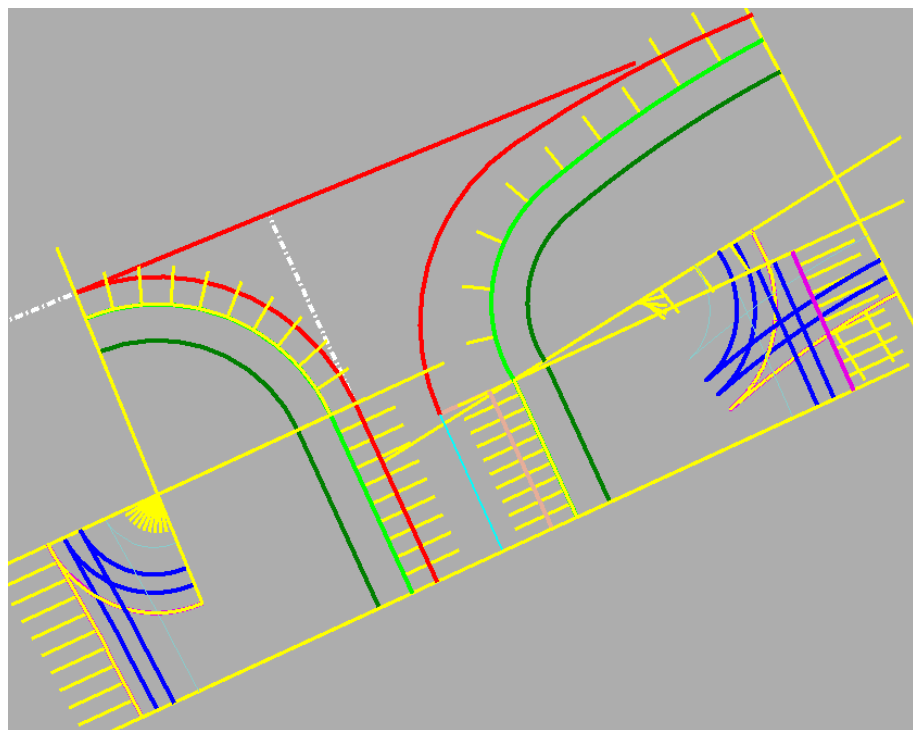
Superelevation

- Laves i fil for sig
- Design via en editor
- Design interaktivt



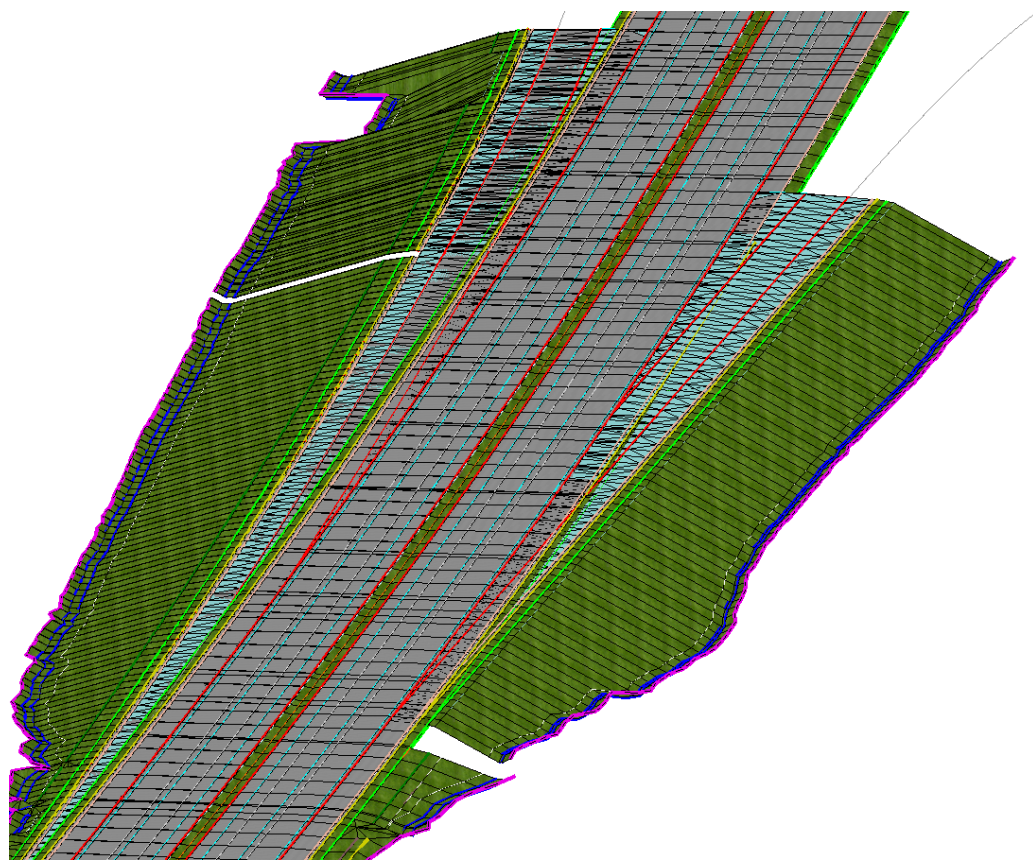
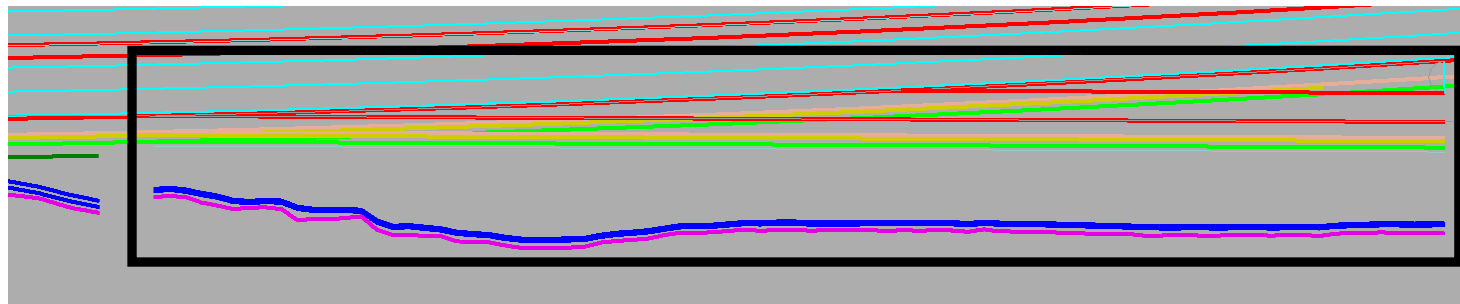
Civil cells

