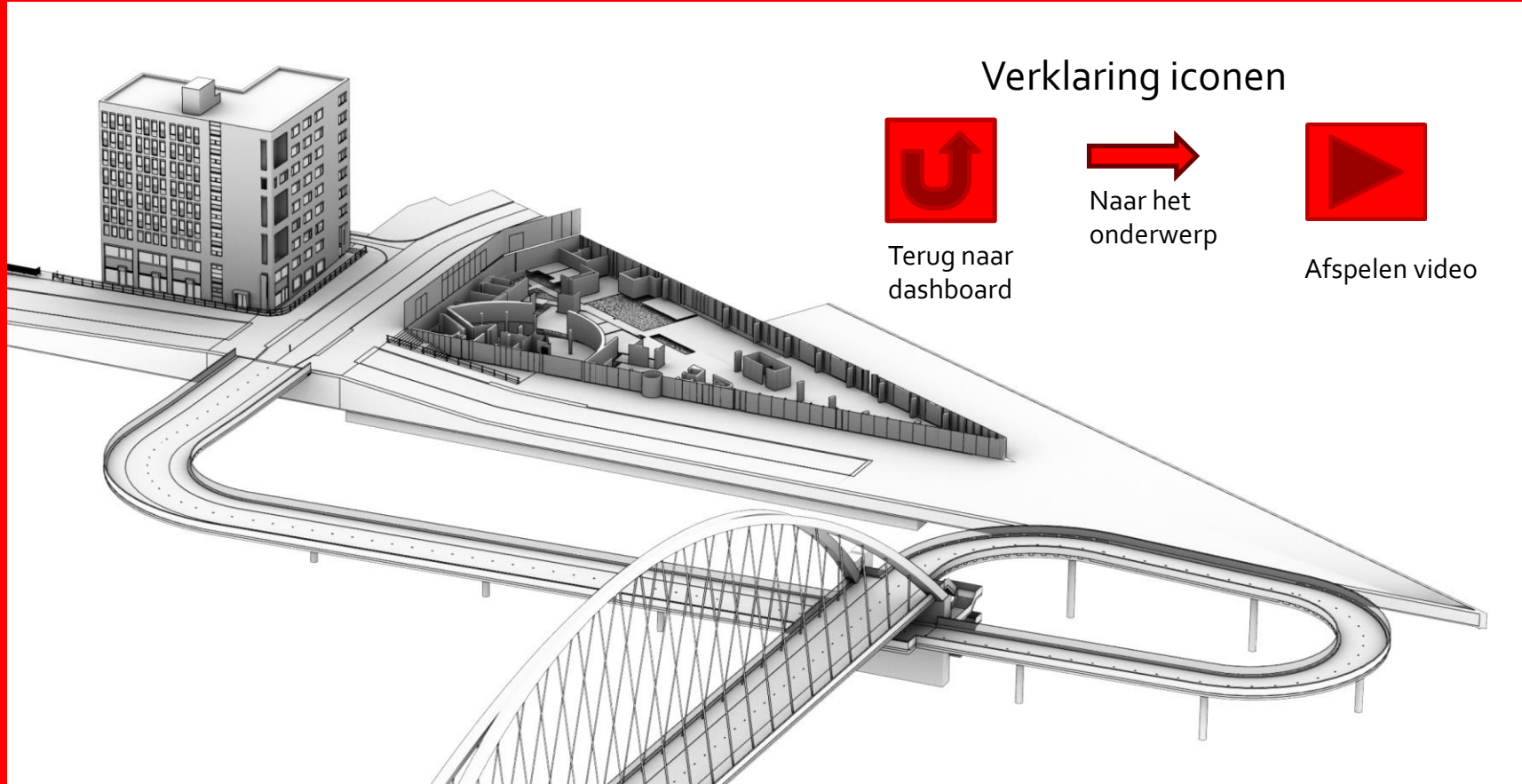


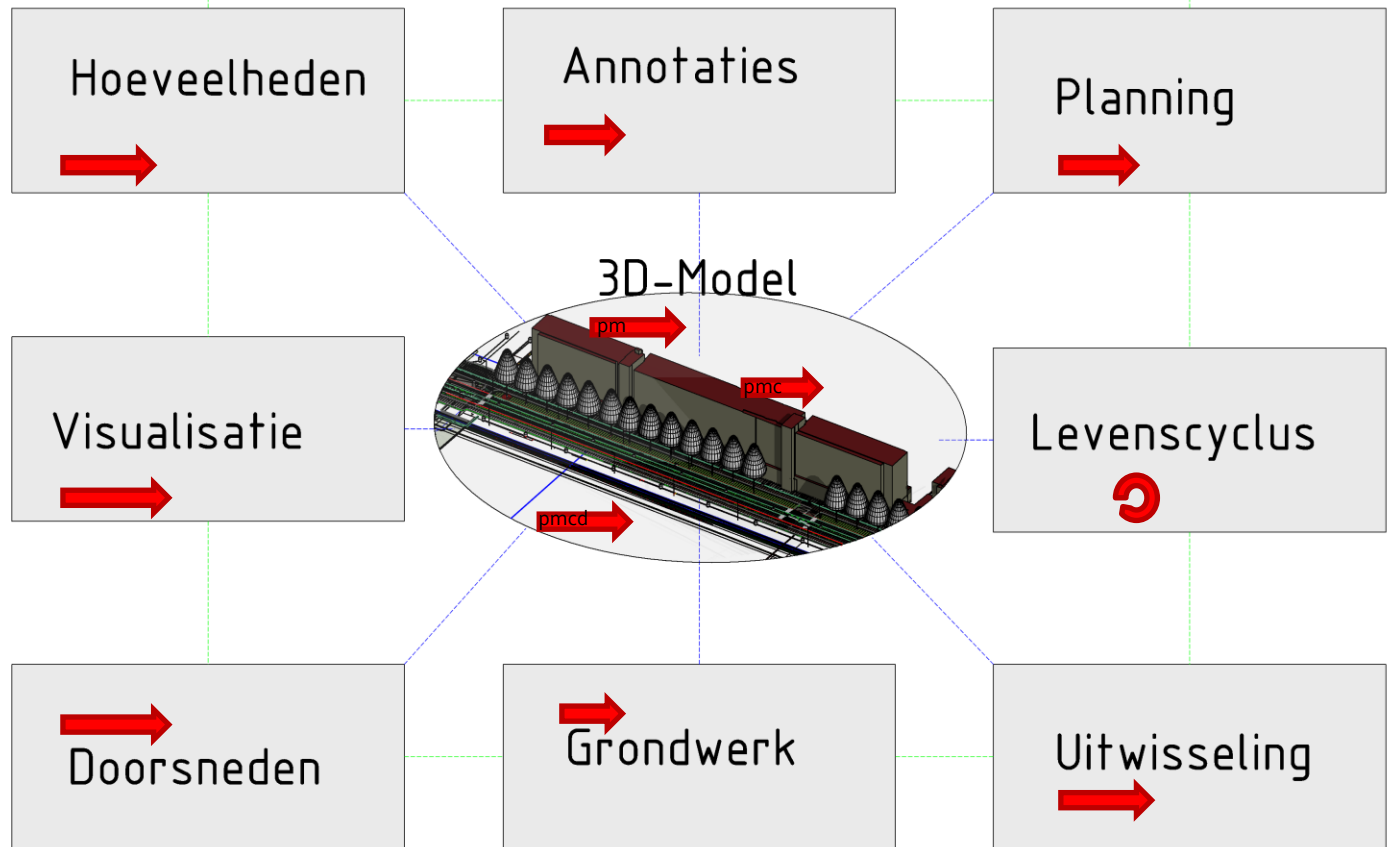


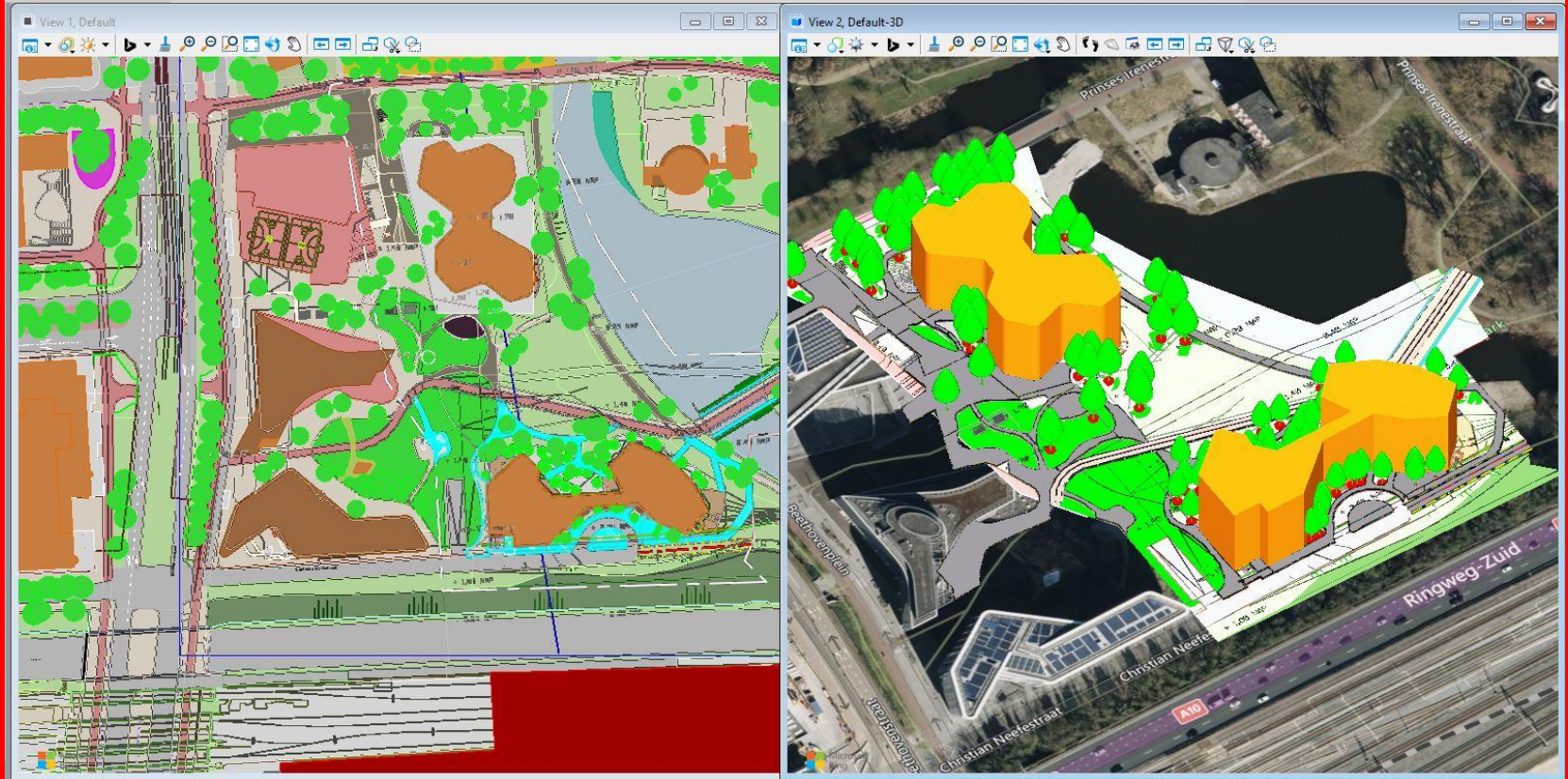
Informatiemodel in Openroads





