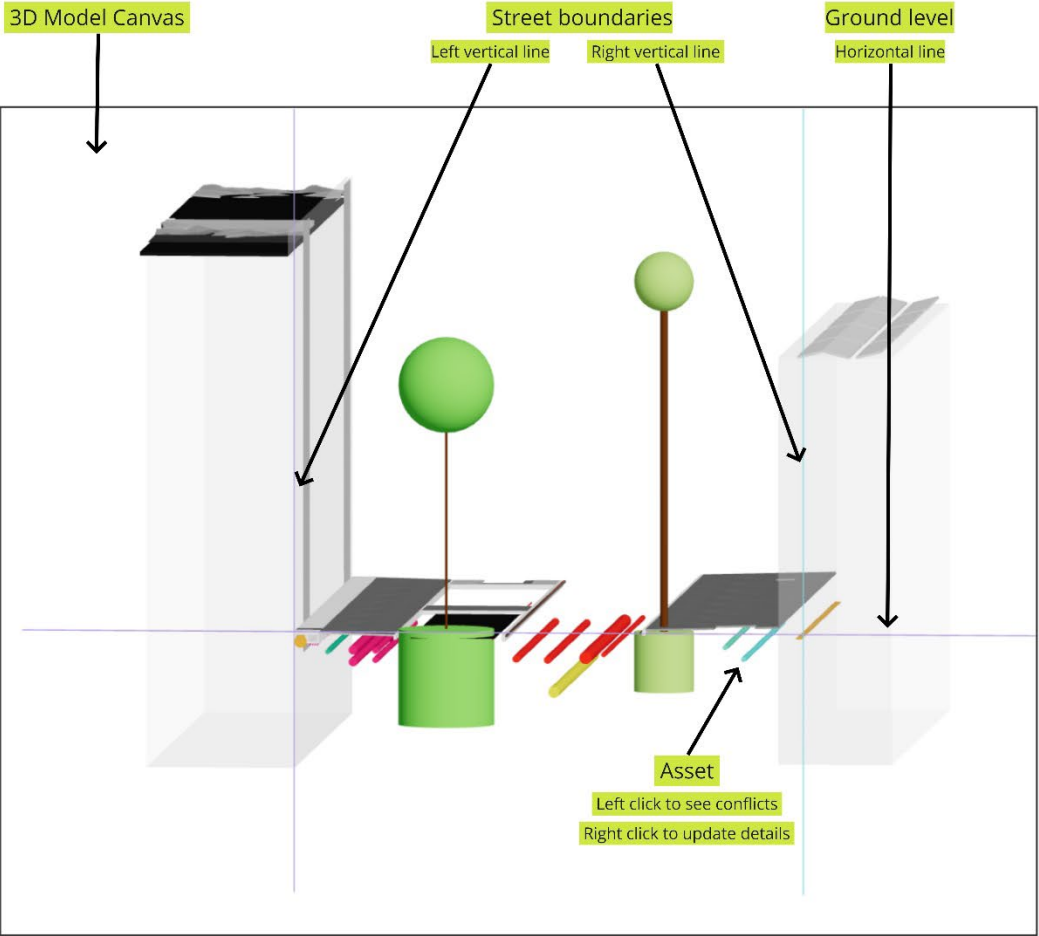


Layout



**Legend**

- CAI/T
- E (LS)
- G\_t
- Warmte LT
- E (MS)\_d
- Boom 3
- HWA/ RWA
- DWA\_t
- DWA\_d
- Boom 2
- G\_d
- W\_d
- Selected
- Conflict

**Conflicts log**

These are the conflicts for the selected object DWA\_t

- Selected Object 16 (DWA\_t) has a conflict with Object 15 (DWA\_d)
- Selected Object 16 (DWA\_t) has a conflict with Object 17 (Warmte LT)
- Selected Object 16 (DWA\_t) has a conflict with Object 14 (HWA/ RWA)
- Selected Object 16 (DWA\_t) has a conflict with Object 18 (Warmte LT)
- Selected Object 16 (DWA\_t) has a conflict with Object 13 (E (LS))

**Instructions button**

**Conflict log**  
on click of asset

**Buttons**

Views: Rotation

Front Top Perspective

Show: Grid Asset Details

Asset: Add Clear all

3D Model: Upload background

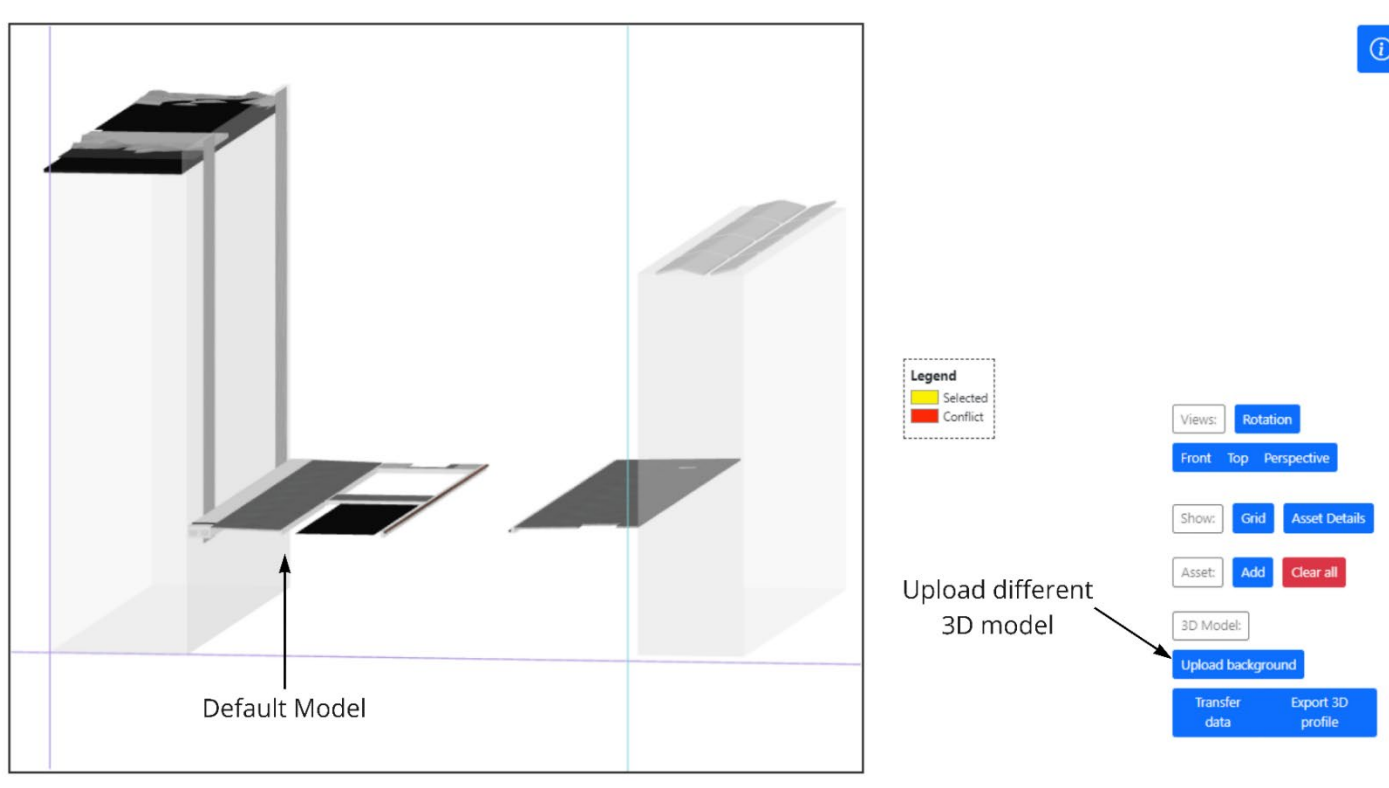
Transfer data Export 3D profile

## Instructions

- All values are in meters
- Use point ( . ) for decimal values not comma ( , )

### Steps to use the tool

1. **3D background:** Default 3D model in background is Haaksbergweg profile, to change it click on the Upload 3D Model button and select a 3D file (glTF) from your computer. File size should be max 50 MB.<sup>1</sup>



<sup>1</sup> Note that this feature is currently not working the tool (production environment). A workaround for this is update the default background file. More details are in the Maintenance section in "Workaround for upload 3D background".