- T-kryds



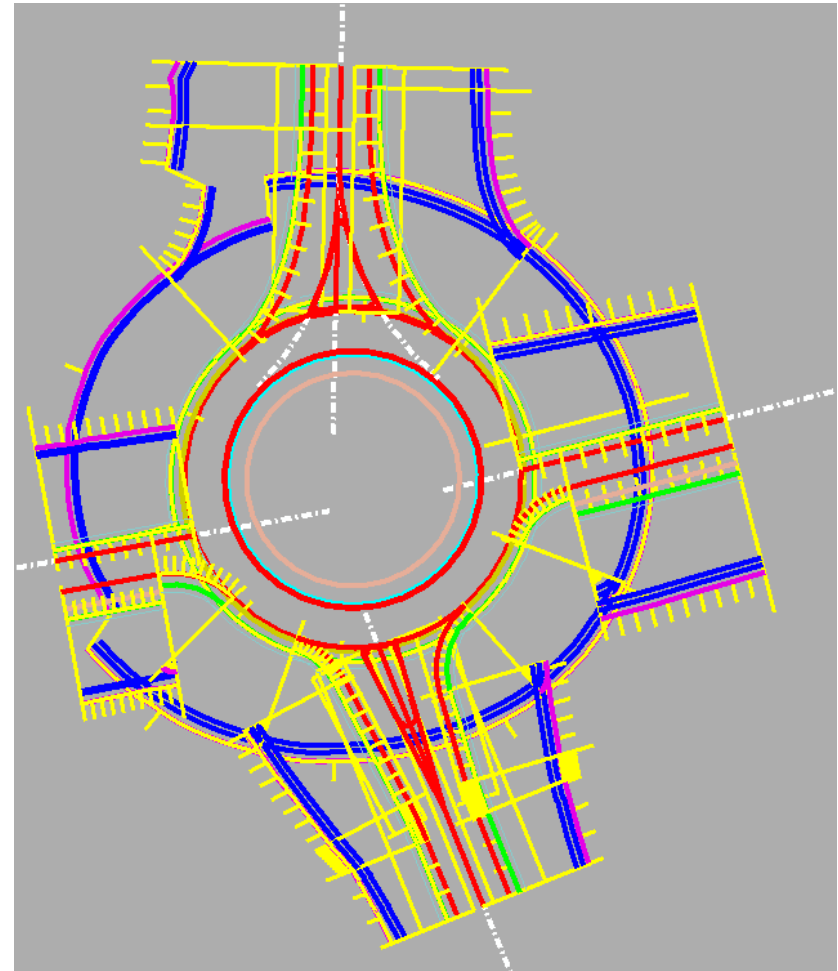
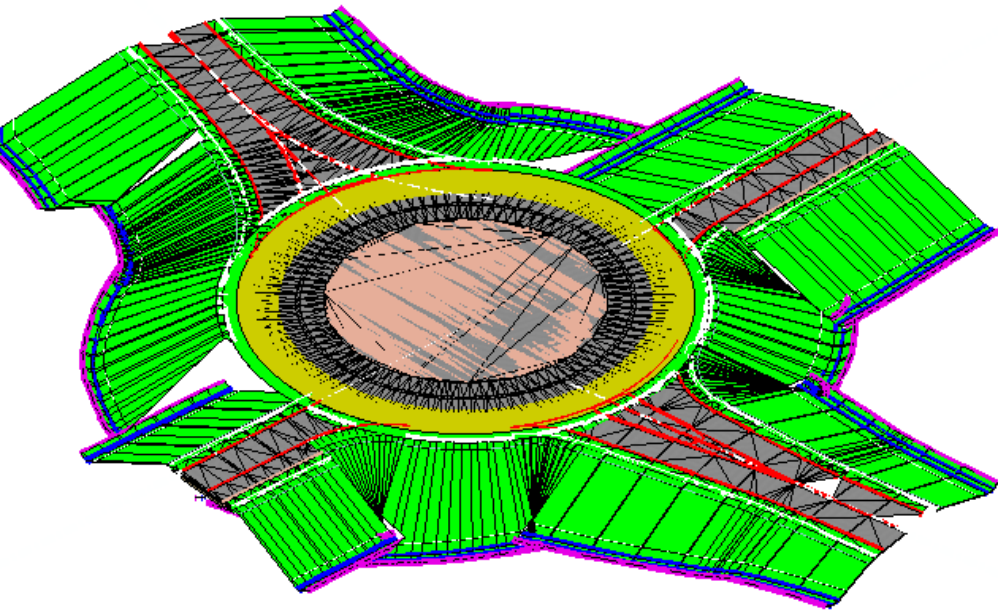
Civil cells