Informatie

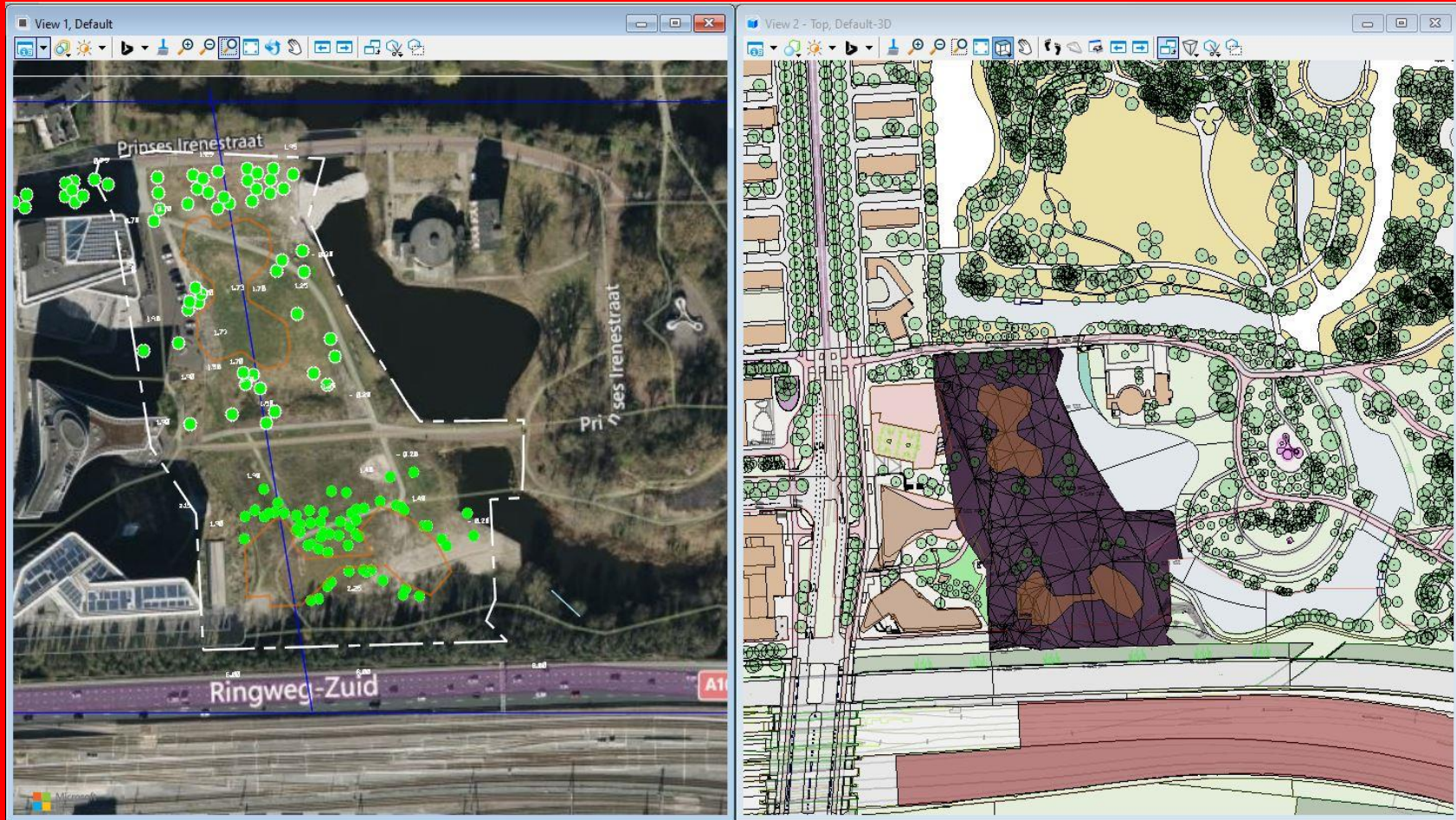






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Informatiemodel Grondwerk BS