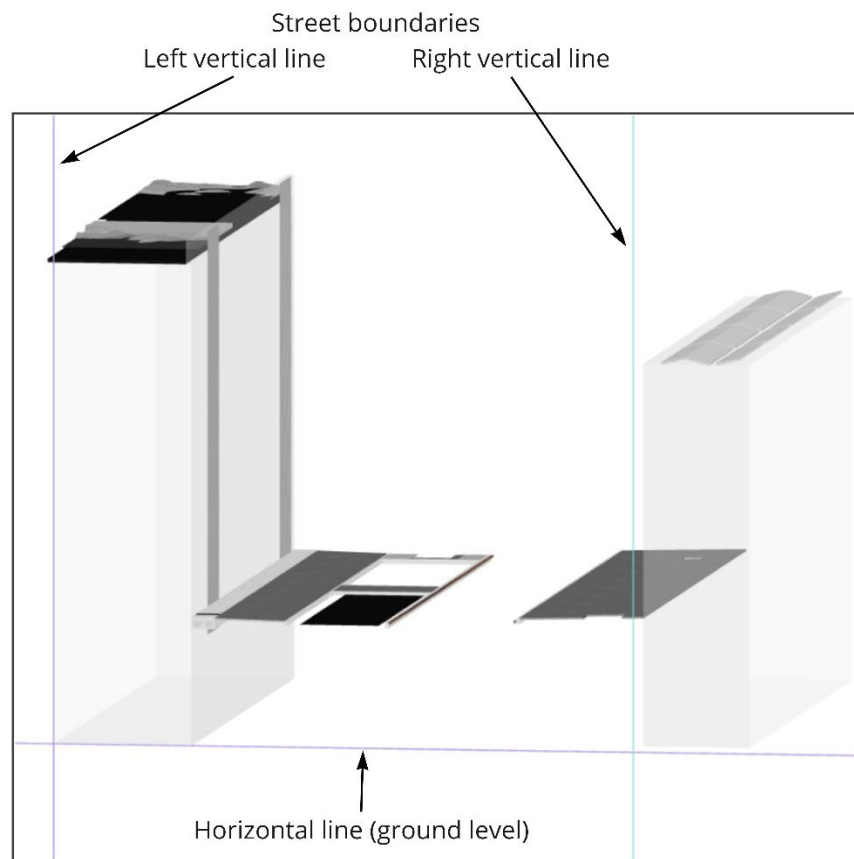
2. **Reference line (x and y axis):** To set the reference lines for the ground level and street boundaries, user should get the exact values from the 3D model of street.

- a. Double-clicking on the horizontal line and set the reference ground level (in meters)
  - Note: Ground level is just reference height of the street and is always same for the whole street.



- b. Double-click on the left vertical line (dark blue in color) and set it to the left end of the street. (in meters)
- c. Double-click on the right vertical line (light blue in color) and set it to the right end of the street. (in meters)
  - Note: Street width is the value of the right vertical line minus the left vertical line

Double click on the line to change values



Views: **Rotation**

**Front** Top Perspective

Show: **Grid** Asset Details

Asset: **Add** Clear all

3D Model:

**Upload background**

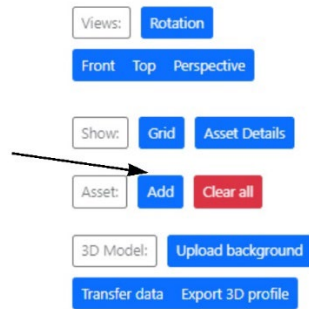
Transfer data Export 3D profile

A vertical toolbar on the right side of the interface. It contains several buttons for controlling the 3D model: 'Views: Rotation', 'Front Top Perspective', 'Show: Grid Asset Details', 'Asset: Add Clear all', '3D Model:', 'Upload background', and 'Transfer data Export 3D profile'.

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3. **Adding assets:** The different assets can be added to the street profile in the following manner.

a. Click on the button “Add asset”



b. Choose the asset type. And then define asset properties

The image shows two side-by-side screenshots of the 'Asset details' dialog box, illustrating the process of adding an asset. The left screenshot shows the 'Persleiding (transp)' asset type, and the right screenshot shows the 'Electra Laagspanning (dist)' asset type. Both screenshots include annotations explaining the fields and buttons.

**Left Screenshot (Persleiding (transp)):**

- Type:** Persleiding (transp)
- Diameter of this asset (in meters):** A range slider is shown. An annotation points to it: "Range slider based on uitlegschema values". Below the slider is a button "Override Diameter Range" and a text field "Overridden diameter value". An annotation points to the button: "Override value by clicking on this button and entering a value".
- Depth (in meters):** A text field with the value ">0.8". An annotation points to it: "Recommended value from uitlegschema as placeholder". Below the field is a note: "Use point for decimal places. For example 2.50 Please do not use comma or alphabets in the field." (user inputs a desired value)
- Distance (in meters):** A text field with the value "User inputs desired value". Below the field is a note: "Use point for decimal places. For example 2.50 Please do not use comma or alphabets in the field." (user inputs a desired value)
- Buttons:** "Close" and "Upload Asset". An annotation points to the "Upload Asset" button: "Upload asset by filling all the fields and clicking on 'Upload Asset' button".

**Right Screenshot (Electra Laagspanning (dist)):**

- Type:** Electra Laagspanning (dist)
- Diameter of this asset (in meters):** A text field with the value "0.07". An annotation points to it: "Autofill recommended value from uitlegschema (Editable by user)".
- Depth (in meters):** A text field with the value "0.6". An annotation points to it: "Recommended value from uitlegschema as placeholder". Below the field is a note: "Use point for decimal places. For example 2.50 Please do not use comma or alphabets in the field." (user inputs a desired value)
- Distance (in meters):** A text field with the value "User inputs desired value". Below the field is a note: "Use point for decimal places. For example 2.50 Please do not use comma or alphabets in the field." (user inputs a desired value)
- Buttons:** "Close" and "Upload Asset".

- Recommended diameter from the uitleg schema is shown for the asset. Set the Diameter of the asset. This value can be changed as choice
- Recommended Depth of the asset is shown in a placeholder. You still need to enter the value. The depth in the 3D Model is from the horizontal line to the top edge of the asset.
- Enter the distance of the asset from the left vertical line. In 3D model, this is shown from the left vertical line to the center of the added asset.
- Upload the asset.
- Add all the assets for the profile in a similar manner.

## Legenda

\* transp -> transport

\* dist -> distribution

- CAI/T - CAI/ TV/ Telecom (transp)
- Data – Glasvezel (dist)
- E (LS) - Electra Laagspanning (dist)
- E (MS)\_t - Electra Middenspanning (transp)
- E (MS)\_d - Electra Middenspanning (dist)
- E (HS) - Electra Hoogspanning (transp)
- DWA\_t - DWA Droogweerafvoer (onderheid riool) (transp)
- DWA\_d - DWA Droogweerafvoer (riool) (dist)
- DWA+RWA (gemengd)\_t - DWA+RWA (gemengd) Droogweerafvoer (onderheid riool) (transp)
- DWA+RWA (gemengd)\_d - DWA+RWA (gemengd) Droogweerafvoer (riool) (dist)
- HWA/ RWA - Hemelwaterafvoer (riool) (dist)
- PL – Persleiding (transp)
- Warmte\_HT - Warmtenet Hoogtemperatuur (HT) (transp)
- Warmte\_MT - Warmtenet Midden temperatuur (MT) (dist)
- Warmte LT - Warmtenet Lage Temperatuur (dist)
- Koude
- Datawarmte
- W\_t – Drinkwater (transp)
- W\_d - Drinkwater (dist)
- G\_t – Gas (transp)
- G\_d - Gas (dist)
- O.A.T. - Ondergronds Afval Transport (transp)
- Boom 1 – Tree height more than 15 meters
- Boom 2 - Tree height between 10 and 15 meters
- Boom 3 - Tree height between 6 to 10 meters
- Gebouwen