- Rampekiler



Civil cells

- Rundkørsel

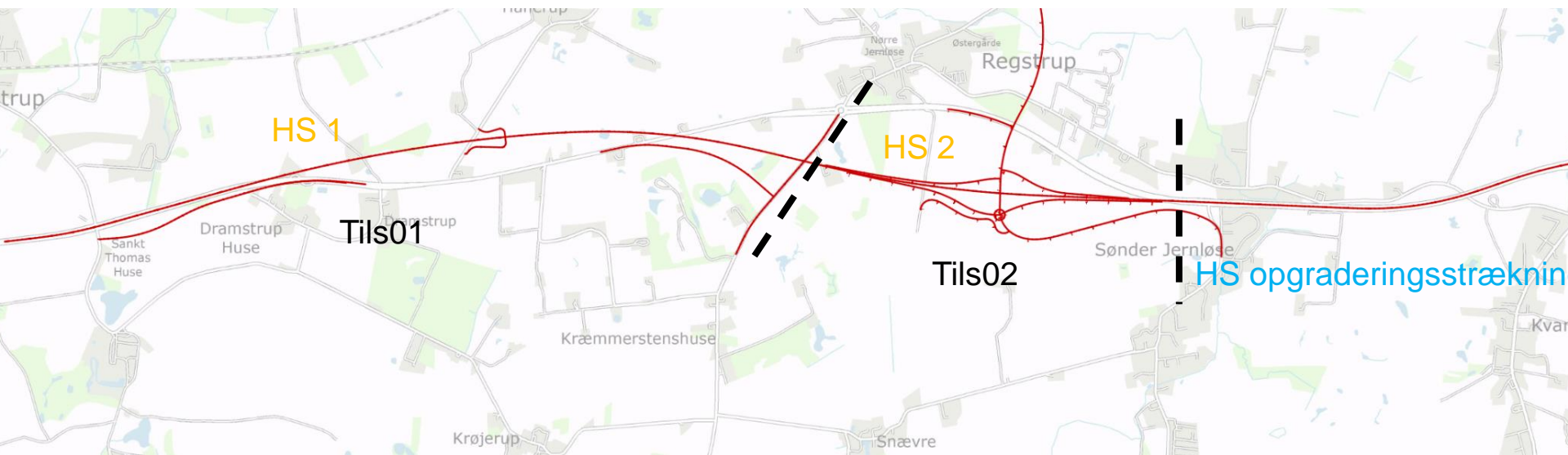


- [Film](#), lille konkurrence, find 3 fejl☺

Workflow

Opbygning af modelrelationer

- HS
- HS Opgraderings strækning
- Tils01
- Tils02



Workflow

Opbygning af modelrelationer

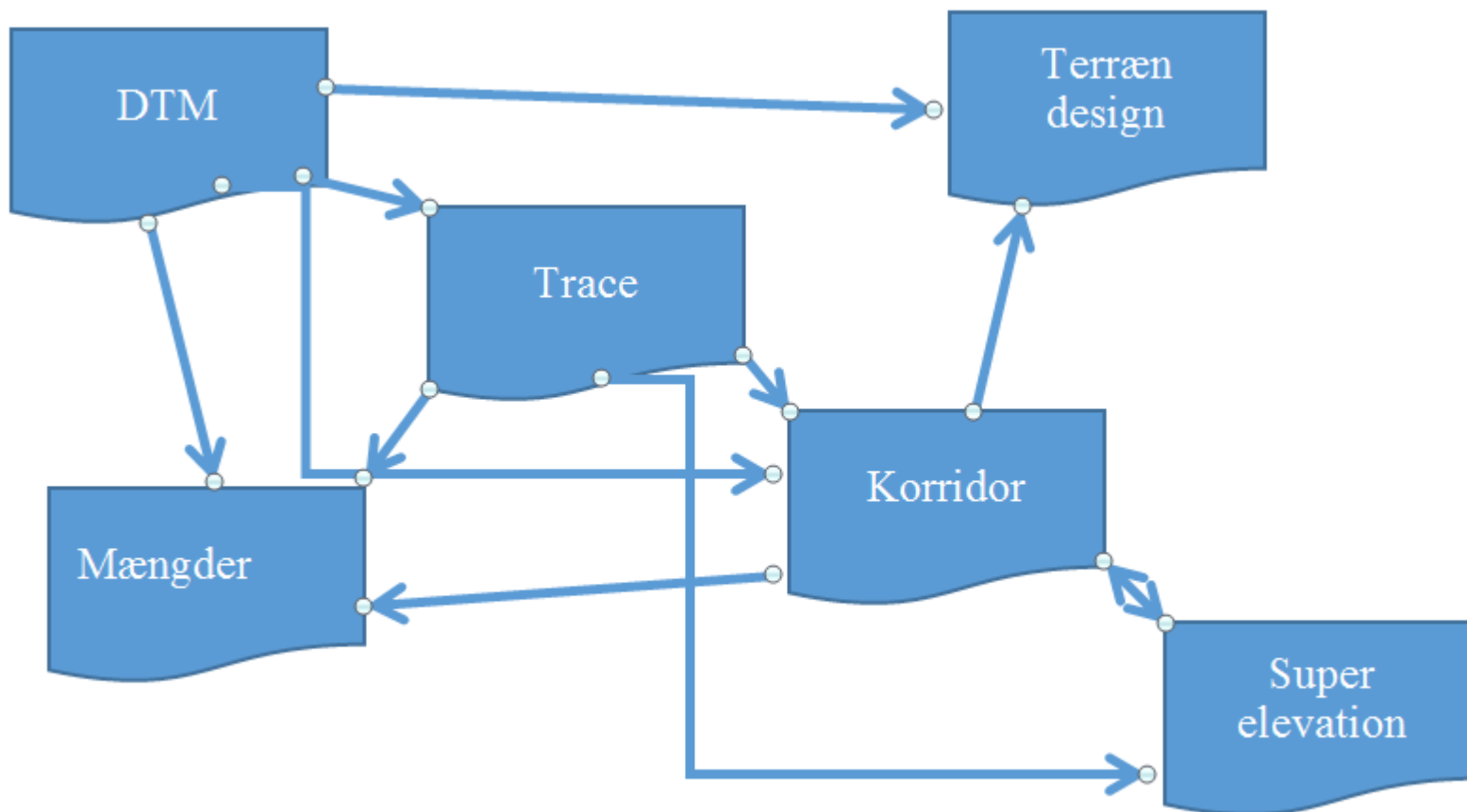
- HS

The screenshot displays a software interface with a table of 'End Condition Exceptions'. The table lists various exceptions with their descriptions, enabled status, exception types, and stationing. A context menu is open over the table, highlighting 'End Condition Exception'.