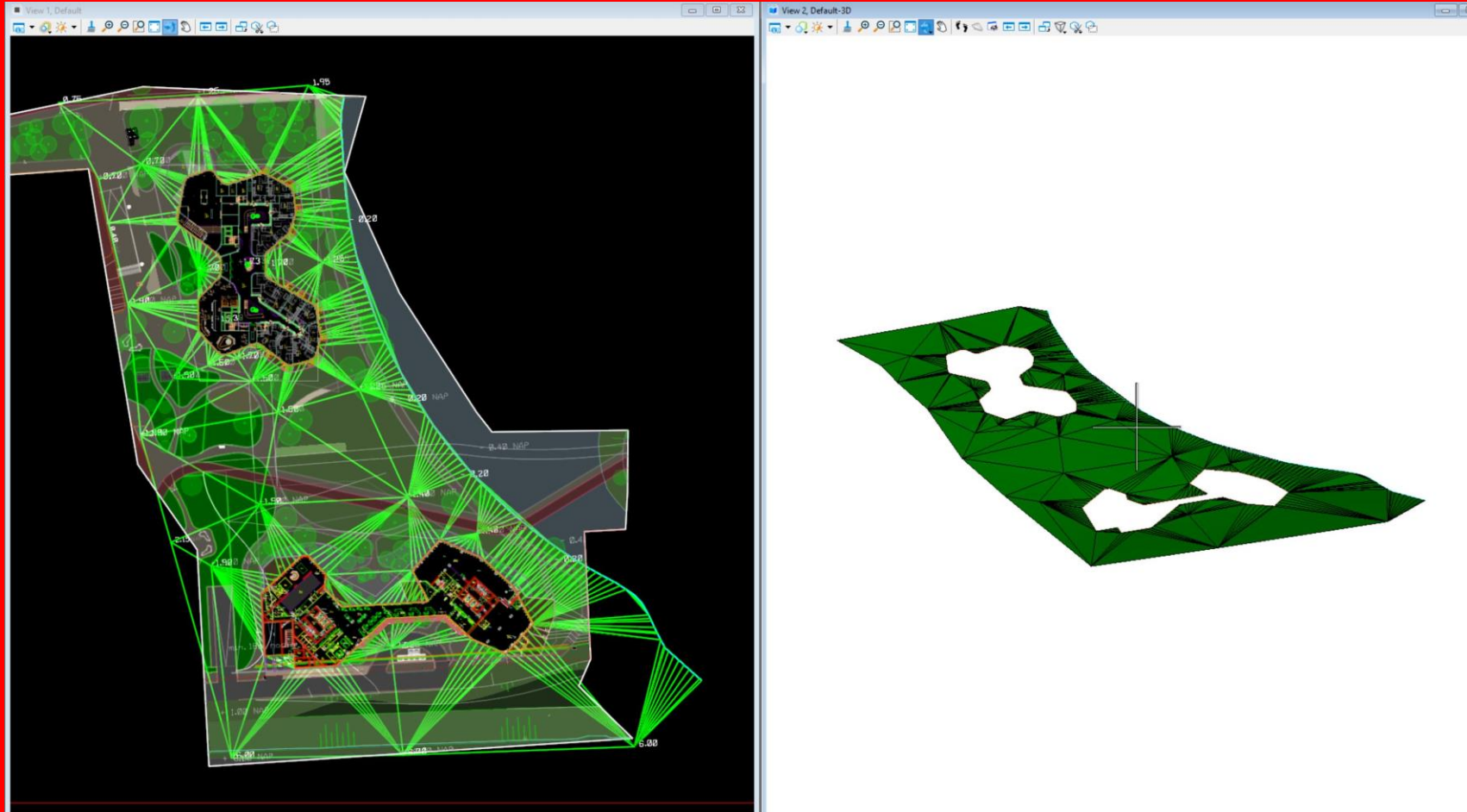


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Informatiemodel Grondwerk NS

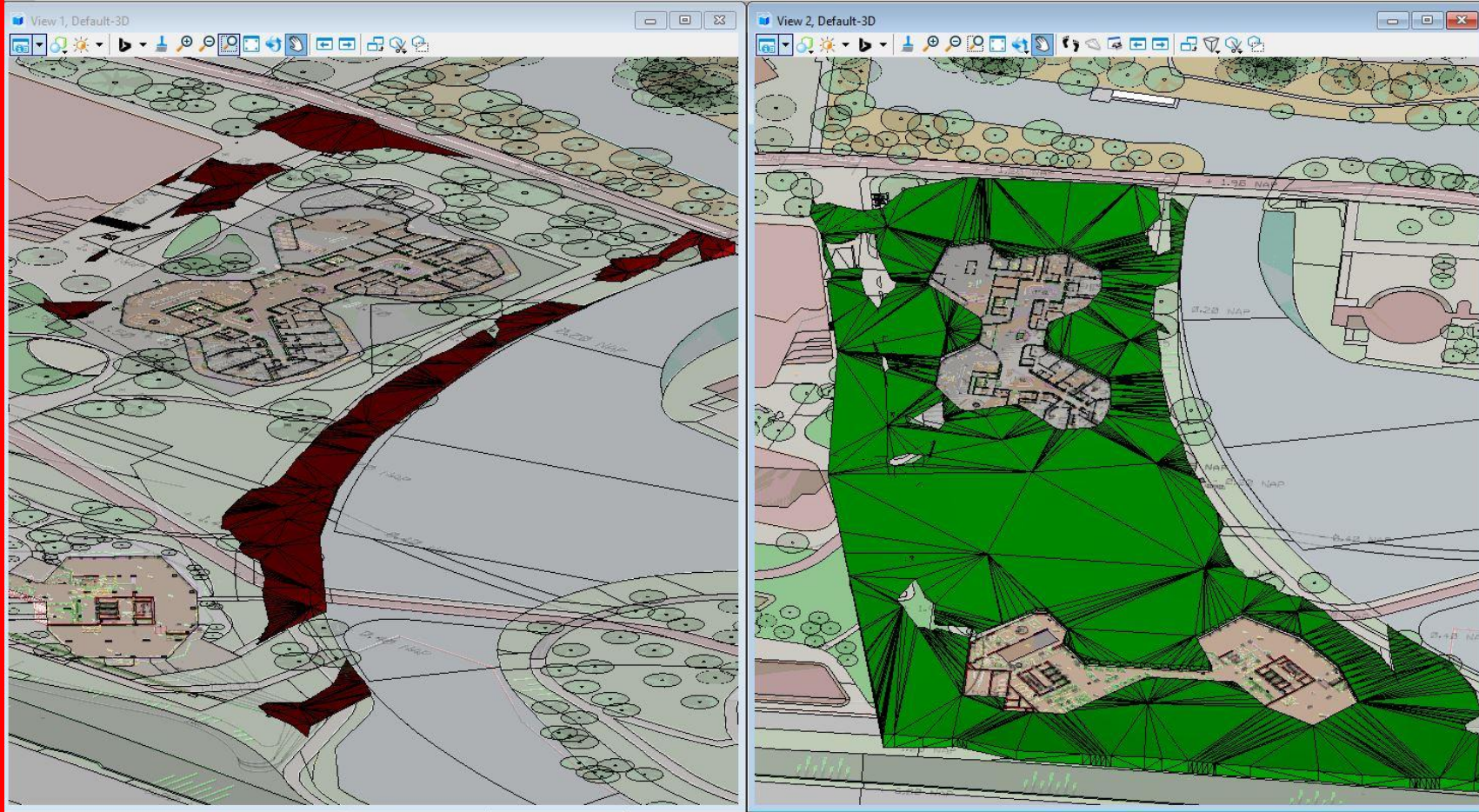


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Informatiemodel
Grondwerk
Ontgraven en aanvullen