Uitlegschema used in the tool



afstand/Asset	afstand/Beschrijving	afstand/Categorie	afstand/Color	afstand/Diameter	afstand/Depth	afstand/CAI/T	afstand/Data	afstand/E (LS)	afstand/E (MS)	afstand/E (HS)	afstand/DWA	afstand/DWA+RWA (gemengd)	afstand/HWA/ RWA	afstand/PL	afstand/Warmte	afstand/Warmte LT	afstand/Koude	afstand/Datawarmte	afstand/W	afstand/G	afstand/Boom 1	afstand/Boom 2	afstand/Boom 3	afstand/Gebouwen
CAI/T	CAI/ TV/ Telecom	transp	#F5A623	0.08-0.1	0.6	0.5	0	0.5	0.75	2	0.75	0.75	0.75	0.75	0.7	0.7	0.7	0.7	0.5	0.3	2	1.5	1	0.25
Data	Glasvezel	dist	#E5934D	0.04-0.05	0.6/0.5	0.5	0	0.25	0.25	2	0.75	0.75	0.75	0.75	0.7	0.7	0.7	0.7	0.5	0.3	2	1.5	1	0.25
E (LS)	Electra Laagspanning	dist	#F81C94	0.07	0.6	0.5	0.25	0.1	0.1	2	0.75	0.75	0.75	0.75	2.5	2.5	2.5	2.5	0.5	0.3	2	2	1	0.5
E (MS)_t	Electra Middenspanning	transp	#C53B86	0.1	0.9	0.75	0.25	0.1	1	2	0.75	0.75	0.75	0.75	2.5	2.5	2.5	2.5	0.75	0.3	1	2	2	1
E (MS)_d	Electra Middenspanning	dist	#AF1960	0.1	0.7/0.9	0.75	0.25	0.1	0.1	2	0.75	0.75	0.75	0.75	2.5	2.5	2.5	2.5	2	0.3	2	2	1	1
E (HS)	Electra Hoogspanning	transp	#ED2E52	0.14	1.2	2	2	2	2	3	2	2	2	2	2	2	2	2	2	5	2	2	2	2
DWA_t	DWA Droogweerafvoer (onderheid riool)	transp	#0674B7	0.3-0.4	>1.8	2.5	2.5	2.5	2.5	3	3	3	3	3	3	3	3	3	3	3	5	4	3	5
DWA_d	DWA Droogweerafvoer (riool)	dist	#0999F4	0.25	0.8	0.75	0.75	0.75	0.75	2	Undefined	Undefined	0.75	0.75	1	0.75	0.75	0.75	1	0.75	2	1.5	1	3
DWA+RWA (gemengd)_t	DWA+RWA (gemengd) Droogweerafvoer (onderheid riool)	transp	#073CAF	0.3-1.8	>1.8	2.5	2.5	2.5	2.5	3	Undefined	Undefined	3	3	3	3	3	3	3	3	5	4	3	5
DWA+RWA (gemengd)_d	DWA+RWA (gemengd) Droogweerafvoer (riool)	dist	#0955F4	0.3-1.8	>0.8	0.75	0.75	0.75	0.75	2	Undefined	Undefined	0.75	0.75	1	0.75	0.75	0.75	1	0.75	2	1.5	1	3
HWA/ RWA	Hemelwaterafvoer (riool)	dist	#A400E2	0.3-1.5	>0.8	0.75	0.75	0.75	0.75	2	0.75	0.75	0.75	0.75	1	0.75	0.75	0.75	1	0.75	2	1.5	1	3
PL	Persleiding	transp	#9013FE	0.063-1.8	>0.8	0.75	0.75	0.75	0.75	2	0.75	0.75	0.75	0.75	1	0.75	0.75	0.75	1	1	2	1.5	1	3
Warmte HT	Warmtenet Hoogetemperatuur (HT)	transp	#A10041	0.5-1	1	0.75	0.75	2.5	2.5	2	1	1	1	1	0.4	0.3	0.3	0.3	1.5	1	2	1.5	1	1.5
Warmte MT	Warmtenet Midden temperatuur (MT)	dist	#C8125C	0.5-1	0.8	0.7	0.7	2.5	2.5	2	1	1	1	1	0.4	0.3	0.3	0.3	1.5	1	2	1.5	1	1.5
Warmte LT	Warmtenet Lage Temperatuur	dist	#F52378	0.25	0.8/1	0.7	0.7	2.5	2.5	2	0.75	0.75	0.75	0.75	0.3	0.3	0.3	0.3	1.5	1	2	1.5	1	1.5
Koude	Koude - Warmtenet Lage Temperatuur	dist	#bcecf7	0.25	0.8/1	0.7	0.7	2.5	2.5	2	0.75	0.75	0.75	0.75	0.3	0.3	0.3	0.3	1.5	1	2	1.5	1	1.5
Datawarmte	Datawarmte - Warmtenet Lage Temperatuur	dist	#bcd7d5	0.25	0.8/1	0.7	0.7	2.5	2.5	2	0.75	0.75	0.75	0.75	0.3	0.3	0.3	0.3	1.5	1	2	1.5	1	1.5
W_t	Drinkwater	transp	#064EB0	0.315-1.2	1	1	1	1	2	2	1	1	1	1	2	2	2	2	1	2	2	2	2	3
W_d	Drinkwater	dist	#2FEBE0	0.015-0.315	0.8	0.5	0.5	0.5	2	2	1	1	1	1	1.5	1.5	1.5	1.5	0.5	0.5	2	2	2	2
G_t	Gas	transp	#03B78D	0.075-0.4	0.8	0.3	0.3	0.3	0.3	5	1	1	1	1	1	1	1	1	0.3	0.3	2	2	1	2.0/3.5
G_d	Gas	dist	#50E3C2	0.075-0.4	0.8	0.3	0.3	0.3	0.3	5	1	1	1	1	1	1	1	1	0.3	0.3	2	2	1	1.2
O.A.T.	Ondergronds Afval Transport	transp	#EFB17C	0.4	1-1.5	0.75	0.75	0.75	0.75	2	0.75	0.75	0.75	0.75	2	2	2	2	1	1	2	1.5	1	3
Boom 1	Boom 1		#7ED321	Undefined	2	2	2	1&2	2	2	5&2	5&2	2	2	2	2	2	2	2&2	2&2	Undefined	Undefined	Undefined	Undefined
Boom 2	Boom 2		#81EC72	Undefined	1.5	1.5	2	2&2	2	2	4&1.5	4&1.5	1.5	1.5	1.5	1.5	1.5	1.5	2&2	2&2	Undefined	Undefined	Undefined	Undefined
Boom 3	Boom 3		#6DE54F	Undefined		1	1	2&1	2	2	3&1	3&1	1	1	1	1	1	1	2&2	1&1	Undefined	Undefined	Undefined	Undefined
Gebouwen	Gebouwen		#9B9B9B	Undefined		0.25	0.25	0.5	1&1	2	5&3	5&3	3	3	1.5	1.5	1.5	1.5	3&2	2 3.5&1.2	Undefined	Undefined	Undefined	Undefined

