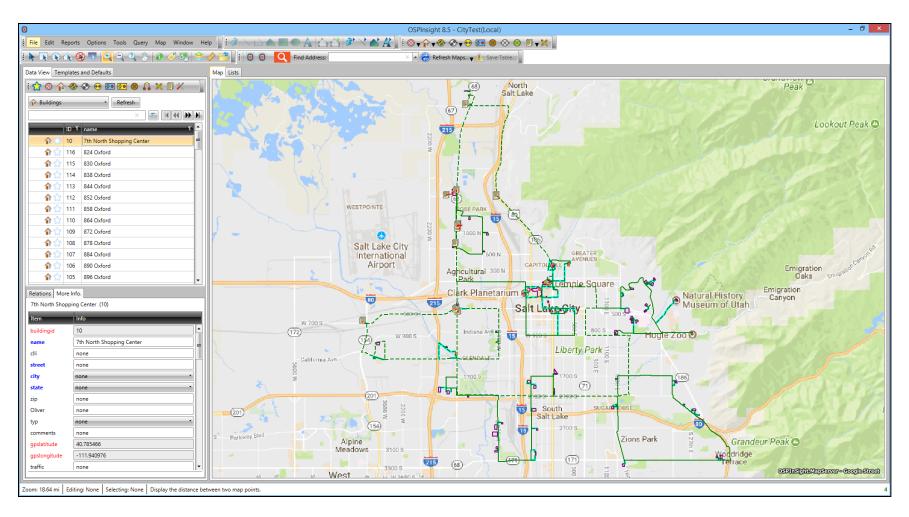


Edit for MapInfo v. 8.5 New Features



The look and feel has not changed





Much has been done on the backend

Database changes include:

- Additional EA fields
- Create User / Date fields
- Etc.

Performance Enhancements to reduce Deadlocks / Timeouts include:

- Improvement of the main queries that were involved with deadlocks.
- Reduction in amount of data on a .tab file (users need to be aware)
 - 4 gb to 200 mb (see next slide)

Changes to allow installation on virtualized environments

OSPINSIGHT

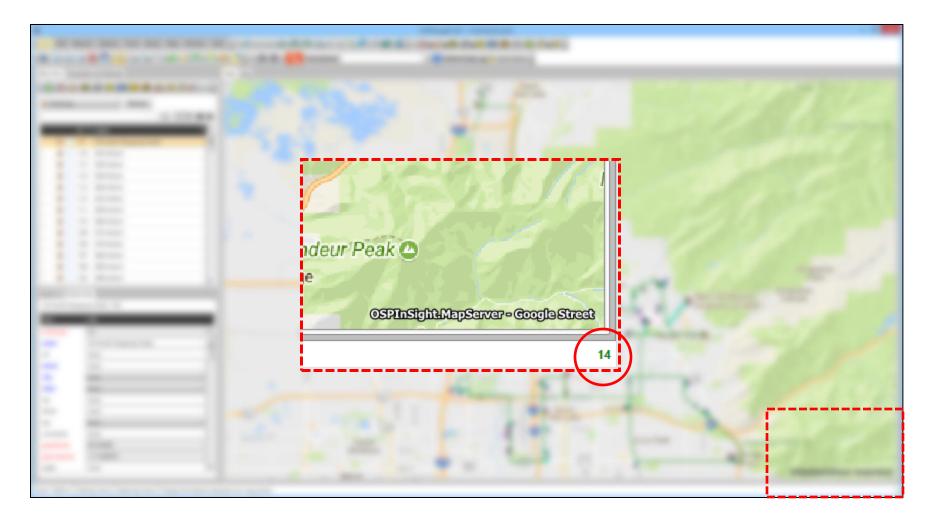
Fields can be selected for each object layer for use with the layers when opened on the map

0	Map Fields Picker -	×
Access Point	Column Name	• ۲
Building	Access Point	
Cable	name	
Document Duct Bank	clli	
Plan	street	
Pole		
Pole Line	city	
Slack Loop	state	
Splice Point	placement	
Termination Point	typ	
	owner	
	addressnotes	
	typesize	
	comments	
	gpslatitude	
	gpslongitude	
	workorderid	_ ▼
	OK Cancel	Apply

Note: If you have labels setup within MapInfo already, the first time you open the database those labels may not be available. You will need to ensure that the fields used in those labels are chosen in the Map Fields Picker and then re-open the database.