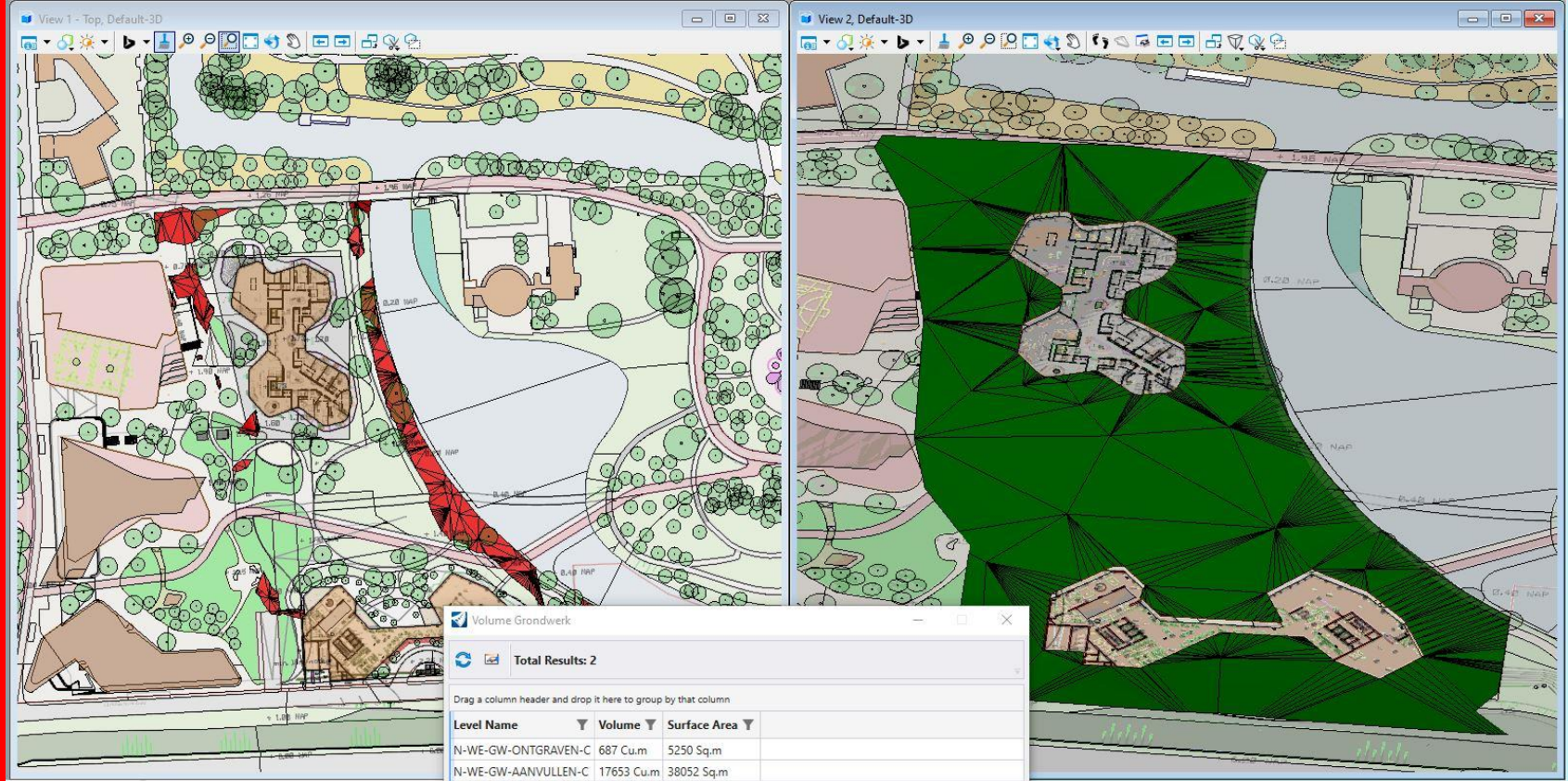


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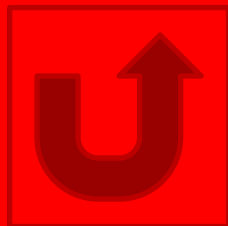


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Informatiemodel Grondwerk Hoeveelheden

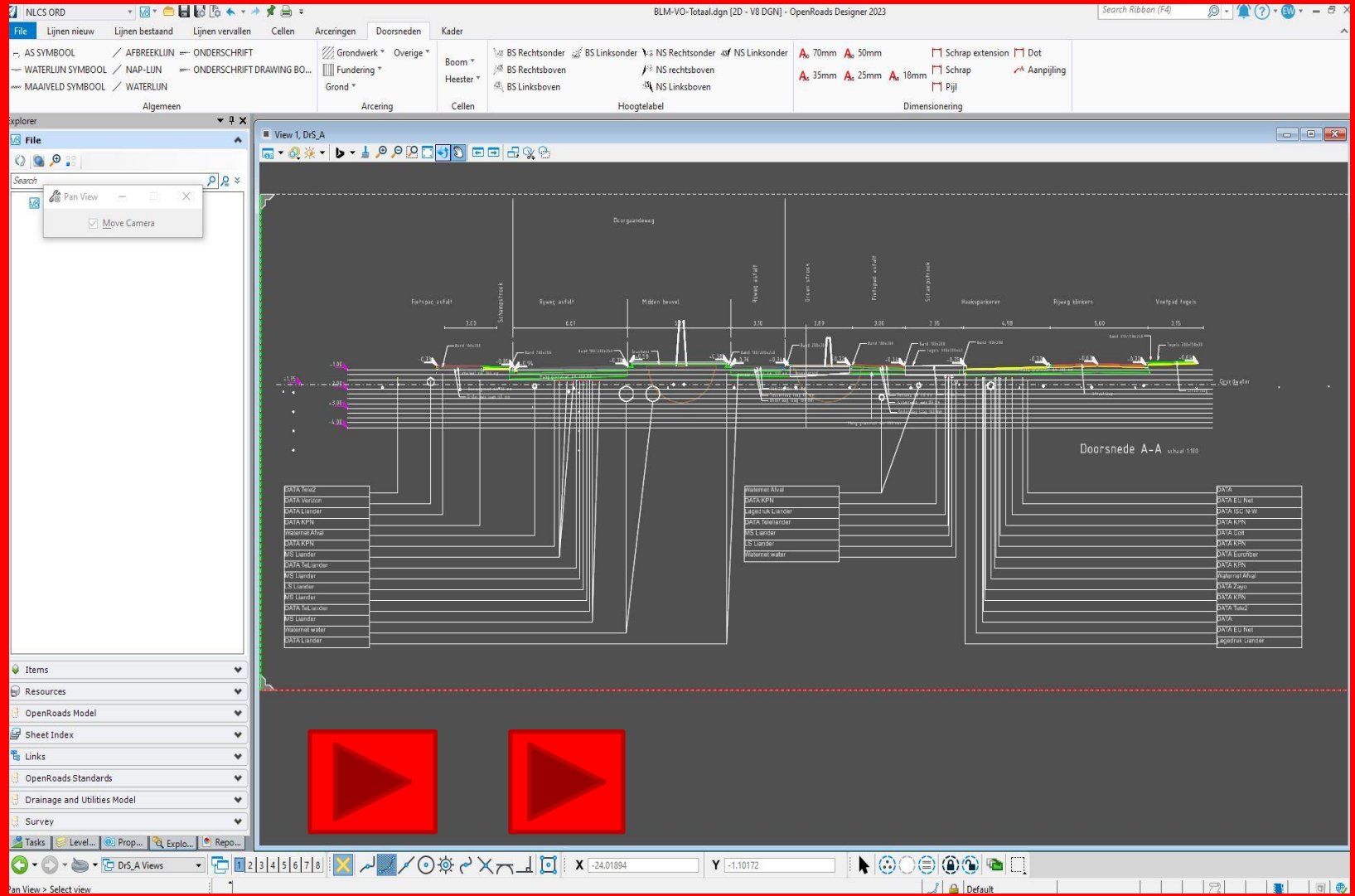


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Informatiemodel Doorsnede



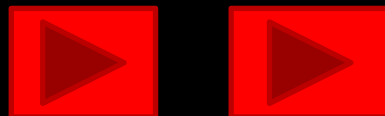
November 2024

Gemeente Amsterdam

Informatiemodel Hoeveelheden

The screenshot shows the Bentley OpenRoads Designer 2023 interface. A 3D model of a road construction project is visible in the background. Overlaid on the model is the 'Bentley Civil Report Browser' window, which displays a table of quantities for various materials and components. The table has three columns: Item Name, Quantity, and Unit. The 'Quantities by Named Boundary Report.xls' file is selected in the left-hand pane.

Item Name	Quantity	Unit
N-WE-VH-CM-VERHARDING_BETONTEGEL_300x150x80_EV-C:	332.126	26.563
N-WE-VH-CM-VERHARDING_GESLOTEN-C:	45.659	22.824
N-WE-VH-CM-VERHARDING_BETONTEGEL_300x300x45_HV-C:	176.338	7.918
N-WE-VH-CM-VERHARDING_BETONTEGEL_300x300_HV-C:	3091.978	245.006
N-WE-VH-CM-VERHARDING_ASFALT_ONDERLAAG-C:	7724.934	695.361
N-WE-VH-CM-VERHARDING_ROLLAAG_ROOD-C:	226.944	18.292
N-WE-VH-CM-VERHARDING_ASFALT_ZWART-C:	4089.148	203.291
N-WE-BC-CM-BETONVORM_GEWAPEND-C:	98.900	49.325
N-WE-VH-CM-VERHARDING_ASFALT_TUSSENLAAG-C:	4095.347	325.268
B-WE-PUT-WKO:	7	
N-BOOM_1STE GROOTTE:	63	
N-CONTAINER-ONDERGRONDS-REST:	13	
N-WE-VH-KANTOPSLUITING_ACHTERKANTBAND-G:	5945.242	
N-WE-VH-KANTOPSLUITING_TROTTOIRBAND_RWS_110220-G-C:	1000.539	
N-WE-AL-KNIKPUNT-G:	228.425	
N-WE-VH-KANTOPSLUITING_TROTTOIRBAND_130150-G-C:	702.314	
N-WE-VH-VERHARDING_MATERIAALVERSCHIL-G:	193.022	
N-WE-VH-KANTVERHARDING-G:	257.581	
N-WE-AL-HARTLIJN-G:	904.124	
N-WE-AL-HULPLIJN-1-G:	605.189	
N-WE-VH-KANTOPSLUITING_TROTTOIRBAND_RWS_110220-G:	26.870	
N-WE-AL-HARTLIJN-G:	120.720	