Original uitlegschema

Tabel [voorstel]  
uitleggschema

versie  
16-03-2021

Asset	Beschrijving		Afstand tussen K&L										Afstand tussen bomen			Afstand van gebouwen <sup>2</sup>		
			CAU/T	Data	E (LS)	E (MS)	E (HS)	DWA	HWA/ RWA	PL	Warmte	Warmte LT	W	G	Boom 1 <sup>1</sup>		Boom 2 <sup>1</sup>	Boom 3 <sup>1</sup>
CAU/T	CAU/ TVI/ Telecom	transp	0,50m <sup>1</sup>	0,00m	0,50m	0,75m	2,00m	0,75m	0,75m	0,75m	0,70m <sup>1</sup>	0,70m <sup>1</sup>	0,5m	0,30m	2,00m <sup>1</sup>	1,50m <sup>1</sup>	1,00m <sup>1</sup>	0,25/ 0,50m
Data	Glasvezel	dist.	Lelidraad K&L A'dam	Lelidraad K&L A'dam	Lander 14: 01-21	Lander 14: 01-21	Lander 14: 01-21	Waternet KK 12-20	Waternet KK 12-20	Lelidraad K&L A'dam	Lelidraad K&L A'dam	Waternet KK 12-20	Lander 14: 01-21	Lelidraad K&L A'dam	Lelidraad K&L A'dam	Lelidraad K&L A'dam	Gem A'dam (B)	
		bren	Lelidraad K&L A'dam	Lelidraad K&L A'dam	Lander 14: 01-21	Lander 14: 01-21	Lander 14: 01-21	Waternet KK 12-20	Waternet KK 12-20	Lelidraad K&L A'dam	Lelidraad K&L A'dam	Waternet KK 12-20	Lander 14: 01-21	Lelidraad K&L A'dam	Lelidraad K&L A'dam	Lelidraad K&L A'dam	Gem A'dam (B)	
E (LS) <sup>1</sup>	Electra Laagspanning	transp	0,50m	0,25m	0,10 + 0,15m	0,10m	2,00m	0,75m	0,75m	0,75m	2,50m	2,50m	0,5m	0,30m	2,00m	2,00m	1,00m	0,50m
		bren	Lander 14: 01-21	Lander 14: 01-21	Lander 17: 03-21	Lander 17: 03-21	Lander 14: 01-21	Lander 14: 01-21	Lander 14: 01-21	Lander 14: 01-21	Lander 17: 03-21	Lander 17: 03-21	Waternet KK 12-20	Lander 14: 01-21	Lander 14: 01-21	Lander 14: 01-21	Lander 14: 01-21	Lander 14-01-21
E (MS) <sup>1</sup>	Electra Middenspanning	transp	0,75m	0,25m	0,10m	1,00m <sup>10</sup>	2,00m	0,75m	0,75m	0,75m	2,50m	2,50m	0,75m	0,30m	1,00m	2,00m	2,00m	1,00m
		bren	Lander 14: 01-21	Lander 14: 01-21	Lander 17: 03-21	Lander 17: 03-21	Lander 14: 01-21	Waternet KK 12-20	Waternet KK 12-20	Lander 17: 03-21	Lander 17: 03-21	Waternet KK 12-20	Lander 14: 01-21	Lander 14: 01-21	Lander 14: 01-21	Lander 14: 01-21	Lander 14: 01-21	Lander 14-01-21
		dist.	0,75m	0,25m	0,10m	0,10m <sup>9</sup>	2,00m	0,75m	0,75m	0,75m	2,50m	2,50m	0,30m	2,00m	2,00m	1,00m	1,00m	
E (HS) <sup>1</sup>	Electra Hoogspanning	transp	2,00m	2,00m	2,00m	2,00m	3,00m <sup>10</sup>	2,00m	2,00m	2,00m	2,00m	2,00m	2,00m	5,00m	2,00m	2,00m	2,00m	2,00m
		bren	Lander 14: 01-21	Lander 14: 01-21	Lander 14: 01-21	Lander 14: 01-21	Lander 17: 03-21	Lander 14: 01-21	Lander 14: 01-21	Lander 14: 01-21	Lander 14: 01-21	Lander 01: 02-21	Lander 14: 01-21	Lander 14: 01-21	Lander 14: 01-21	Lander 14: 01-21	Lander 14: 01-21	Lander 01-02-21
DWA	Droogverafvoer r (onderheid riool)	transp	2,50m	2,50m	2,50m	2,50m	3,00m	3,00m	3,00m	3,00m	3,00m	3,00m	3,00m	3,00m	5,00m	4,00m	3,00m	5,00 m
		bren	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20
		dist.	0,75m	0,75m	0,75m	0,75m	2,00m	-	0,75m	0,75m	1,00m	0,75m	1,00m	0,75m	2,00m	1,50m	1,00m	3,00 m
DWA+ RWA (gemeng d)	Droogverafvoer r (riool)	transp	2,50m	2,50m	2,50m	2,50m	3,00m	-	3,00m	3,00m	3,00m	3,00m	3,00m	3,00m	5,00m	4,00m	3,00m	5,00 m
		bren	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20
		dist.	0,75m	0,75m	0,75m	0,75m	2,00m	-	0,75m	0,75m	1,00m	0,75m	1,00m	0,75m	2,00m	1,50m	1,00m	3,00 m
HWA/ RWA	Hemelwaterafvoer (riool)	transp	0,75m	0,75m	0,75m	0,75m	2,00m	0,75	-	0,75m	1,00m	0,75m	1,00m	1,00m	2,00m	1,50m	1,00m	3,00m
		bren	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20
PL	Persleiding	transp	0,75m	0,75m	0,75m	0,75m	2,00m	0,75m	0,75m	0,75m	1,00m	0,75m	1,00m	1,00m	2,00m	1,50m	1,00m	3,00m
		bren	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Lander 14: 01-21	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20
Warmte	Warmtenet Hoogtemperatuur r (HT)	transp	0,75m	0,75m	2,50m	2,50m	2,00m	1,00m	1,00m	1,00m	0,40m <sup>12</sup>	0,30m	1,50m <sup>7</sup>	1,00m	2,00m <sup>1</sup>	1,50m <sup>1</sup>	1,00m <sup>1</sup>	1,50m
		bren	Gemeente Almere	Gemeente Almere	Lander 17: 03-21	Lander 17: 03-21	Lander 14: 01-21	Waternet KK 12-20	Waternet KK 12-20	Warmte Bedrijf	Gemeente A'dam	Waternet KK 12-20	Lander 14: 01-21	Lelidraad K&L A'dam	Lelidraad K&L A'dam	Lelidraad K&L A'dam	Gemeente Almere	
		dist.	0,70m <sup>1</sup>	0,70m <sup>1</sup>	2,50m	2,50m	2,00m	1,00m	1,00m	1,00m	0,40m <sup>12</sup>	0,30m	1,50m <sup>7</sup>	1,00m	2,00m <sup>1</sup>	1,50m <sup>1</sup>	1,00m <sup>1</sup>	1,50m
Warmte LT	Midden temperatuur (MT)	transp	Lelidraad K&L A'dam	Lelidraad K&L A'dam	Lander 17: 03-21	Lander 17: 03-21	Lander 14: 01-21	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Warmte Bedrijf	Gemeente A'dam	Waternet KK 12-20	Lander 14: 01-21	Lelidraad K&L A'dam	Lelidraad K&L A'dam	Lelidraad K&L A'dam	Gemeente Almere
		dist.	0,70m <sup>1</sup>	0,70m <sup>1</sup>	2,50m	2,50m	2,00m	0,75m	0,75m	0,75m	0,30m	0,30m	1,50m <sup>7</sup>	1,00m	2,00m <sup>1</sup>	1,50m <sup>1</sup>	1,00m <sup>1</sup>	1,50m
		bren	Lelidraad K&L A'dam	Lelidraad K&L A'dam	Lander 17: 03-21	Lander 17: 03-21	Lander 14: 01-21	Waternet KK 12-20	Waternet KK 12-20	Gemeente A'dam	Gemeente A'dam	Waternet KK 12-20	Lander 14: 01-21	Lelidraad K&L A'dam	Lelidraad K&L A'dam	Lelidraad K&L A'dam	Gemeente Almere	
W	Drinkwater	transp	1,00m	1,00m	1,00m	2,00m	2,00m	1,00m	1,00m	1,00m	2,00m <sup>7</sup>	2,00m <sup>7</sup>	1,00m	1,00m	2,00m	2,00m	2,00m	3,00m
		bren	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20
		dist.	0,5m	0,5m	0,5m	2,00m	2,00m	1,00m	1,00m	1,00m	1,50m <sup>7</sup>	1,50m <sup>7</sup>	0,5m	0,5m	2,00m	2,00m	2,00m	2,00m
G	Gas	transp	0,30m	0,30m	0,30m	0,30m	5,00m	1,00m	1,00m	1,00m	1,00m	1,00m	0,30m	0,30m	2,00m	2,0m	1,00m	<200mm = 2,0 m >200mm = 3,5m
		bren	Lander 09: 02-21	Lander 09: 02-21	Lander 09: 02-21	Lander 09: 02-21	Lander 09: 02-21	Lander 09: 02-21	Lander 09: 02-21	Lander 09: 02-21	Lander 09: 02-21	Lander 09: 02-21	Lander 09: 02-21	Lander 09: 02-21	Lander 09: 02-21	Lander 09: 02-21	Lander 09: 02-21	Lander 09-02-21
		dist.	0,30m	0,30m	0,30m	0,30m	5,00m	1,00m	1,00m	1,00m	1,00m	1,00m	0,30m	0,30m	2,00m	2,00m	1,00m	1,20m
O.A.T.	Ondergronds Afval Transport	transp	0,75m <sup>14</sup>	0,75m <sup>14</sup>	0,75m <sup>14</sup>	0,75m <sup>14</sup>	2,00m <sup>14</sup>	0,75m <sup>14</sup>	0,75m <sup>14</sup>	0,75m <sup>14</sup>	0,75m <sup>14</sup>	0,75m <sup>14</sup>	1,00m <sup>14</sup>	1,00m <sup>14</sup>	2,00m <sup>14</sup>	1,50m <sup>14</sup>	1,00m <sup>14</sup>	3,00m <sup>14</sup>
		bren	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Lander 14: 01-21	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20
Asset	Beschrijving		CAU/T	Data	E (LS)	E (MS)	E (HS)	DWA	HWA/ RWA	PL	Warmte	Warmte LT	W	G	Boom 1 <sup>1</sup>	Boom 2 <sup>1</sup>	Boom 3 <sup>1</sup>	Afstand van gebouwen <sup>2</sup>