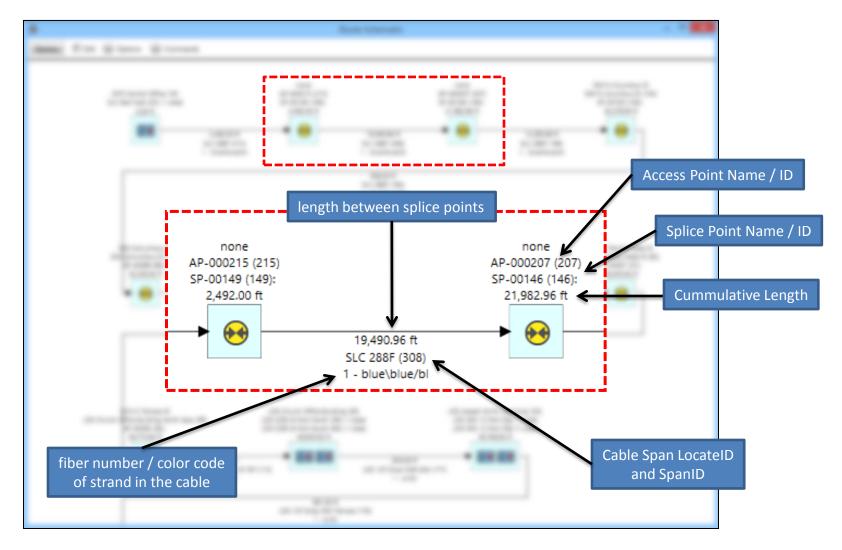


Connection to database confirmation



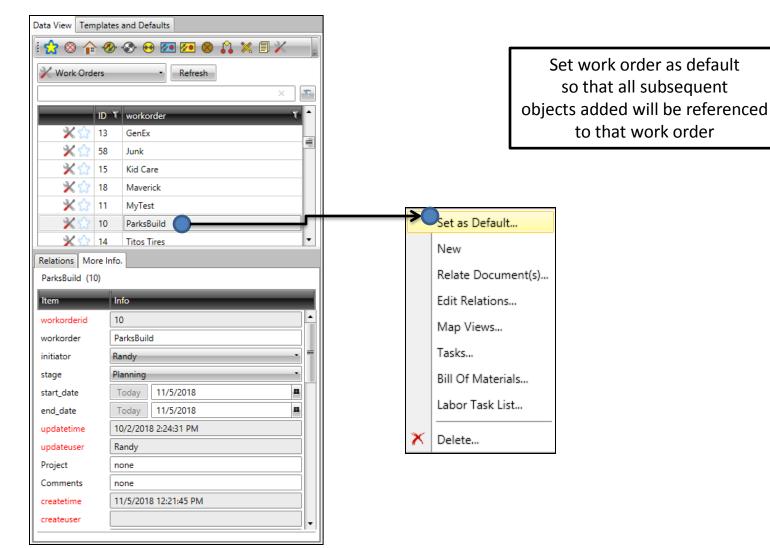


Splice Points added to the Route Schematic





Work Order – Set as Default





Work Order – Edit Relations

0	Relatio	ns - Work Order: DFC WO-00	3 - 🗆 ×			
Save Cancel 🖍	Export	t				
	ID					
▲ Access Point	2					
8	169	150 W S Temple	×			
8	170	Abravanel West JBox	×			
Buildings	2					
\$	90	Abravanel Hall	×			
\$	91	UMOCA	×			
▲ Cable Spans	6					
	243	243	×			
	244	244	×		1	
<i>⊗</i> ∙	245	245	×			View all network objects
	246	246	× =			related to the work order
	247	247	×			
	249	249	×			and have the ability to
Documents	0			í		remove items or drag and
▲ Duct Banks	3					drop new items from the
-®-	175	DB-00175	×			data view.
-®-	177	DB-00177	×			
·&·	178	DB-00178	×			
Equipment	0					
Plan	0					
Poles	0					
▲ Splice Points	2					
	120	SP-00120	×			
	121	SP-00121	×			
▲ Termination Points	4					
	101		✓ •			



Work Order – Edit Relations

•	Relatio	ns - Work Order: DFC WO-003	- 🗆 🗙
Save Cancel	N Expor	t	
	ID		
▲ Access Point	2		
8	169	150 W S Temple	×
8	170	Abravanel West JBox	×
▲ Buildings	2		
1	90	Abravanel Hall	×
1	91	UMOCA	×
▲ Cable Spans	6		
-⊗-	243	243	×
-⊗-	244	244	×
-⊗-	245	245	×
-⊗-	246	246	× =
	247	247	×
	249	249	×
Documents	0		
Duct Banks	3		
	175	DB-00175	×
	177	DB-00177	×
	178	DB-00178	×
Equipment	0		
Plan	0		
Poles	0		
Splice Points	2		
	120	SP-00120	×
	121	SP-00121	×
A Termination Poir	nts 4		
	101		✓ 1