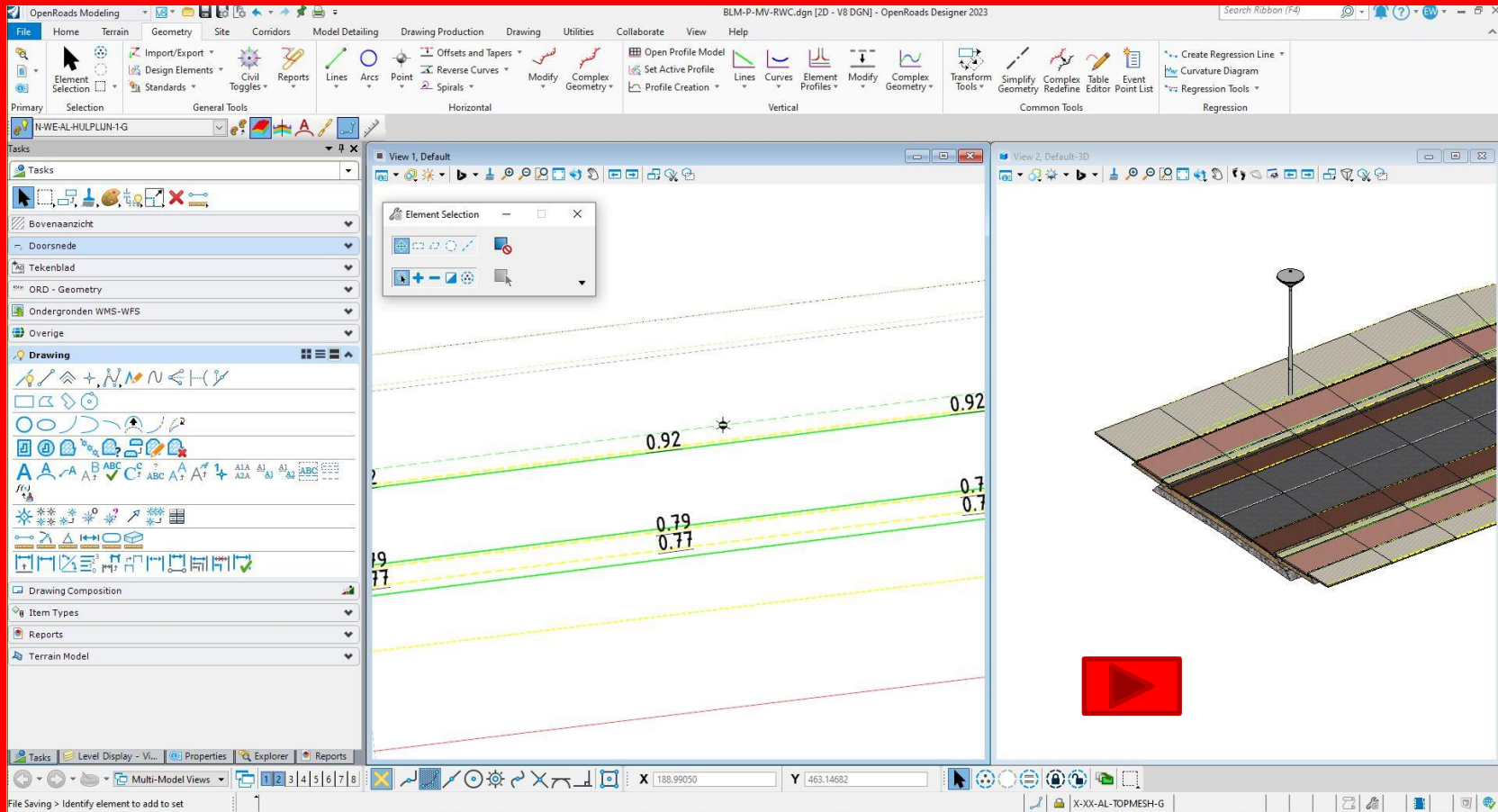
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Informatiemodel Parametrisch Lichtmast



November 2024





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Informatiemodel Parametrisch Corridor

The screenshot displays the OpenRoads Designer 2023 software interface. The main window shows a 3D view of a parametric corridor model, with a 2D plan view visible in the bottom-left corner. The interface includes a ribbon menu with various toolsets such as File, Home, Terrain, Geometry, Site, Corridors, Model Detailing, Drawing Production, Drawing Utilities, Collaborate, View, and Help. A 'Pan View' dialog box is open in the top right corner. The 'Level Display - View 5' panel on the left shows the current view settings. The 'Name' list on the left contains various object names, including 'X-XX-AL-TOPMESH-G', 'X-XX-DTM-BREAKLINE-G', and 'X-XX-AL-CORRIDOR_ELEMENT_ELEMENT-X'. The 'Corridor Objects - N-WE-AL-H' panel on the right shows a table of parametric constraints.

Constraint Label	Enabled	Start Value	Stop Value	Start Slope
Breedte Parkeervak Rec...	True	2.1000	2.1000	
Breedte Parkeervak Links	True	-2.1000	-2.1000	

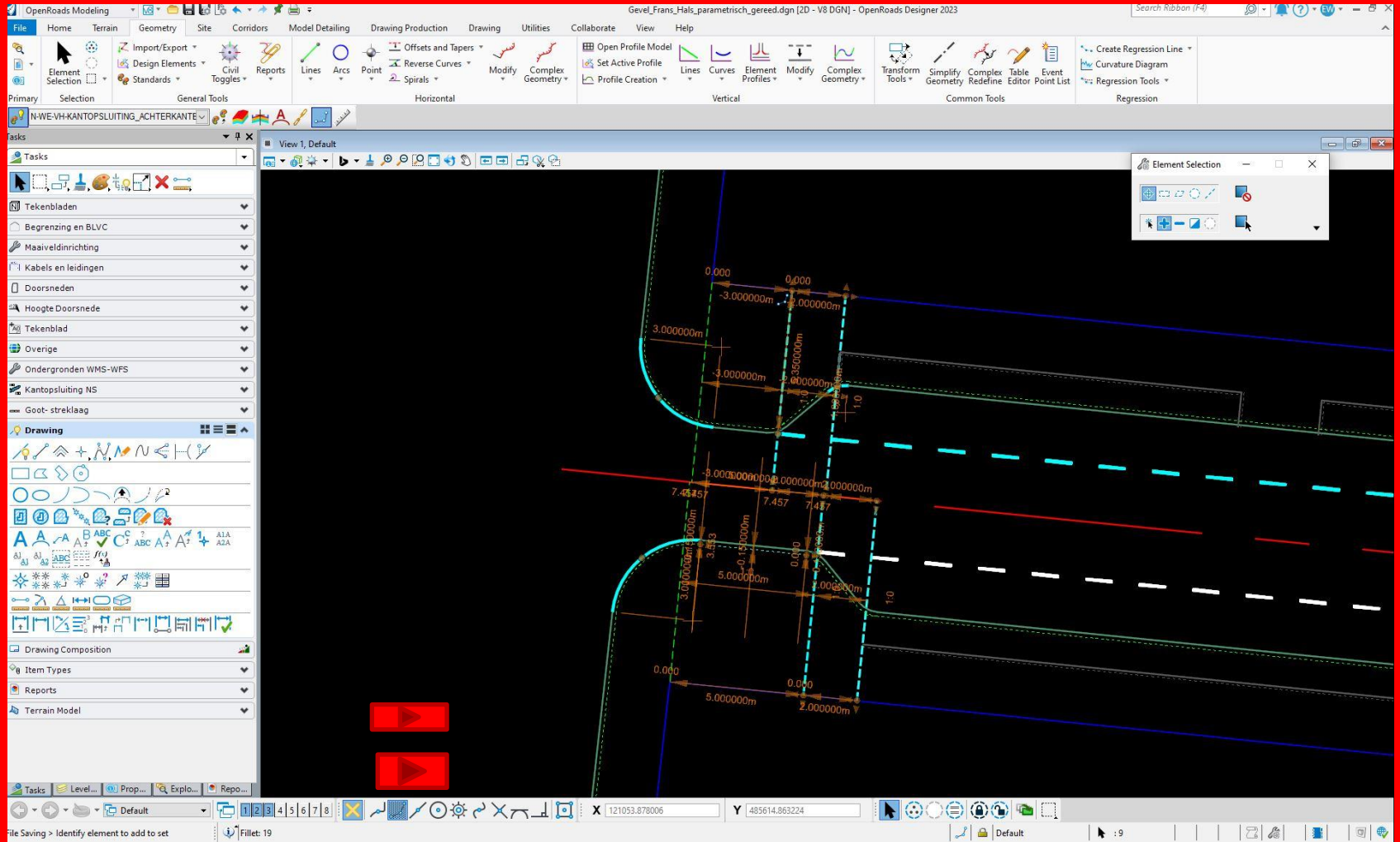
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Informatiemodel Parametrisch plan