Description	Enabled	ECEException Type	Start Station	End Station	Station
Gennemtvinger trug	True	Left Override	204+180.00	204+220.00	7+499.96
Ingen afvanding ved Hanerupvejstien sy...	True	Backbone Only (Right)	204+415.00	204+422.00	7+499.96
Ingen afvanding ved Hanerupvejstien n...	True	Backbone Only (Left)	204+415.00	204+423.00	7+499.96
Ingen afvanding ved faunapassage nord...	True	Backbone Only (Left)	204+492.00	204+507.00	7+499.96
Ingen afvanding ved faunapassage syds...	True	Backbone Only (Right)	204+494.00	204+507.00	7+499.96
afvnon ved bassin st. 202750 sydside	True	Right Override	202+750.00	202+785.00	7+499.96
Gennemtvinger grøft st. 202795-202825	True	Left Override	202+795.00	202+825.00	3+148.78
Gennemtvinger grøft st. 203130-204140	True	Left Override	203+130.00	203+140.00	3+150.00
AFVNON HS H bassin st. 204850	True	Right Override	204+843.94	204+940.00	5+036.42
Gennemtvinger grøft st. 204560-204800	True	Right Override	204+508.00	204+680.00	
Gennemtvinger grøft st. 203490-203055	True	Left Override	203+990.00	204+055.00	
Gennemtvinger grøft st. 204795-204850	True	Left Override	204+795.00	204+850.00	

Workflow

- Opbygning af modelrelationer



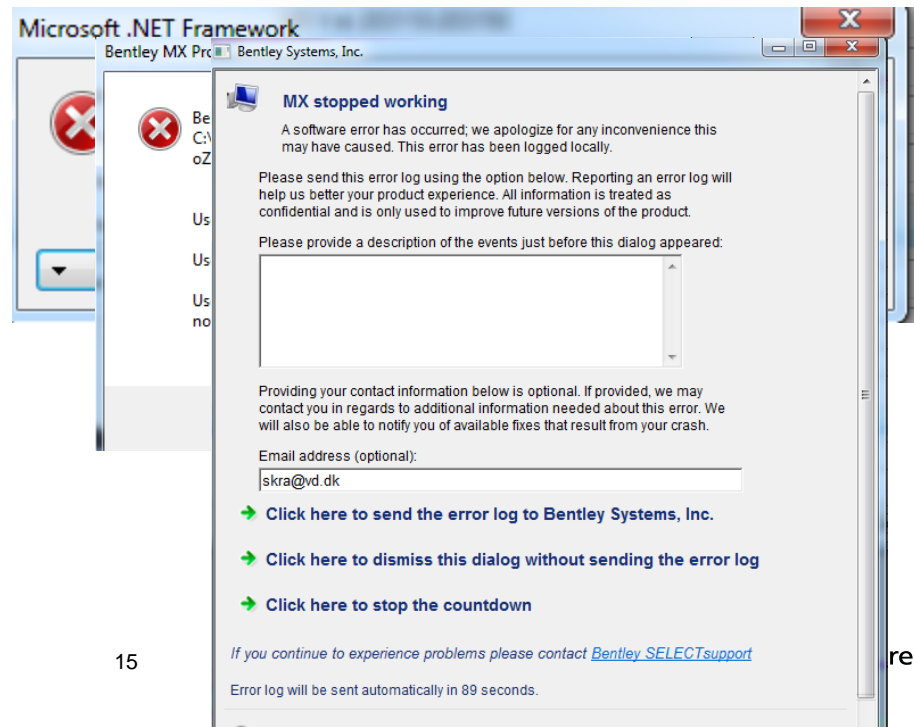
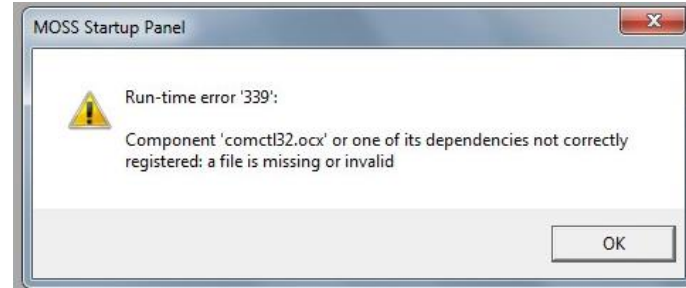
Workflow

- Civil cells

1. Korridor
2. Point controls
3. End condition exeptions
4. Civil cells


- Ellers...