- Een elektra tracé bestaat over het algemeen uit meerdere kabels. Tot soms wel meer dan 10 kabels
- Voor vrij-verval, maximaal 15m van de perceelgrens
- Volgens de Lelidraad K&L IB (Gemeente Amsterdam) de bomen categories: 1 hoogte >15m; 2 hoogte 10-15m; 3 hoogte 6-10m
- Afstand hart op hart (h.o.h.)
- Leidings diameter < 0,15m; afstand = 0,20m. Leidings diameter > 0,15m; afstand = 0,40m. Afstand tussen buizen, van rand tot rand.
- Gebaseerd op perisool-metingen
- De vermelde afstanden kunnen wellicht nog gaan wijzigen. Dit is afhankelijk van de uitkomsten uit het lopende TKI onderzoek binnen Waternet
- Indien niet mogelijk, kan deze er dan boven worden geplaatst, dan is de horizontale afstand 0
- In specifieke situaties kan van deze afstand afgeweken worden Bijvoorbeeld ingeval van veiligheid of wederzijdse beïnvloeding van thermische, elektrische en/of mechanische aard.
- Bij voorkeur in geschieden tracés. In specifieke situaties kan van deze afstand afgeweken worden Bijvoorbeeld ingeval van veiligheid of wederzijdse beïnvloeding van thermische, elektrische en/of mechanische aard.