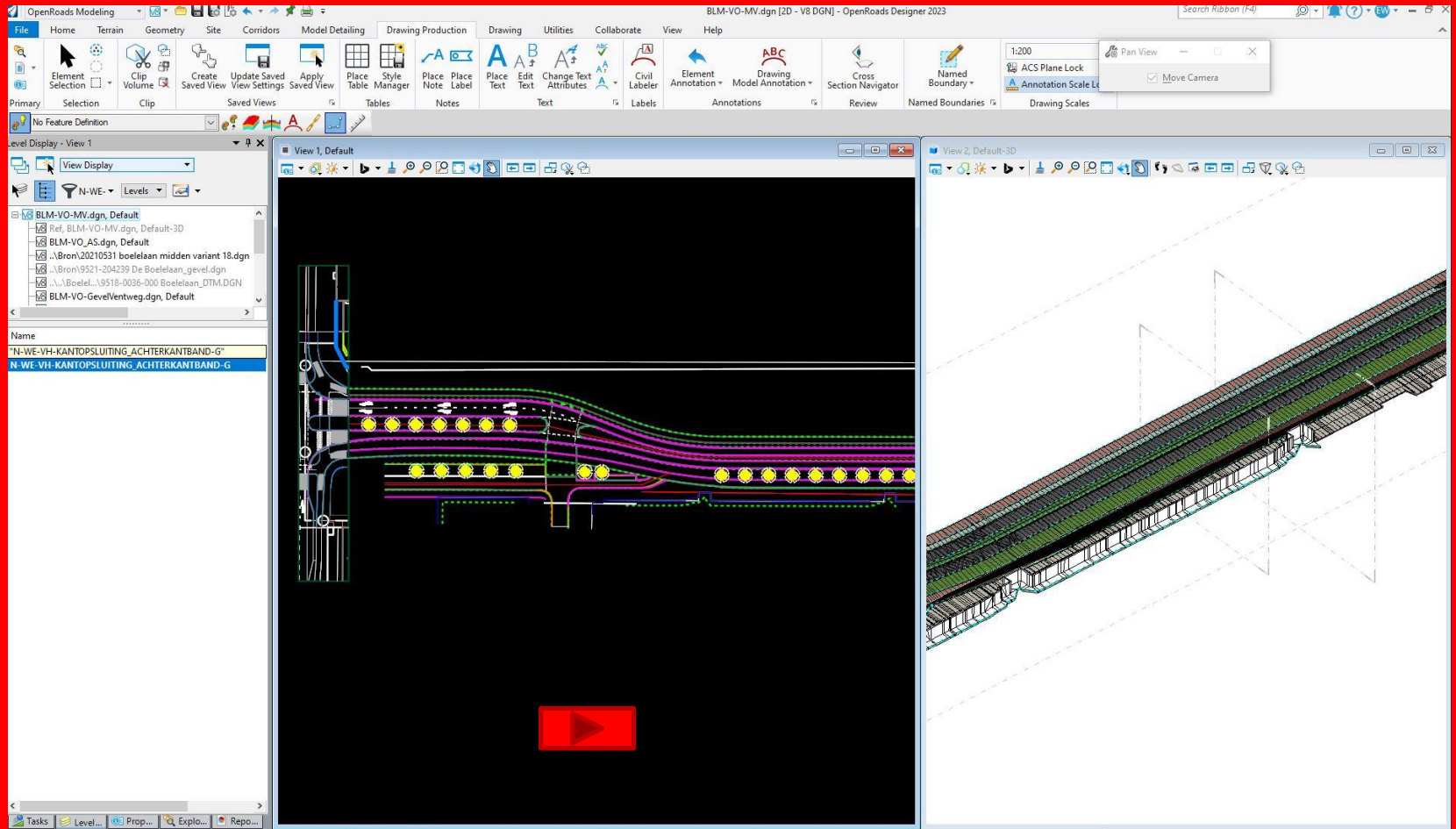
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Informatiemodel Annotation hoogtemaat



November 2024



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Informatiemodel Annotation Legenda

OpenRoads Modeling

BLM-VO-MV.dgn (2D - V8 DGN) - OpenRoads Designer 2023

Search Ribbon (F4)

File Home Terrain Geometry Site Corridors Model Detailing Drawing Production Drawing Utilities Collaborate View Help

Element Selection Clip Volume Create Saved View Update Saved View Settings Apply Saved View Place Table Style Manager Place Note Label Place Text Edit Text Change Text Attributes Civil Labeler Element Annotation Model Annotation Section Note Locate Along ACS Plane Lock

1:200

ACS Plane Lock

Section Note Locate Along ACS Plane Lock

Tasks

View, 1, Default

Labeler

Cross Section

Plan - Drainage and Utilities

Plan - General

Plan - Intersections

Plan - Linear

Banden

Antiekcode

Catalogusnummer

Catalogusnummer

Lengte

Lengte (L)

Materiaal

Naam

Radius

NLCSA: Hellingpercent.

NLCSA: Hoogtemaat - B

NLCSA: Hoogtemaat - N

NLCSA: Hoogtemaat - T

NLCSA: Lengte - Boog

NLCSA: Lengte - Lijn

NLCSA: Naam

NLCSA: Naam met Lead

NLCSA: Offset tussen G

NLCSA: Radius - Boog

NLCSA: Radius - Lijn

Material

Location Method: Locate Along

Element Template: None

Dimension Style Override: Override Dimension Style

Text Style Override: NLCS-T25-A

Leader Location: Auto

Border Frame: Circle

Text Divider: None

Use active

Use active

Use active

Extension: 0.00

Offset: 0.00

Rotation: Horizontal

Interval Type: Increment

Along Interval: 30.0000

Offset: 0.0000

Vertices

Label Offsets

Normal: 0.0000

Tangential: 0.0000

Horizontal: 0.0000

Vertical: 0.7500

Place Close

Tasks

Level... Prop... Explo... Repo...

Default

X 119810.42502 Y 483142.71529

File Saving > Selecteer bandenlijnen

Complex Element: FPL_TL1

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Informatiemodel Annotation plan Gis

The screenshot displays the OpenRoads Designer 2023 software interface. The main window shows a GIS annotation plan for a road project. The interface includes a ribbon menu with tabs for File, Terrain, Geometry, Site, Corridors, Model Detailing, Drawing Production, Drawing Utilities, Collaborate, and View. The central drawing area shows a road layout with various annotations, including trees and utility lines. A red play button is overlaid on the bottom right of the drawing area.

On the left side, the Properties panel shows the selected element's details:

Feature Name	Description
162	

Extended

Model	Default
Last Modified	14-11-2023 11:46:10
Modified	Modified
New	New
Locked	Unlocked
Display Style	(From View Display)

Vondelpark_Bomen

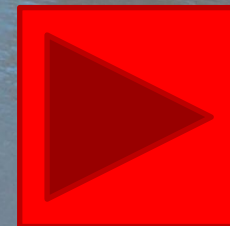
geometry	3161A883140400228000000
autocad_id	
Boomhoogte	d. 12 tot 15 m.
FID	161
geometrie	
Groeiplate	
Grondsoo00	
Grondsoort	
ID_uit_oud	7A793AF8-0A1A-4B69-BE54-D
igds_level	N-WE-KG-WERKRENS-G
igds_model	Default
Jaar_van_a	1960
Soortnaam	Pterocarya fraxinifolia
Standpla00	Samenhangend
Standpla01	
Standplaat	Halfverharding
Status	
Type	Boom niet vrij uitgroeiend
Type_extra	
Type_gedet	

On the right side, the Labeler panel shows the configuration for the selected element:

Property	Value	Option
Location Method	Select Elements	
Element Template	N-WE-AL-M	<input type="checkbox"/> Use active
Dimension Style Override	Override Dimension Style	<input type="checkbox"/> Use active
Text Style Override	Override Text Style	<input type="checkbox"/> Use active
Leader Location	None	<input type="checkbox"/> Use active
Extension	2.00	
Border Frame	None	
Text Divider	None	
Offset	0.50	
Rotation	Horizontaal	<input type="checkbox"/> Lock Perpendicular
		<input checked="" type="checkbox"/> Use Selection
		<input checked="" type="checkbox"/> Use Fence