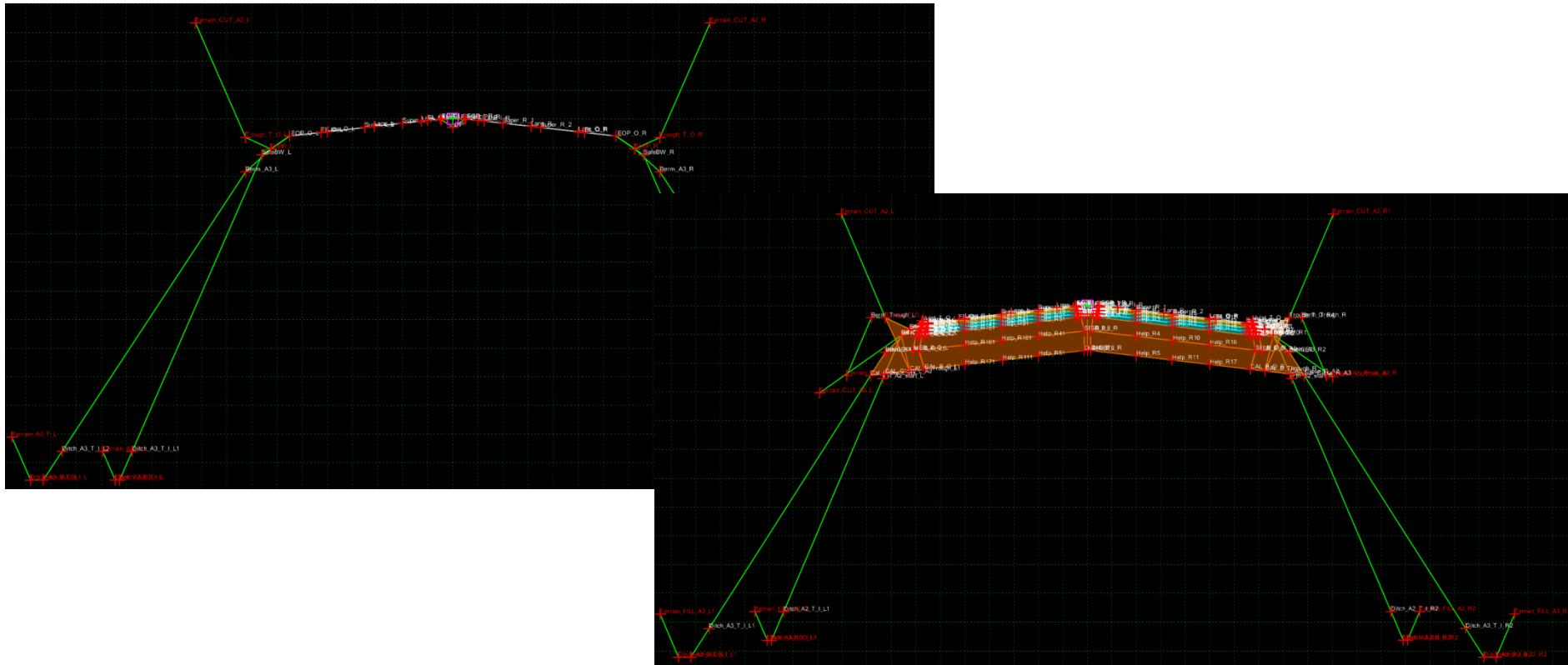
- Compres design



Workflow


Hurtigere hastighed

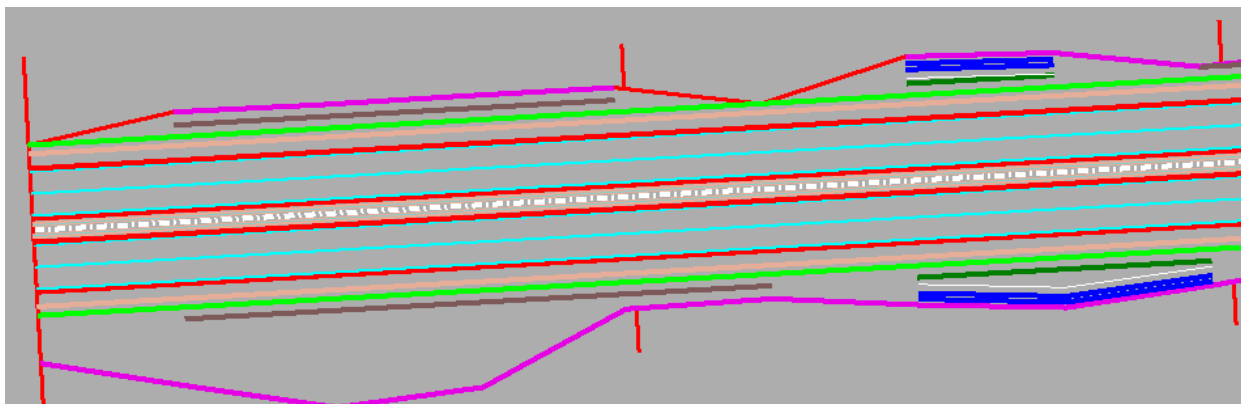
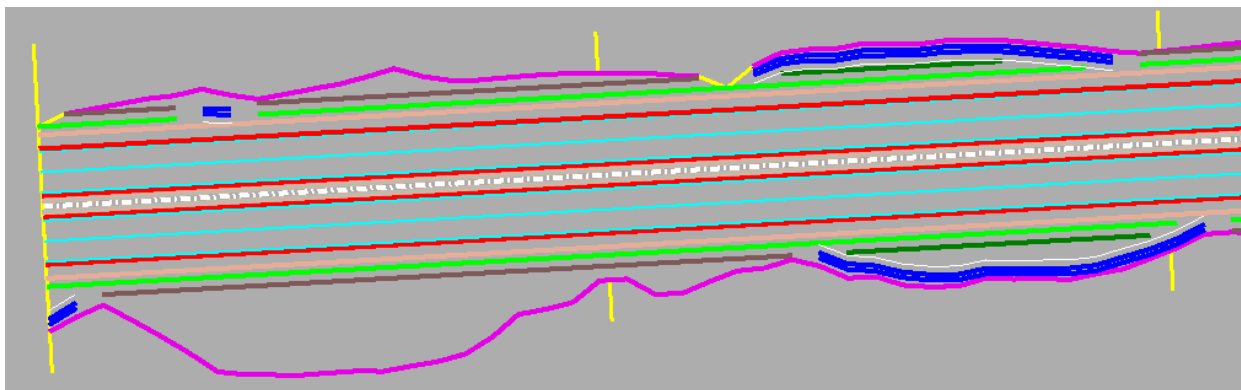
- Simple templates
- Corridor object – Lock design 