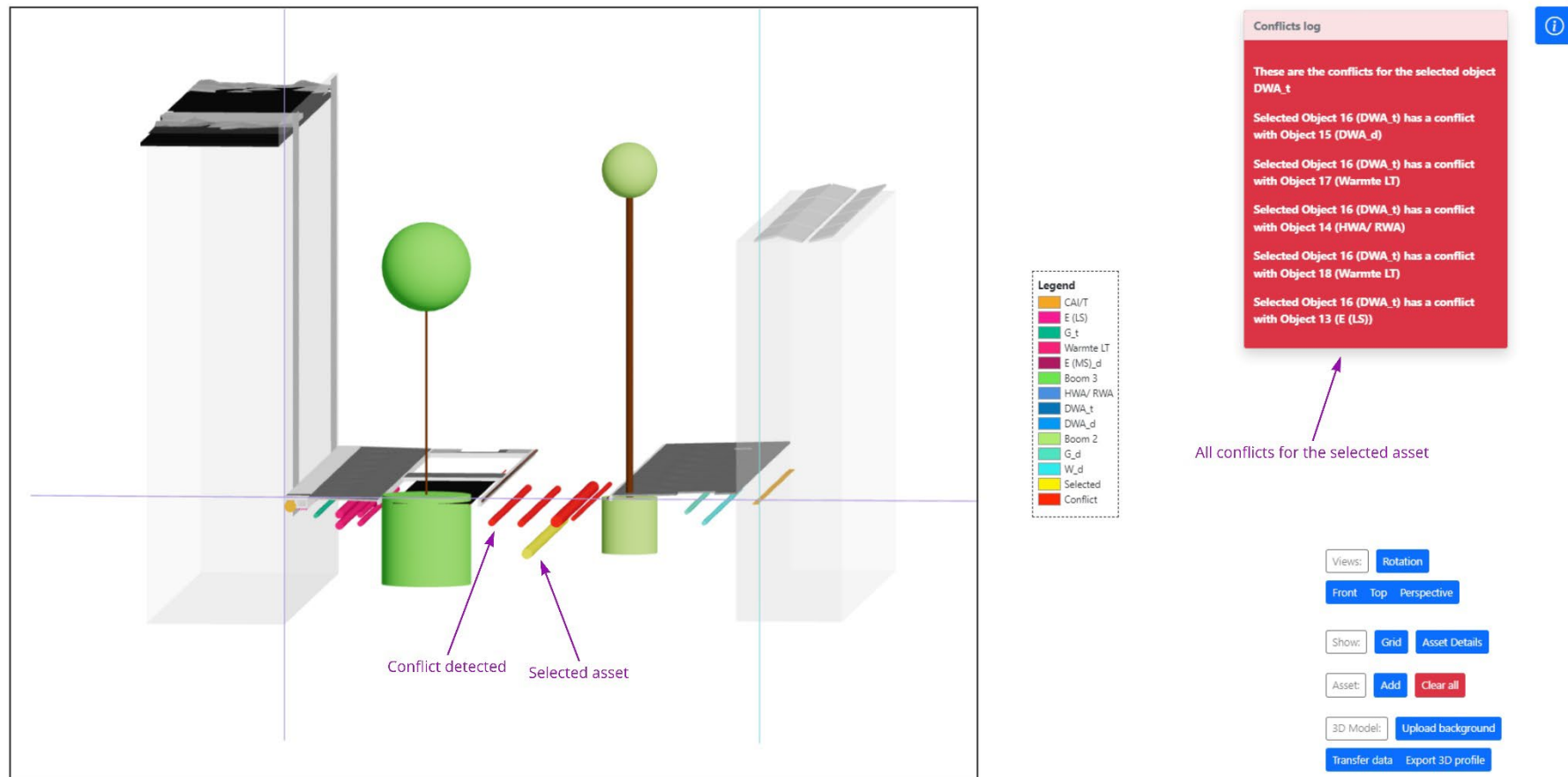
Tabel [voorstel]  
uitlegschem

versie  
16-03-2021

	Beschrijving	Diameter			Dekking (depth)			vrij werkruimte 1		
		transp.	diët.	hulsaansl.	transp.	diët.	hulsaansl.	transp.	diët.	hulsaansl.
CAU/T	CAU/ TV/ Telecom	80 - 100mm	25 - 50mm	+	0,60m	0,60/0,50m	0,50m	0,30m	0,30m	0,30m
bron		Gemeente A'dam Eisener 12-20	Gemeente A'dam Eisener 12-20	-	NEN 7171-1/ Gemeente R'dam/ Gemeente A'dam	Gemeente A'dam (WICR)	Gemeente A'dam (WICR)	NEN 7171-1	NEN 7171-1	NEN 7171-1
Data	Glasvezel	40mm-50mm	40mm-50mm	+	0,60m	0,60/0,50m	0,50m	0,30m	0,30m	0,30m
bron		NEN 7171-1	NEN 7171-1	-	NEN 7171-1/ Gemeente R'dam	Gemeente A'dam (WICR)	Gemeente A'dam (WICR)	NEN 7171-1	NEN 7171-1	NEN 7171-1
E (LS)	Electra Laagspanning	-	70mm	70mm	-	0,60m	0,50m	-	0,25m	0,25m
bron		-	Llander 14-01-21	Llander 14-01-21	-	Llander 14-01-21	Llander 14-01-21	-	Llander 14-01-21	Llander 14-01-21
E (MS)	Electra Middelspanning	100mm	100mm	100mm	0,90m	0,70/ 0,90m	0,70/ 0,90m	0,25m	0,25m	0,25m
bron		Llander 14-01-21	Llander 14-01-21	Llander 14-01-21	Llander 17-03-21	Llander 14-01-21	Llander 14-01-21	Llander 14-01-21	Llander 14-01-21	Llander 14-01-21
E (HS)	Electra Hoogspanning	140mm	-	-	1,20m	-	-	2,00m	-	-
bron		Llander 17-03-21	-	-	Llander 01-02-21	-	-	Llander 01-02-21	-	-
DWA	Droogweerafvoer (riool)	0,30-0,40m	0,25 m	125 - 160mm	>1,80m	0,80m	0,34m	2,00m	0,50m	0,50m
bron		Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20
DWA + HWA		0,30-1,80m	0,30-1,80m	125 - 160mm	>1,80m	>0,80m	125 - 160mm	2,00m	0,50m	125 - 160mm
bron		Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20
HWA/ RWA	Hemelwaterafvoer (riool)	-	0,30-1,50m	125 - 160mm	-	>0,80m	0,34m	-	0,50m	0,50m
bron		Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20
PL	Persleiding	0,063-1,80	-	-	>0,80m	-	-	0,50m	-	-
bron		Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20
Warme HT/ MT	Warmtenet Hoge/ Midden temperatuur	500-1000mm	500-1000mm	<160mm	1,00m	0,80 m	0,50m	0,50m	0,50m	0,50m
bron		Warme Bedrijf	Warme Bedrijf	Rotterdam	Gemeente A'dam/ Gemeente R'dam	NEN 7171-1	Gemeente A'dam (WICR)	Warme Bedrijf	Warme Bedrijf	Warme Bedrijf
Warme LT	Warmtenet Lage Temperatuur	250-400mm	250mm		0,80m/ 1,00m	0,80m/ 1,00m	0,50m	0,30m	0,30m	0,30m
bron		Gemeente A'dam	Gemeente A'dam		Gemeente A'dam	Gemeente A'dam	Gemeente A'dam (WICR)	Gemeente A'dam	Gemeente A'dam	Gemeente A'dam
W	Drinkwater	0,315-1,20m	0,015-0,315m	0,015-0,15m	1,00m	0,80m	0,80m	1,50m	0,5m	0,50m
bron		Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20	Waternet KK 12-20
G	Gas	75-400mm	75- 400mm	32-63mm	0,80m	0,80m	0,50m	0,25m	0,25m	0,25m
bron		Llander 14-01-21	Llander 14-01-21	Llander 14-01-21	Llander 14-01-21	Llander 14-01-21	Llander 14-01-21	Llander 14-01-21	Llander 14-01-21	Llander 14-01-21
O.A.T.	Onroergronds Afval Transport	400mm	400mm	400mm	1m to 1,5m	2,6 - 3,2m	2,6 - 3,2m	0,50m <sup>2</sup>	0,50m <sup>2</sup>	0,50m <sup>2</sup>
bron		Leverancier	Advisee Bureau	Advisee Bureau	Leverancier	Advisee Bureau	Advisee Bureau	NEN 7171-1	NEN 7171-1	NEN 7171-1

1. bijde zijden  
2. Gebaseerd op persriool-metingen

4. **Conflict detection:** To check for conflicts in the profile, you need to check the conflicts for each asset.
- Click on an asset to see the conflicts for the asset
    - The selected asset is in yellow color
    - The conflicted assets are shown in red color
    - Upon clicking on an asset, on the top right, the name of the conflicting assets are shown.



5. **Update diameter and depth of the asset in profile:** To change the diameter or depth of the asset, right click on the asset and change the respective values.

**Update asset details** [X]

Type

DWA\_t

**Diameter of this asset (in meters)**

0.45

Enter desired value. Recommended value from Uitlegschema is mentioned underneath.

Uitlegschema recommendation: 0.3-0.4

**Depth (in meters)**

Length from the horizontal line to the top edge of this asset

2.16

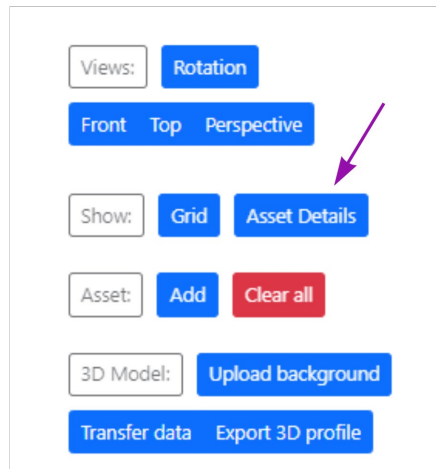
Enter desired value. Recommended value from Uitlegschema is mentioned underneath.

Uitlegschema recommendation: > 1.8

Close Update asset Delete asset

6. **Delete asset:** To remove an asset from the profile, right-click on the asset and choose “Delete Asset”

7. **Drag and drop:** To change the position (distance) of the asset, drag the asset (left click and hold the mouse button) and drop it in a desired position.
8. **Asset Details:** To see a list of all the assets (existing or deleted), click on the “Asset Details” button.



9. **Restore asset:** A deleted asset can be seen at the bottom of the list upon clicking on “Asset Details”. To restore the asset, click on “Restore Asset” button. Once you restore an asset, the asset will reappear in the 3D model based on the previous data (diameter, depth, distance)

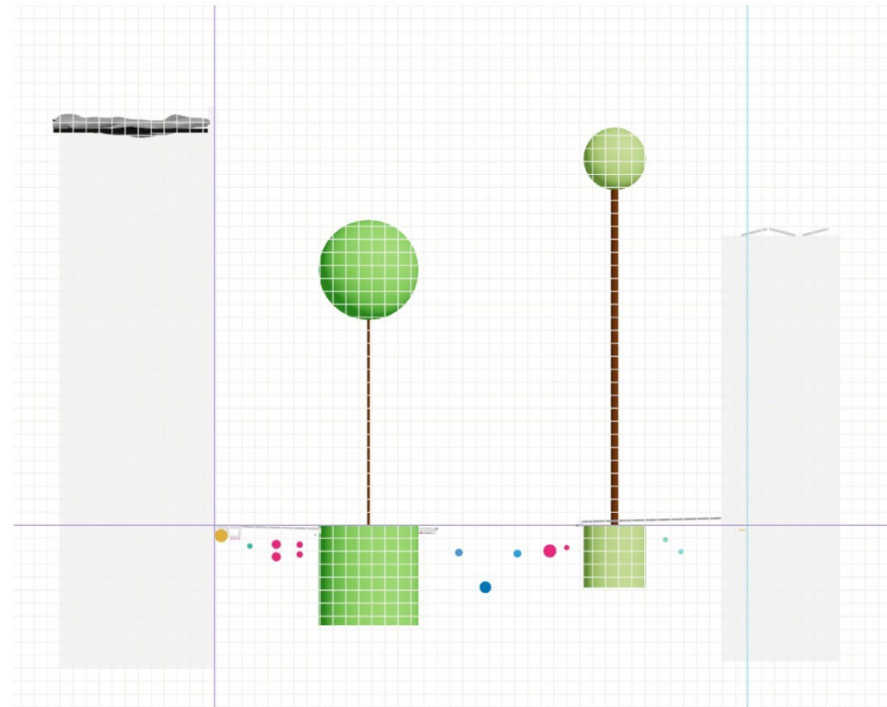
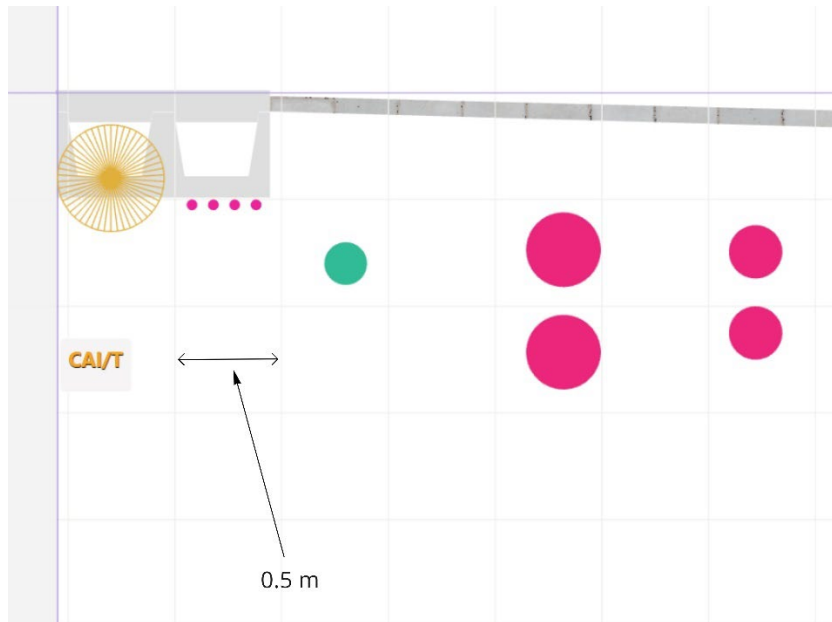
Asset order in profile  
(-1 for deleted assets)