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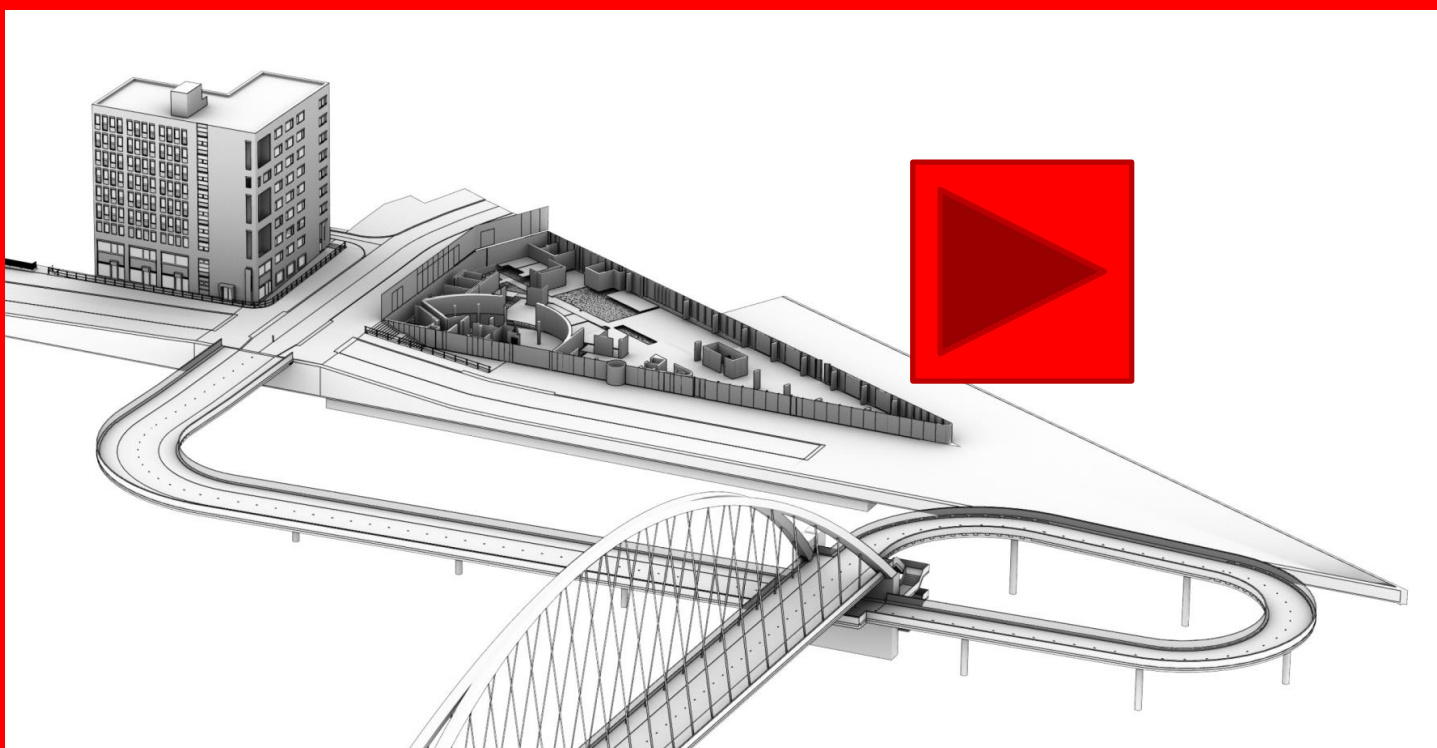
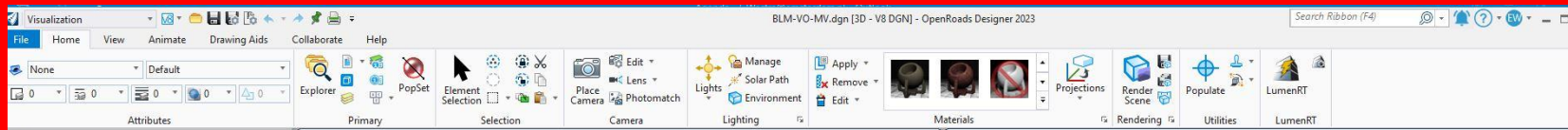






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Informatiemodel Visualization



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Informatiemodel Planning

3D Objects

ID	Name	Duration	Start	Finish	3D Reso.
1	ST00... 10B MH	365d	09:00 20/05/24	17:00 10/10/25	
2	ST00... 10B VS	700d	09:00 20/02/24	17:00 26/10/26	
3	ST00... 11VS	450d	09:00 20/02/25	17:00 11/11/26	
4	ST00... 10A	600d	09:00 20/02/26	17:00 08/06/28	
5	ST00... 9A	650d	09:00 20/02/26	17:00 17/08/28	
6	ST00... 9B	650d	09:00 20/02/26	17:00 17/08/28	
7	ST00... 9C	650d	09:00 22/02/27	17:00 17/08/29	
8	ST00... 12B	365d	09:00 22/02/27	17:00 14/07/28	
9	ST00... 12AMH	800d	09:00 22/02/27	17:00 15/03/30	
10	ST00... 12AVS	368d	09:00 21/02/28	17:00 18/07/29	
11	ST00... 13A	450d	09:00 21/02/28	17:00 09/11/29	
12	ST00... 13BSH	451d	09:00 21/02/28	17:00 12/11/29	
13	ST00... 14	900d	09:00 20/02/29	17:00 02/08/32	
14	ST00... CTR	600d	09:00 20/02/29	17:00 09/06/31	

3D Using Dates [Best] Colors [Appearance Profiles] [1598x187]

TOP FRONT

Enough memory [Filter Off] Selected [1][0][1] 09:00 15/04/29 Private Project Transactions: 55 100%

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Informatiemodel Hoeveelheden

The screenshot shows the Bentley OpenRoads Designer 2023 interface. The main window displays a 3D model of a road construction project. A 'Bentley Civil Report Browser' window is open, showing a list of report files on the left and a table of quantities on the right. The table lists various report items and their corresponding quantities.

Report Item	Quantity 1	Quantity 2
N-WE-VH-CM-VERHARDING_BETONTEGEL_300x150x80_EV-C:	332.126	26.563
N-WE-VH-CM-VERHARDING_GESLOTEN-C:	45.659	22.824
N-WE-VH-CM-VERHARDING_BETONTEGEL_300x300x45_HV-C:	176.338	7.918
N-WE-VH-CM-VERHARDING_BETONTEGEL_300x300_HV-C:	3091.978	245.006
N-WE-VH-CM-VERHARDING_ASFALT_ONDERLAAG-C:	7724.934	695.361
N-WE-VH-CM-VERHARDING_ROLLAAG_ROOD-C:	226.944	18.292
N-WE-VH-CM-VERHARDING_ASFALT_ZWART-C:	4089.148	203.291
N-WE-BC-CM-BETONVORM_GEWAPEND-C:	98.900	49.325
N-WE-VH-CM-VERHARDING_ASFALT_TUSSENLAAG-C:	4095.347	325.268
B-WE-PUT-WKO:	7	
N-BOOM_1STE GROOTTE:	63	
N-CONTAINER-ONDERGRONDS-REST:	13	
N-WE-VH-KANTOPSLUITING_ACHTERKANTBAND-G:	5945.242	
N-WE-VH-KANTOPSLUITING_TROTTOIRBAND_RWS_110220-G-C:	1000.539	
N-WE-AL-KNIKPUNT-G:	228.425	
N-WE-VH-KANTOPSLUITING_TROTTOIRBAND_130150-G-C:	702.314	
N-WE-VH-VERHARDING_MATERIALVERSCHIL-G:	193.022	
N-WE-VH-KANTVERHARDING-G:	257.581	
N-WE-AL-HARTLIJN-G:	904.124	
N-WE-AL-HULPLIJN-1-G:	605.189	
N-WE-VH-KANTOPSLUITING_TROTTOIRBAND_RWS_110220-G:	26.870	
N-WE-AL-HARTLIJN-G:	120.720	

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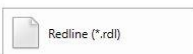


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Informatiemodel Uitwisselingsformaten Export




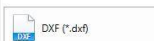




3D Modeling File Types

 ACIS (*.sat)	Geometric modeling kernel developed by Spatial Corporation (formerly Spatial Technology).
 OBJ (*.obj)	Geometry definition file format first developed by Wavefront Technologies.
 Parasolids (*.x_t)	A geometric modeling kernel originally developed by ShapeData, now owned by Siemens PLM Software (formerly UGS Corp.)
 SketchUp (*.skp)	SketchUp is a 3D modeling program for applications such as architectural, interior design, civil and mechanical engineering, film, and video game design.
 Stereolithography (*.stl)	Standard Tessellation Language file. A file format native to the stereolithography CAD software created by 3D Systems.







Common File Types

 3D	A DGN-based file containing a 3D design model using the content from the current model.
 Export with Display Rules	Export to dgn or dwg/dxf format using active display rules.
 DWG (*.dwg)	Autodesk(r) Drawing File.
 Design Library (*.dgnlib)	A DGN-based file that is labelled as a "Design library" that contains data resources, such as cells, levels, and styles.
 Redline (*.rdl)	A DGN-based file that used by for markup and redlining workflows.
 V8 Format Design (*.dgn)	Bentley V8 format design file.
 Visible Edges (*.hln)	A DGN-based file that contains the edges of surfaces that are visible.