Workflow

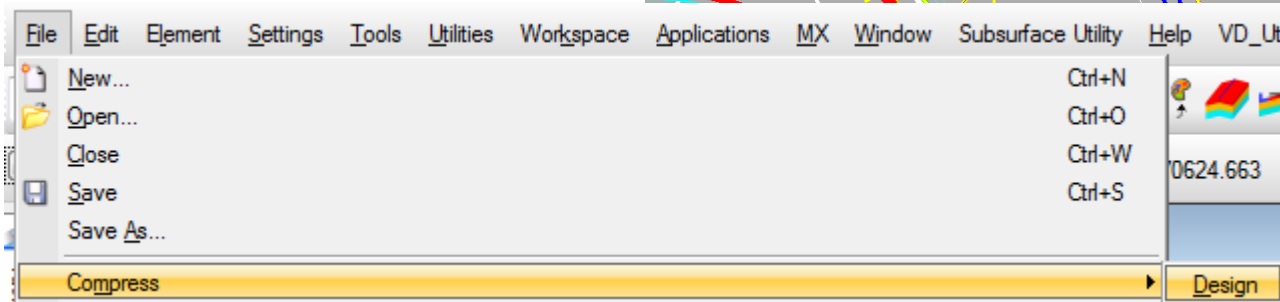
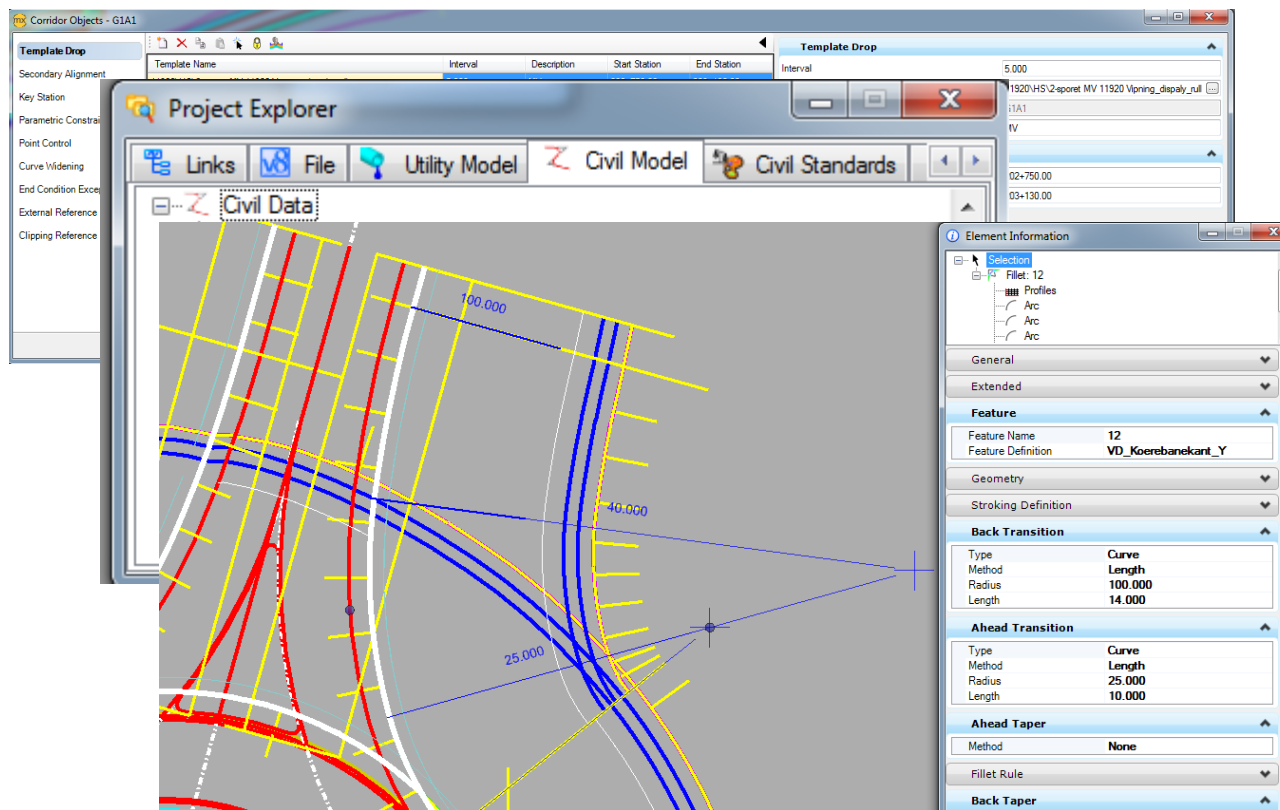
Hurtigere hastighed

