

C10 - Item Types

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Vejdirektoratet

- BIM i VD
- OpenRoads i VD



C10 - Item Types

- Hvad er ItemTypes?
- Hvilke muligheder giver de?
- Live demo
- Erfaringer

Category	Property	Expression	MicroStation	OpenSty/Road/As	Comments
Element Properties	Element Description	this.GetElement().ElementDescription	X	X	
Element Properties	Level	this.GetElement().Level	X	X	
Element Properties	Color	this.GetElement().Color	X	X	
Element Properties	Line Style	this.GetElement().Style	X	X	
Element Properties	Weight	this.GetElement().Weight	X	X	
Element Properties	Class	this.GetElement().ElementClass	X	X	
Element Properties	Number of Elements	this.GetElement().NumItems	X	X	
Element Properties	Template	this.GetElement().Template	X	X	
Element Properties	Transparency	this.GetElement().Transparency	X	X	
Element Properties	Priority	this.GetElement().Priority	X	X	
Length	Length	this.GetElement().Length	X	X	
Length	Total Length	this.GetElement().TotalLength	X	X	
Length	Total Length	this.GetElement().LinearElement.Length		X	
Civil Quantities	Top Sloped Area	this.GetElement().MeshSurfaceEntry.SlopedArea		X	Values returned in Meters, see Examples tab for expression to test units
Civil Quantities	Planar Area	this.GetElement().MeshSurfaceEntry.PlanarArea		X	Values returned in Meters, see Examples tab for expression to test units
Civil Quantities	Volume	this.GetElement().MeshSurfaceEntry.CurVolume		X	Values returned in Meters, see Examples tab for expression to test units
Feature	Feature Definition	this.GetElement().ObjectDefinition		X	
Feature	Feature Name	this.GetElement().FeatureName		X	
Survey	Name	this.GetElement().Name		X	
Survey	Display	this.GetElement().Display		X	
Survey	Field Code	this.GetElement().Feature		X	
Survey	Zone	this.GetElement().Zone		X	
Survey	Description	this.GetElement().Description		X	
Survey	Terrain Model attribute	this.GetElement().DTM		X	
Survey	Length	this.GetElement().Length		X	
Survey	Area	this.GetElement().Area		X	

The screenshot shows the OpenRoads Designer software interface. The main window displays the 'Item Types' panel on the left, showing a tree view of item types under 'Vejkasse'. The 'Properties' panel is open, showing the 'Property Definition' for 'Laengde' (Length), with properties like Type (Number), Is Array (False), Is ReadOnly (True), and Visibility (Show). The 'Expression Builder' is also open, showing the expression `this.GetElement().GetDisplayString("TotalLength")` for the 'Total Length' property. A 'Picklist' is visible, showing a list of item types including 'Areal', 'Beskrivelse', 'DelLokation', 'DelLokID', 'Feature_Definition', 'Forkortelse', 'GetClass', 'GetElement', 'GetFile', 'GetInstanceId', 'GetInstanceLabel', and 'GetItem'.

Autovaern	
Feature_Definition	SafeB_Single_Sided_L
Lagnavn	TV_U_APT_AutoV
Type	Vejautovaern
Beskrivelse	Vejautovaern, enkelt-sided, venstre
Laengde	467.80098m
Styrkeklasse	H1
Arbejdsbredde	W4
Sikkerhedsklasse	A
Forkortelse	
Tilbudsliste	32.01
CCI Kode	[L]FQD100
Komponentkode	FQD
TypeID	100
Liste	[L]
Klassifikationssystem	CCI
CO2	10.00 kg/m

VD's Egenskabsdata

- Pt. under udarbejdelse
- Branchesamarbejde om hvad vi vil
- Det er kun fantasien der sætter grænsen