Restore assets that are deleted  
(Button enabled only for deleted assets)

#	Order	Asset Id	Asset Name	Diameter	Depth	Distance	Restore
1	1	1	CAI/T	0.5	0.15	0.25	<button>Restore Asset</button>
2	2	3	E (LS)	0.05	0.5	0.63	<button>Restore Asset</button>
3	3	4	E (LS)	0.05	0.5	0.73	<button>Restore Asset</button>
4	4	5	E (LS)	0.05	0.5	0.83	<button>Restore Asset</button>
5	5	6	E (LS)	0.05	0.5	0.93	<button>Restore Asset</button>
6	-1	7	G_t	0.2	0.7	1.35	<button>Restore Asset</button>

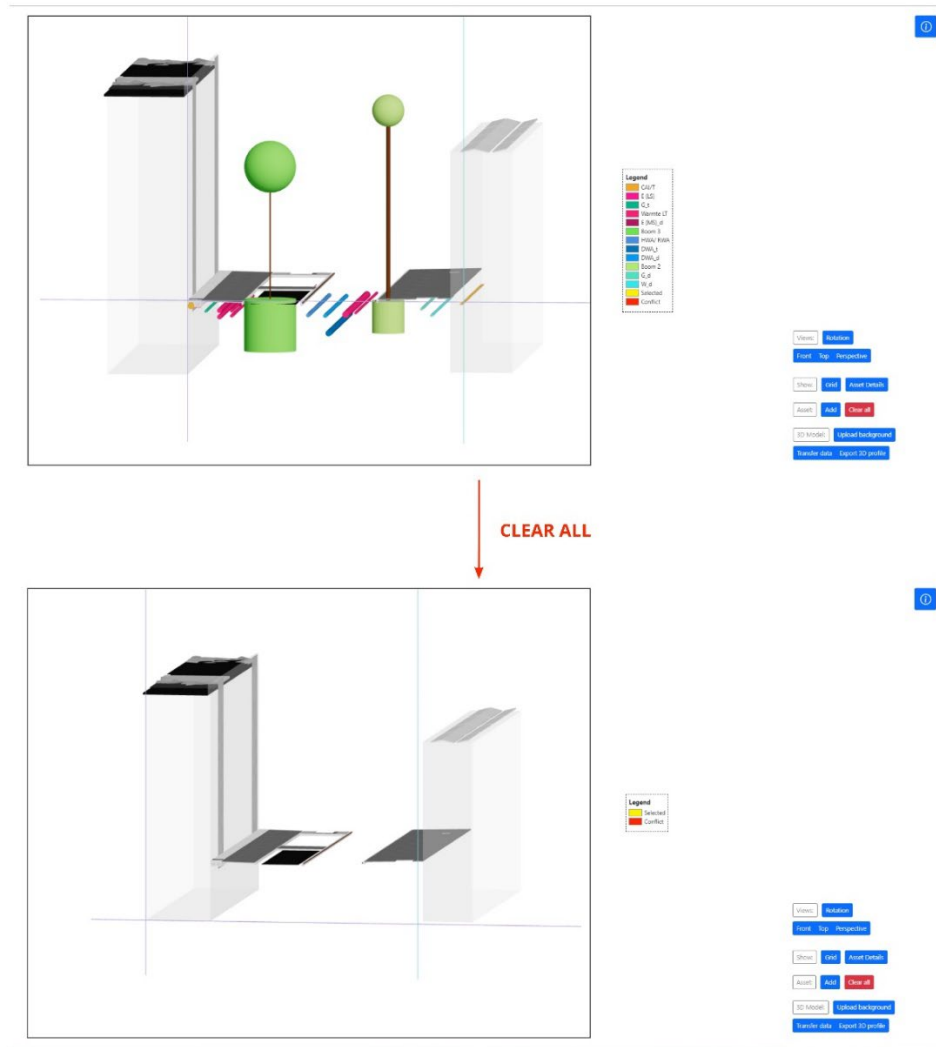
10. **Grid:** Click on “View Grid” button to see the grid in the model. Each grid is 0.5 meter size and can be used to estimate the length in the profile.

- Note: It is best to use Grid in Front view



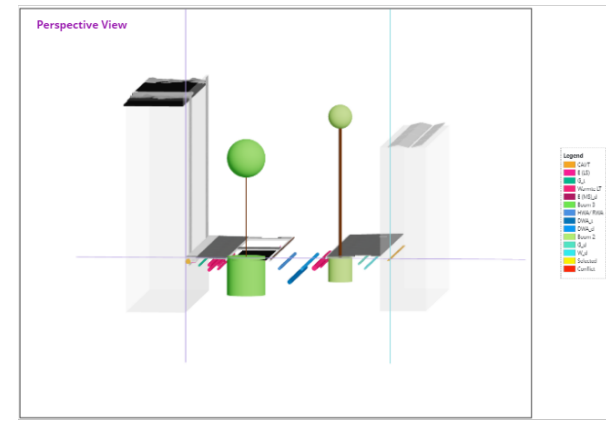
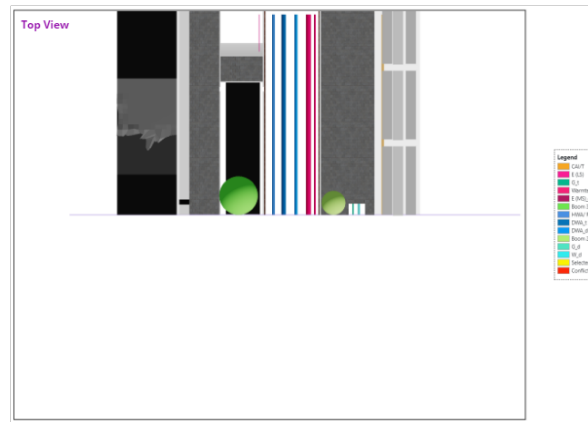
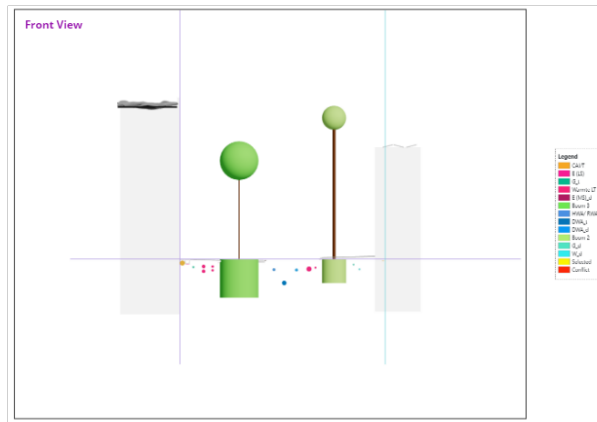


11. **Reset profile:** Use the "Clear all" button to reset the profile and remove all the added assets, reset the ground level, street boundaries and view settings. Once cleared, any data cannot be restored.