-  Point controls og End Condition – Hastighed 
- Design stage



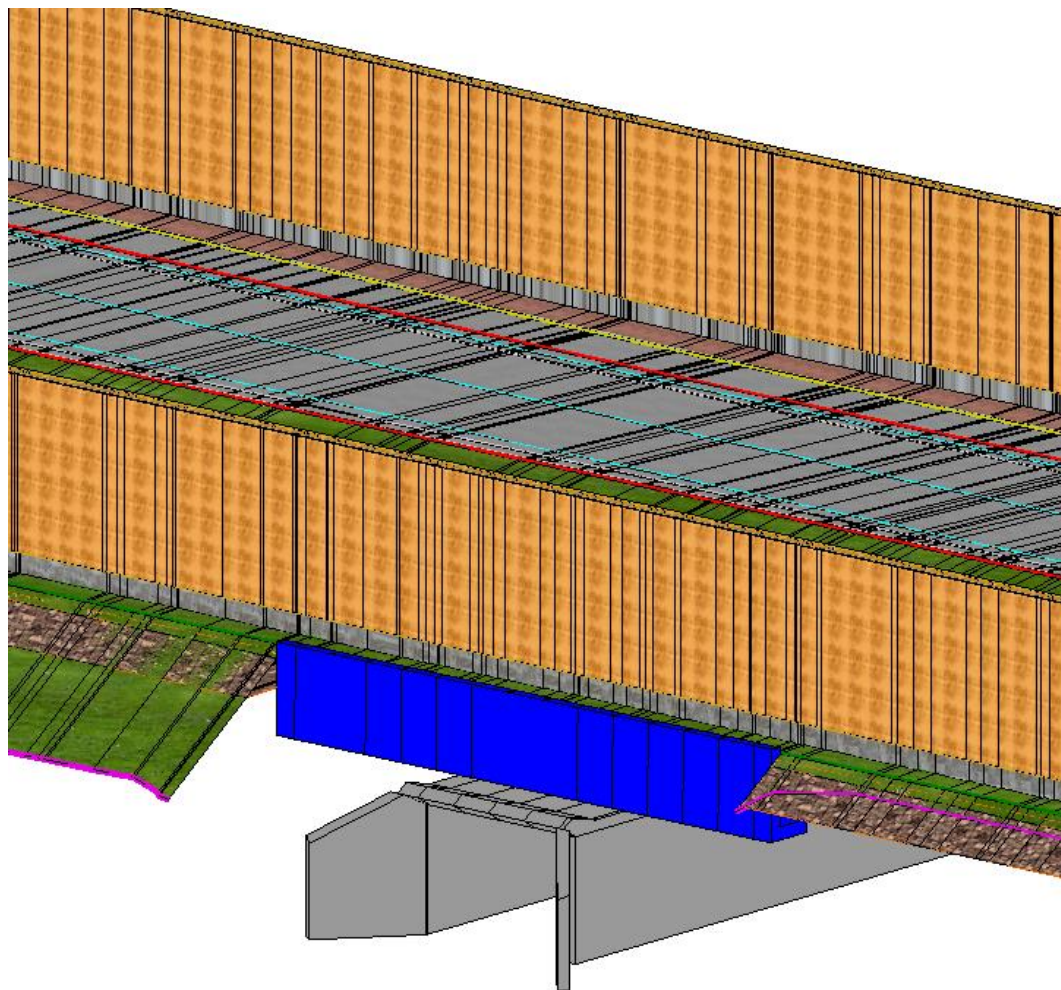
SS4 – vores nye venner

- Corridor Object
- Element Info
- Project explorer
- Compress → design



Så langt er vi nået

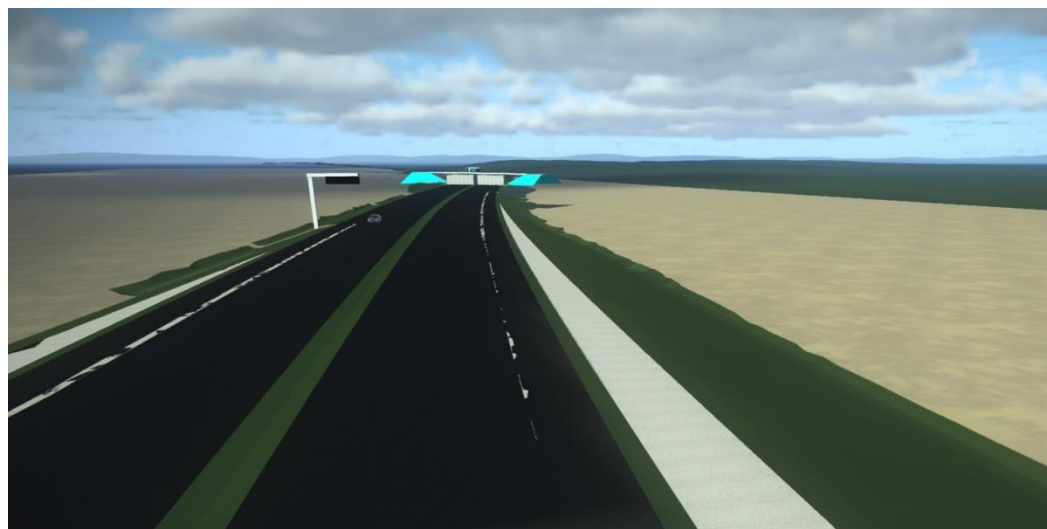
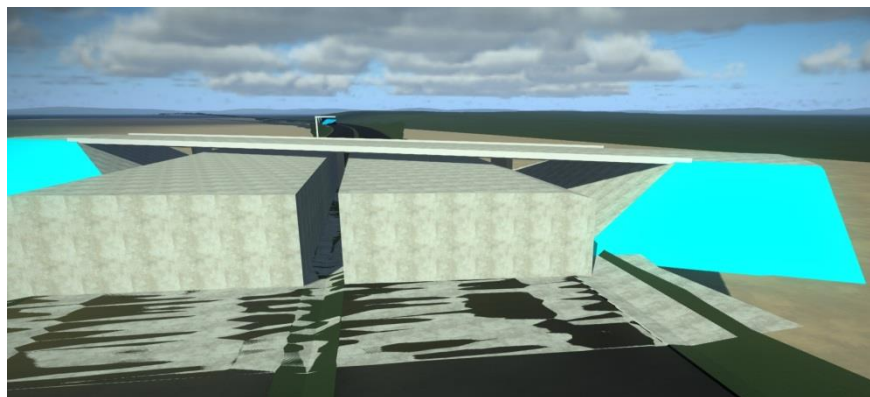
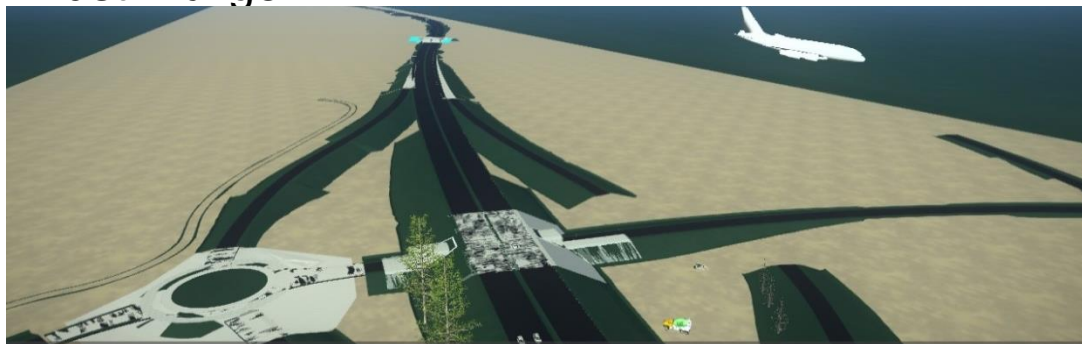
- 3D modeller
- Materiale til forretninger
- Ekspropriation
- Udbud