Autovaern	
Feature_Definition	SafeB_Single_Sided_L
Lagnavn	TV_U_APT_AutoV
Type	Vejautovaern
Beskrivelse	Vejautovaern, enkeltsidet, vens
Laengde	467.80098m
Styrkeklasse	H1
Arbejdsbredde	W4
Sikkerhedsklasse	A
Forkortelse	
Tilbudslistepost	32.01
CCI Kode	[L]%FQD100
KomponentKode	FQD
TypeID	100
Liste	[L]
Klassifikationssystem	CCI
CO2	10.00 kg/m

Live

- Tjek at jeres program er konfigureret rigtigt om i bruger dgnlib eller excel

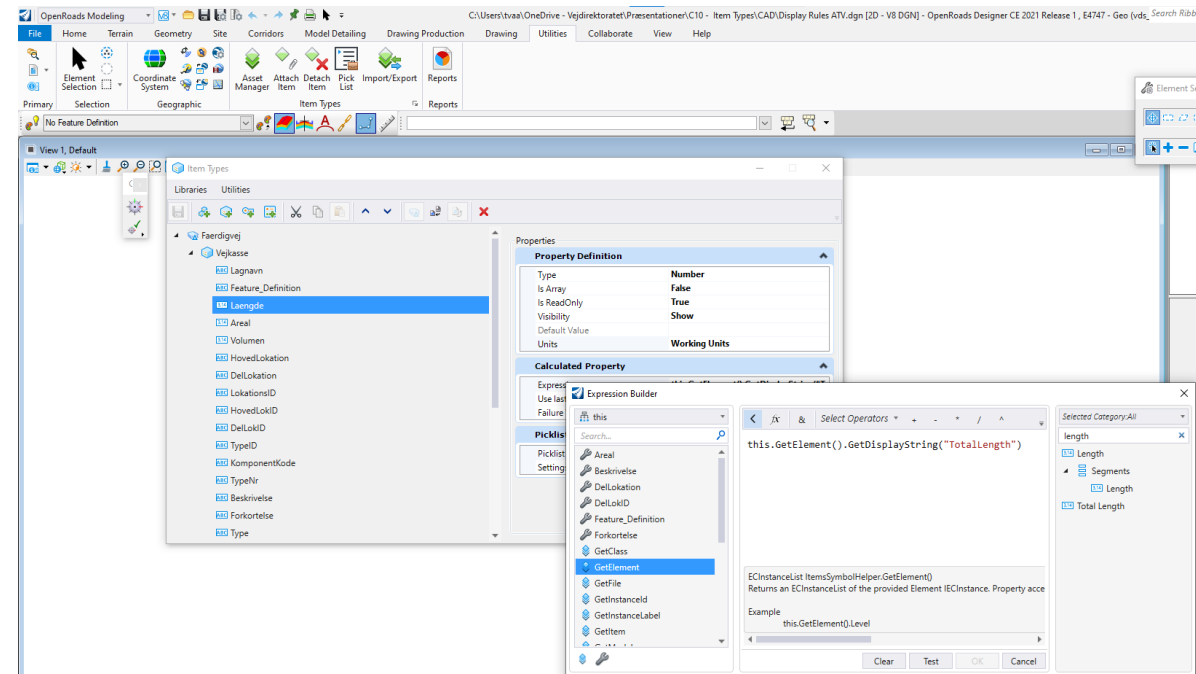
- ITEMTYPE_LOOKUP

- Sådan opbygger vi ItemTypes i VD

- Vi laver en ItemType

- Tilknyt ItemType til objekter

- Eksempel hvor det kan anvendes med "Display Rules"