Exchange File Types

 PDF (*.pdf)	Adobe PDF.
 CGM (*.cgm)	Computer Graphics Metafile.
 Collada (*.dae)	Collaborative Design Activity. An interchange file format for interactive 3D applications.
 DXF (*.dxf)	Drawing Exchange Format. A drawing exchange file format supported by most CAD packages.
 FBX (*.fbx)	Filmbox format. A proprietary format owned by Autodesk (r).
 IGES (*.igs)	Initial Graphics Exchange Specification.
 JT Format (*.jt)	A 3D data format developed by Siemens PLM Software (formerly UGS Corp.).
 STEP (*.stp)	Standard for the Exchange of Product model data (AP203/AP214).

Visualization File Types














 Google Earth (*.kml)	Keyhole Markup Language (KML) A XML based file containing notation for expressing geographic annotation and visualization within Internet-based, two-dimensional maps and three-dimensional Earth browsers.
 Luxology (*.lxo)	Luxology scene file format for modo.
 SVG (*.svg)	Scalable Vector Graphics. An XML-based vector image format for two-dimensional graphics with support for interactivity and animation.
 USD (*.usd)	Universal 3D. A compressed file format standard for 3D computer graphics data.
 VRML (*.vrmil)	Virtual Reality Modeling Language. A standard file format for representing 3-dimensional (3D) interactive vector graphics, designed particularly with the World Wide Web in mind.
 VUE (*.vob)	Eon Vue object format



Gemeente Amsterdam

Informatiemodel Uitwisselingsformaten Import








Common File Types

 DWG (*.dwg)	Autodesk(r) Drawing File.
 DGN (*.dgn)	Design File. A CAD file format supported by Bentley Systems Inc. The native format file for OpenRoads Designer.
 Cell Library (*.cel)	A DGN-based file that stores cells.
 DGNLIB (*.dgnlib)	Design Library. A DGN-based file that contains data resources, such as cells, levels, and styles.
 Redline (*.rdl)	A DGN-based file that used by for markup and redlining workflows.
 Sheet (*.s)	A 3D DGN-based file in which views of the model file(s), including visible edges and sections, are attached.
 DgnDB (*.idgndb)	DgnDB file.
 Imodel (*.imodel)	A DGN-Based file that is a digital container for the open exchange of infrastructure information.
 Shapefile (*.shp)	A popular geospatial vector data format for geographic information system software.
 Text (*.txt)	Text File. An ASCII format file that is structured as a sequence of lines of text.
 Image	Common raster file format.
 MIF/MID (*.mif)	MapInfo interchange format file stores both geometry and attributes (data) for features.
 TAB (*.tab)	MapInfo native format file stores both geometry and attributes (data) for features.

Exchange File Types

 DXF (*.dxf)	Drawing Exchange Format. A drawing exchange file format supported by most CAD packages.
 CGM (*.cgm)	Computer Graphics Metafile
 FBX (*.fbx)	Filmbox format. A proprietary format owned by Autodesk (r).
 PDF (*.pdf)	Portable Document Format File. [Technology Preview]
 JT Format (*.jt)	A 3D data format developed by Siemens PLM Software (formerly UGS Corp.).
 IGES (*.igs)	Initial Graphics Exchange Specification.
 IFC (*.ifc)	Industry Foundation Classes. A data model intended to describe building and construction industry data.
 RFA (*.rfa)	Autodesk Revit Family file which contains components that can be placed in a project.
 STEP (*.stp)	Standard for the Exchange of Product model data (AP203/AP214).

3D Modeling File Types

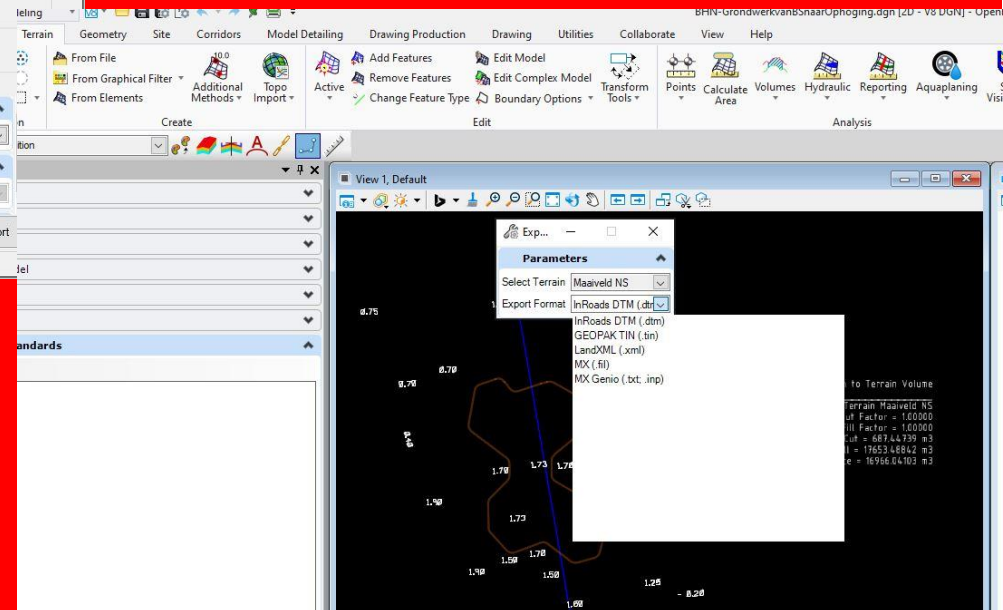
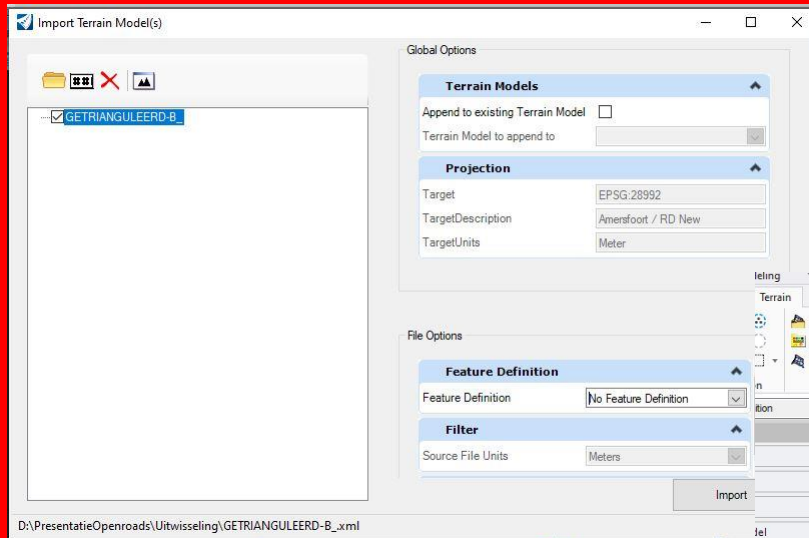
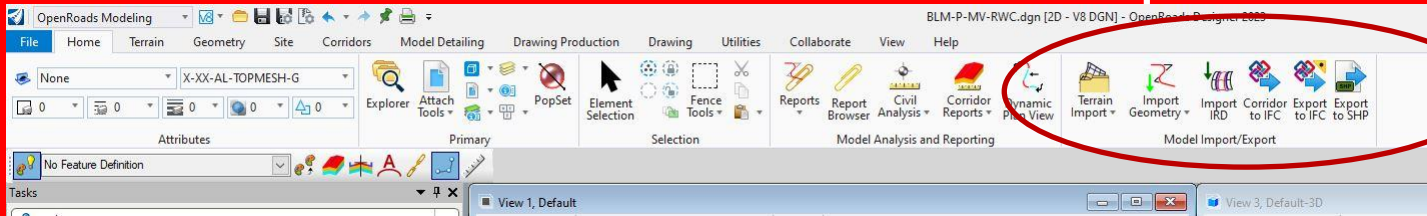
 ACIS (*.sat)	Geometric modeling kernel developed by Spatial Corporation (formerly Spatial Technology).
 3DS (*.3ds)	3D Studio File. A File format used by the Autodesk(r) 3ds Max 3D modeling, animation and rendering software.
 SketchUp (*.skp)	SketchUp is a 3D modeling program for applications such as architectural, interior design, civil and mechanical engineering, film, and video game design.
 3DM (*.3dm)	Rhino file. Useful for the exchange of NURBS geometry.
 Stereolithography (*.stl)	Stereolithography file. Also known as Standard Tessellation Language file. A file format native to the stereolithography CAD software created by 3D Systems.
 Parasolid (*.x_t)	A geometric modeling kernel originally developed by ShapeData, now owned by Siemens PLM Software (formerly UGS Corp.)
 OBJ (*.obj)	Geometry definition file format first developed by Wavefront Technologies.

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Informatiemodel Uitwisselingsformaten Import



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