Visualisering i de tidlige faser

Hvor meget kan vi få, for mindst mulige

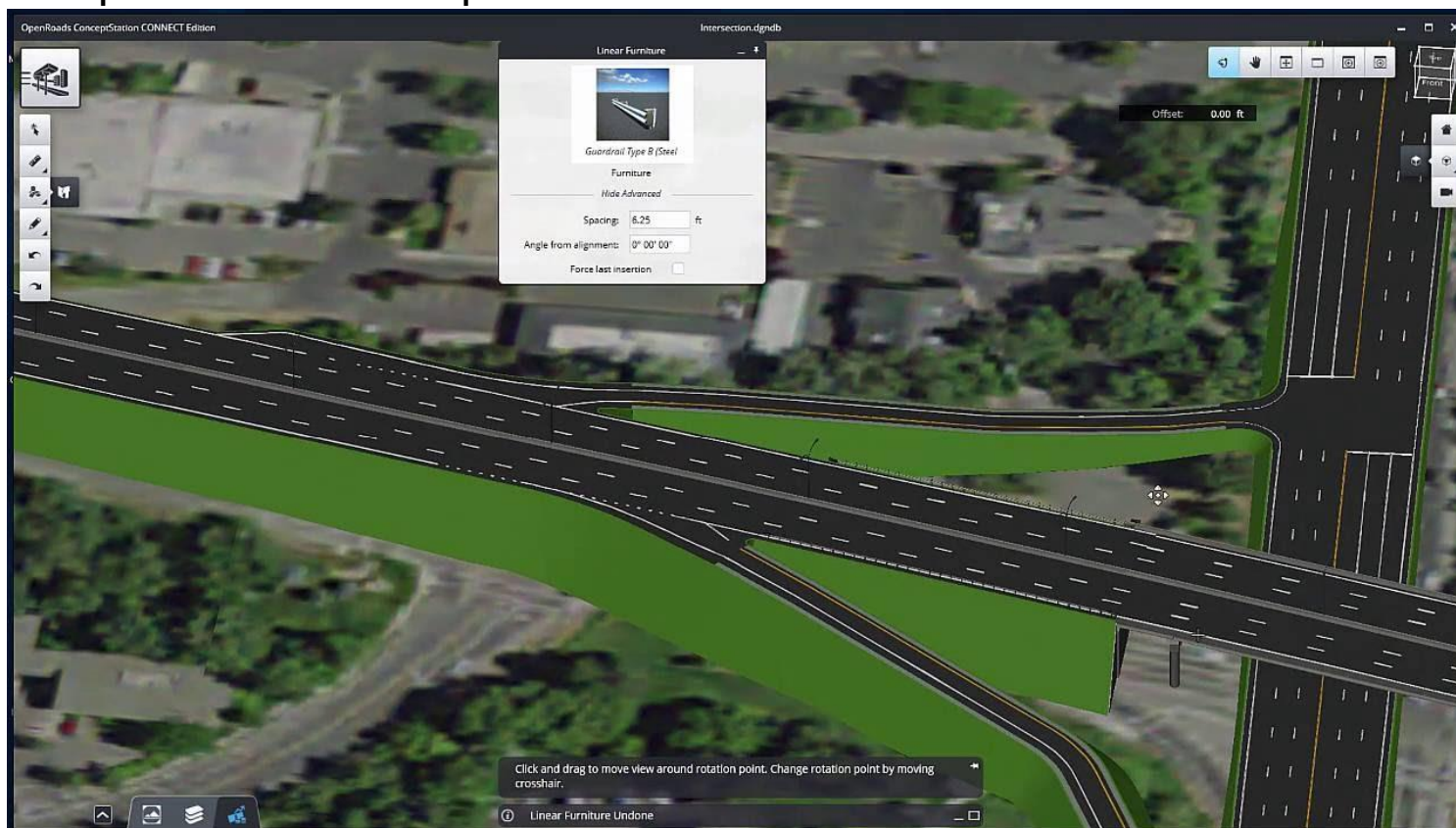
- LumenRT testes
- 3D fra OpenRoads



- [Film LumenRT](#)
- [Film OR visu](#)

Visualisering i de tidlige faser

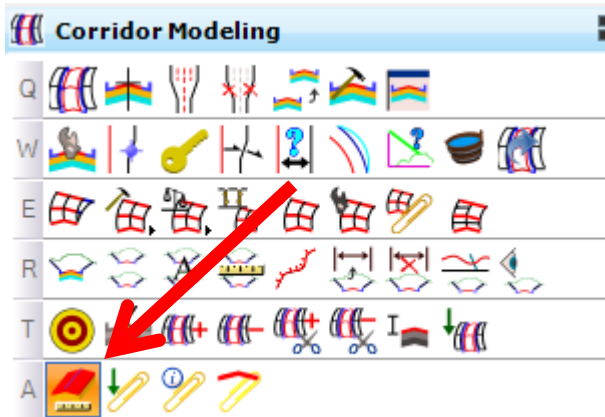
- OpenRoads ConceptStation testes



Der arbejdes videre med Conceptstation

Pris samlingens i de tydelige faser

- Hvor meget kan der vrides ud af OpenRoads
- Et Standard template som rummer så meget som muligt
- Component Quantities



Material	Surface Area	Volume	Units	Unit Cost	Total Cost/Material
Cut Volume	0.0000	51243.6160	CuM	50.00	2562180.80
Fill Volume	0.0000	1975.6836	CuM	45.00	88905.76
VD_ABB	0.0000	1681.1896	CuM	1.00	1681.19
VD_BS	0.0000	12436.2293	CuM	120.00	1492347.52
VD_GAB1	0.0000	125.3568	CuM	78.00	9777.83
VD_GAB2	0.0000	3045.7272	CuM	65.00	197972.27
VD_Graes	13337.6480	0.0000	SqM	458.00	6108642.78
VD_SG	0.0000	7008.8433	CuM	40.00	280353.73
VD_SMA	0.0000	637.6786	CuM	520.00	331592.87
VD_Vulst	0.0000	2.6727	CuM	23.00	61.47

Report

Total Estimated Cost: 11073516.22
Corridor Name: Centerlinje_9