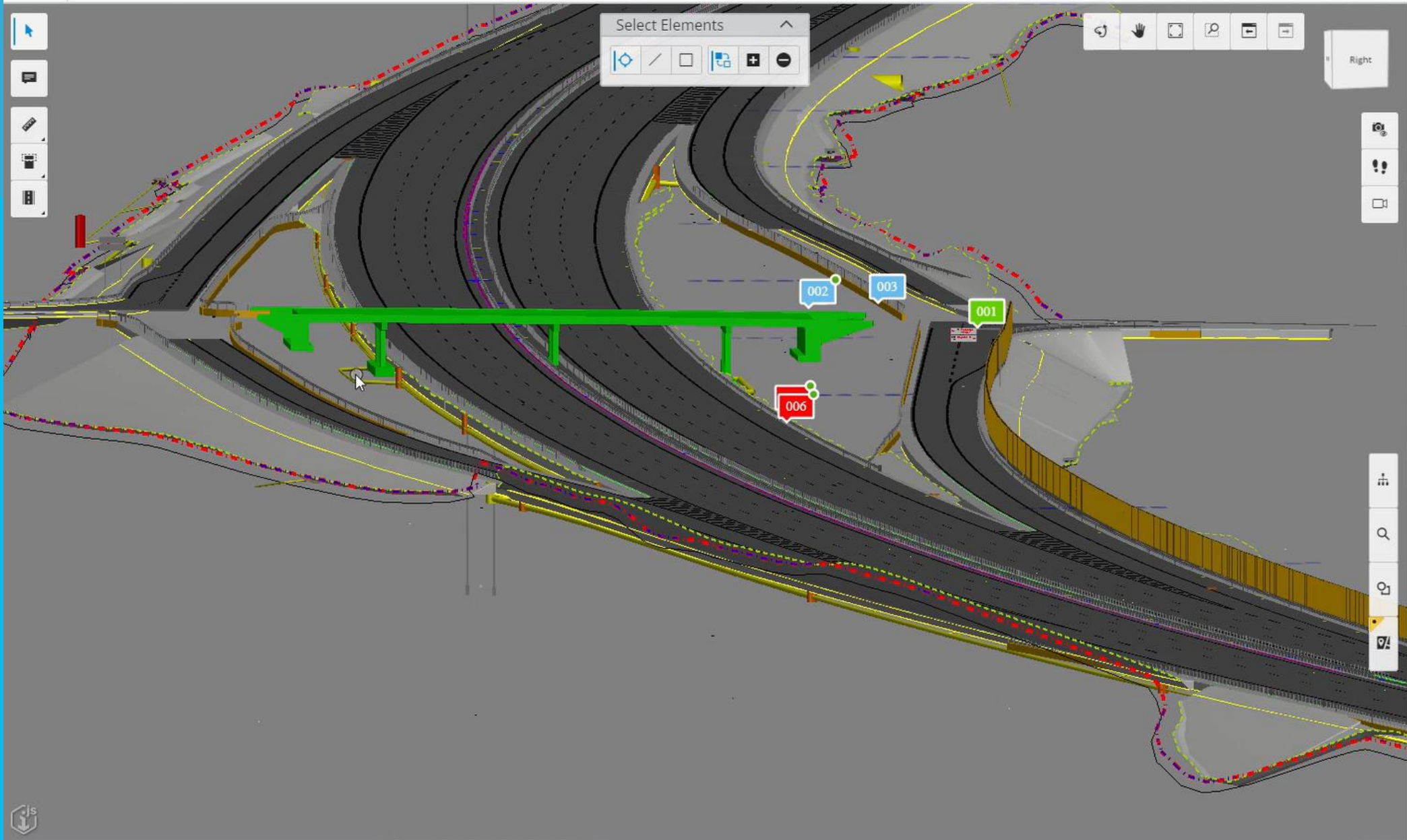




Select Elements



Right



Comments

31 participants

- 008 | Bassin sænkes**
Tina Jonsen
2 days ago
- 006 | Nyt rør**
Asbjørn Jon Ørrild
6 days ago
- 007 | Bassin flyttes**
Tina Jonsen
6 days ago
- 005 | Ledning har forkeret f...**
Rikke C. Storgård Nordmann
6 days ago
- 001 | Skilt hæves test**
Rikke C. Storgård Nordmann
6 days ago
- 004 | Brønd flyttes**
Rikke C. Storgård Nordmann
7 days ago
- 002 | Bro**
Tina Jonsen
10 days ago
- 003 | Tjek autoværn**
Tina Jonsen
10 days ago