## Views

1. To enable rotation of the view, click on “View rotation button”. Left click the mouse button and move around to rotate. You can right click on the mouse and drag to move around in the 3D model, in x or y axis.
2. To save the view settings, click “Alt + R”.
3. Choose the different views to select the Front View, Top View or Perspective View button.
4. The saved view settings are reflected in Perspective View.

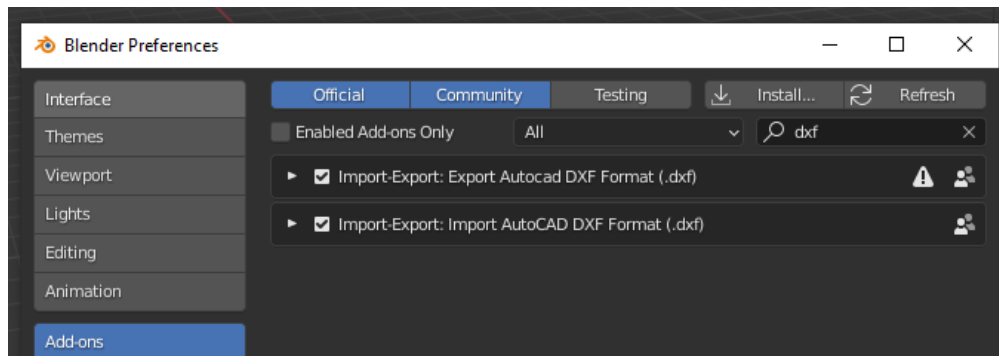


**Export Model** – Click on Export 3D Model button to save a copy of the profile in your computer. This is saved in GLTF format.

To convert GLTF to DXF format or vice-a-versa, use Blender Add-on. (<https://all3dp.com/2/stl-to-dxf-how-to-convert-stl-files-to-dxf-autocad/>).

Steps to install the add-on to convert GLTF to DXF or vice a versa in Blender:

1. Open Blender, and go to Edit -> Preferences
2. Choose Add-Ons
3. Search “DXF” using the search bar
4. Install the two add-ons for import and export of DXF files



Steps to convert GLTF to DXF:

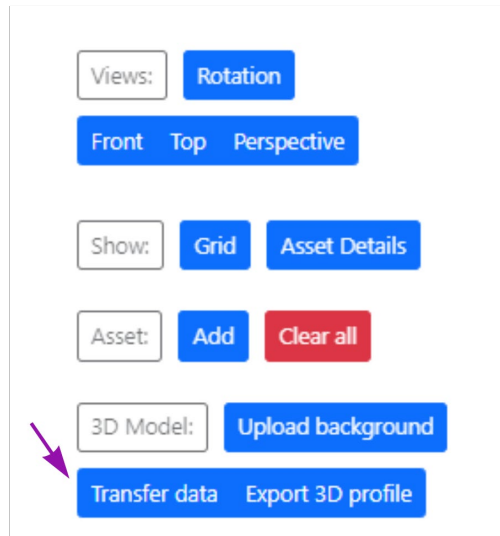
1. Open Blender, go to File -> Import
2. Import the GLTF file (glTF 2.0) in Blender
3. Go to File- > Export
4. And export to AutoCAD DXF

Steps to convert DXF to GLTF:

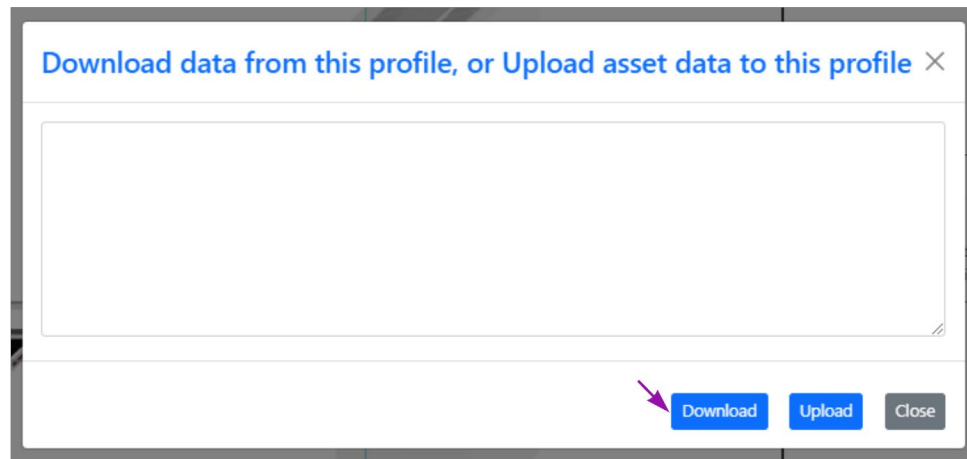
1. Open Blender, go to File -> Import
2. Import the AutoCAD DXF file in Blender
3. Go to File- > Export
4. And export to GLTF (glTF 2.0)

## Transfer profile to another computer or browser

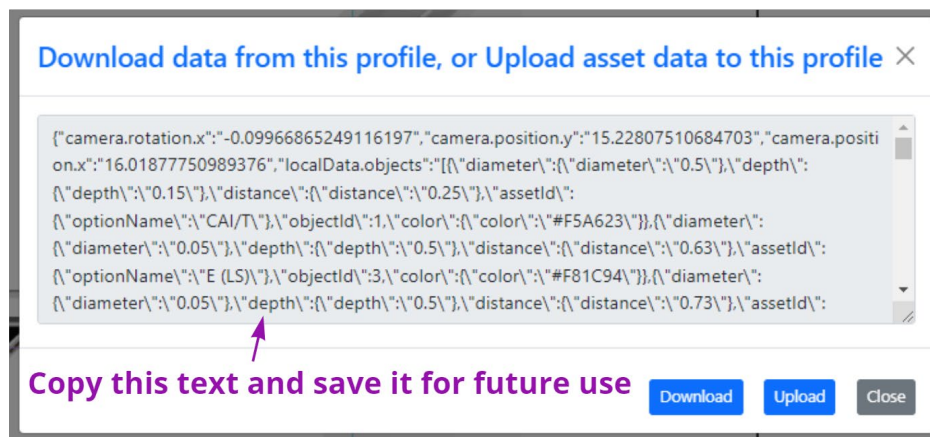
1. On a browser where a profile is built, choose “Transfer data” button.



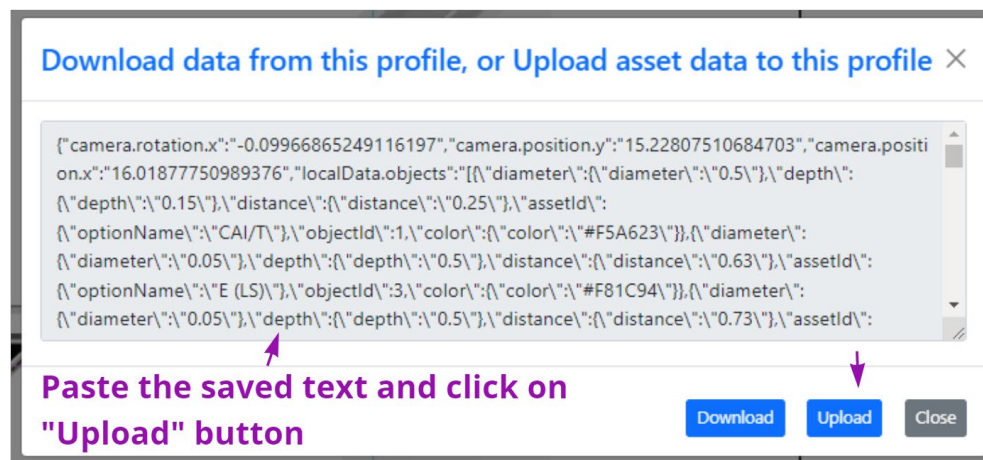
2. Next, click on “Download”



3. Copy the data shown in the textbox.



4. Go to another browser or computer, open the web-app. Again, choose the “Transfer data” button (Image in Step 1).
5. Paste the copied data to the empty textbox and click “Upload”.



6. The profile is transferred to the new computer/browser.