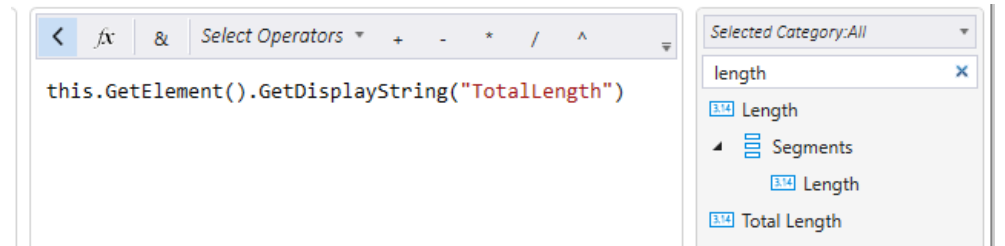
Expressions – Hvor kommer de fra?

Category	Property	Expression	MicroStation	OpenSite/Road/Rai	Comments
Element Properties	Element Description	this.GetElement().ElementDescription	X	X	
Element Properties	Level	this.GetElement().Level	X	X	
Element Properties	Color	this.GetElement().Color	X	X	
Element Properties	Line Style	this.GetElement().Style	X	X	
Element Properties	Weight	this.GetElement().Weight	X	X	
Element Properties	Class	this.GetElement().ElementClass	X	X	
Element Properties	Number of Elements	this.GetElement().NumElems	X	X	
Element Properties	Template	this.GetElement().Template	X	X	
Element Properties	Transparency	this.GetElement().Transparency	X	X	
Element Properties	Priority	this.GetElement().Priority	X	X	
Length	Length	this.GetElement().Length	X		
Length	Total Length	this.GetElement().TotalLength	X		
Length	Total Length	this.GetElement().LinearElement_Length		X	
Civil Quantities	Top Sloped Area	this.GetElement().MeshSurfaceEntity_SlopedArea		X	Values returned in Meters, see Examples tab for expression to test units
Civil Quantities	Planar Area	this.GetElement().MeshSurfaceEntity_PlanarArea		X	Values returned in Meters, see Examples tab for expression to test units
Civil Quantities	Volume	this.GetElement().MeshSurfaceEntity_CivilVolume		X	Values returned in Meters, see Examples tab for expression to test units
Feature	Feature Definition	this.GetElement().ObjectSettings		X	
Feature	Feature Name	this.GetElement().FeatureName		X	
Survey	Name	this.GetElement().Name		X	
Survey	Display	this.GetElement().Display		X	
Survey	Field Code	this.GetElement().Feature		X	
Survey	Zone	this.GetElement().Zone		X	
Survey	Description	this.GetElement().Description		X	
Survey	Terrain Model Attribute	this.GetElement().DTMAttribute		X	
Survey	Length	this.GetElement().Length		X	
Survey	Data File Name	this.GetElement().NetworkName		X	
Survey	Field Book Name	this.GetElement().DatasetName		X	
Survey	Feature Definition	this.GetElement().StyleName		X	
Survey	Feature Description	this.GetElement().FeatureDescription		X	

31	Drainage - Node	Vertical Offset	this.GetElement().Offset		X	Values returned in Meters, see Examples tab for expression to test units
32	Drainage - Node	Ground Elevation	this.GetElement().GroundElevation		X	Values returned in Meters, see Examples tab for expression to test units
33	Drainage - Node	Invert Elevation	this.GetElement().InvertElevation		X	Values returned in Meters, see Examples tab for expression to test units
34	Drainage - Node	Use Slope of Surface	this.GetElement().OrientTopToSurface		X	
35	Drainage - Node	Elevation Reference	this.GetElement().ActiveReference		X	
36	Drainage - Node	Station/Offset Reference	this.GetElement().ActiveStationOffsetReference		X	
37	Drainage - Node	Utility ID	this.GetElement().ID		X	
38	Drainage - Link	Description	this.GetElement().PROP_SU_Description		X	
39	Drainage - Link	Trench	this.GetElement().PROP_SU_CreateTrench		X	
40	Drainage - Link	Start Node	this.GetElement().PROP_SU_StartNode		X	
41	Drainage - Link	Stop Node	this.GetElement().PROP_SU_StopNode		X	
42	Drainage - Link	Start Invert	this.GetElement().PROP_SU_StartInvert		X	Values returned in Meters, see Examples tab for expression to test units
43	Drainage - Link	Stop Invert	this.GetElement().PROP_SU_StopInvert		X	Values returned in Meters, see Examples tab for expression to test units
44	Drainage - Link	Diameter	this.GetElement().PROP_SU_Diameter		X	Values returned in Meters, see Examples tab for expression to test units
45	Drainage - Link	Single Gradient	this.GetElement().PROP_SU_InterpolateElevations		X	
46	Drainage - Link	Utility ID	this.GetElement().ID		X	
47	Drainage - Hydraulic	Material	this.GetElement().Physical_Material		X	
48	Drainage - Hydraulic	Diameter	this.GetElement().ConduitDiameter		X	
49	Drainage - Hydraulic	Wall Thickness	this.GetElement().ConduitThickness		X	
50	Drainage - Hydraulic	Number of Barrels	this.GetElement().Physical_NumberOfBarrels		X	
51	Drainage - Hydraulic	Manning's n	this.GetElement().Physical_ManningsN		X	
52	Drainage - Hydraulic	Flow	this.GetElement().BasicFlowResults_Flow		X	
53	Drainage - Hydraulic	Velocity	this.GetElement().BasicVelocityResults_Velocity		X	
54	Drainage - Hydraulic	Depth (Normal)	this.GetElement().GVFConduitResults_NormalDepth		X	
55	Drainage - Hydraulic	Depth (Critical)	this.GetElement().GVFConduitResults_CriticalDepth		X	
56	Drainage - Hydraulic	Area (Full Flow)	this.GetElement() DerivedPhysicalLinkResults_FullFlowArea		X	
57	Drainage - Hydraulic	Area (Flow)	this.GetElement() RatConduitResults_FlowArea		X	
58	Math	Addition	1 + 4	X	X	
59	Math	Multiplication	2.3 * 3	X	X	
60	Math	Division	12/5	X	X	
61	Math	Remainder	25 mod 3	X	X	
62	Math	Absolute	System.Math.Abs(-45.39)	X	X	
63	Math	Round	System.Math.Round(4.53459,2)	X	X	
64	Math	Ceiling	system.Math.Ceiling(4.53495)	X	X	
65	Math	Maximum	System.Math.Max(1.2, 1.1)	X	X	
66	Math	PI	System.Math.PI	X	X	
67	Math	Sin	System.Math.Sin(45*System.Math.PI/180)	X	X	
68	File/Model	File Name	this.GetFile().FileName	X	X	
69	File/Model	Model Name	this.GetModel().Name	X	X	
70	File/Model	Model Is 3D	this.GetModel().Is3D	X	X	
71	Logical	If-Then	iif(Test_Expression, True_value, False_value)	X	X	
72	Lookup	Lookup	Lookup.GetEntry(tabName,keyName,stringValue).returnValue	X	X	tabName - Tab in spreadsheet file keyName - Column in spreadsheet to match stringValue - Item Type Property to match returnValue - Column in spreadsheet to return

Erfaringer indtil videre

- Undgår Æ Ø Å, mellemrum, specialtegn i Excel arket
- OBS på hvilken egenskab der søges på
 - ORD vs. Microstation udfordringer
- Usikkerhed om den regner rigtig i forhold til mængder
- Forhåbentligt er det forberedt for det nye IFC format



Tak for jeres tid

Spørgsmål?