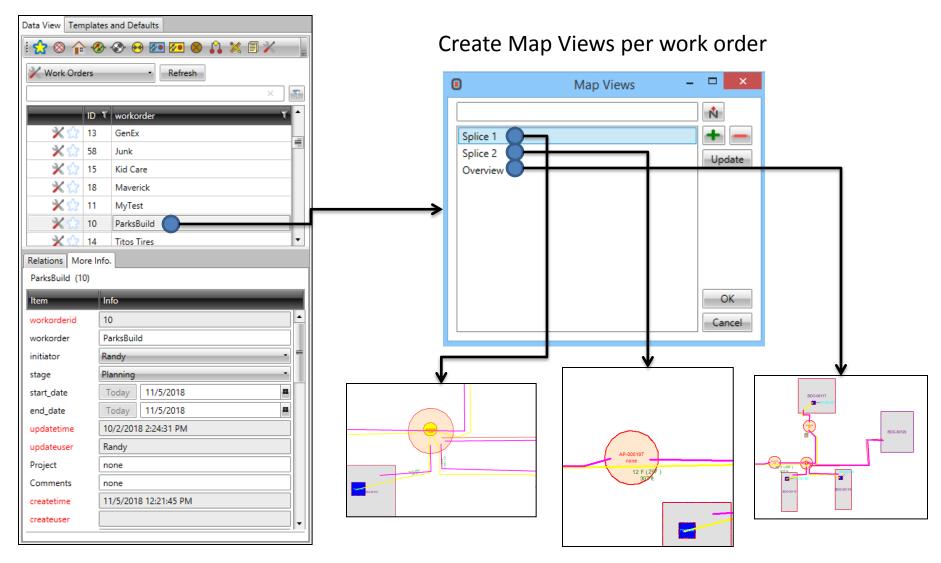


Work Order – Edit Relations

8	Relation	ns - Work Order: DFC WO-003	- 🗆 🗙
Save Cancel 🖍	Export		
	ID		
▲ Access Point	2		
8	169	150 W S Temple	×
8	170	Abravanel West JBox	×
Buildings	2		
^	90	Abravanel Hall	×
1	91	UMOCA	×
▲ Cable Spans	6		
⊗	243	243	×
	244	244	×
<i>⊗</i>	245	245	×
<i>⊗</i>	246	240	× =
<i>⊗</i>	247	247	×
*	249	249	×
Documents	0		
▲ Duct Banks	3		
-®-	175	DB-00175	×
-@-	177	DB-00177	×
÷	178	DB-00178	×
Equipment	0		
Plan	0		
Poles	0		
▲ Splice Points	2		
•	120	SP-00120	×
	121	SP-00121	×
▲ Termination Points	4		
	101	CICAL 15 1240 1	× *



Work Order – Map View





Work Order – Bill of Materials

The materials required to complete the build

	Refresh					
art T umber	Sub Category T	Description T	Quantit _i T	Unit T	Unit Price T	Total Price
	Conduit	Conduit: 6" HDPE SDR-11	1278	Foot	\$2.00	\$2,556.0
	Conduit	Conduit: 2" HDPE SDR-11	243	Foot	\$2.00	\$486.0
	Conduit	Conduit: 1" HDPE - Corrugated	2556	Foot	\$2.00	\$5,112.0
	Cable	Miscellaneous Fiber Optic Cable	1136	Foot	\$2.00	\$2,272.0
	Handhole / Manhole	Tier 8 - 17"x18"x30" - With knock-	9	Each	\$2.00	\$18.0
	Handhole / Manhole	Tier H20 36" Round Concrete Manl	12	Each	\$2.00	\$24.0
	Handhole / Manhole	ISP Junction Box up to 12" x 12"	15	Each	\$2.00	\$30.0
	ISP MPOE/CPE Civil - AC Power	15A, 120V Single Phase Power Cab	600	Foot	\$2.00	\$1,200.0
	ISP MPOE/CPE Civil	Relay Rack: 2-Post, Non Seismic - 1	12	Each	\$2.00	\$24.0
	ISP MPOE/CPE Civil - CAT/COAX	CAT5/6 Connectors	54	Each	\$2.00	\$108.0
	ISP MPOE/CPE Civil - DC Power	#4 AWG Wire Stranded	1200	Foot	\$2.00	\$2,400.0
	Splice Enclosures and Trays	Miscellaneous Splice Enclosure - M	1	Each	\$2.00	\$2.0
	Splice Enclosures and Trays	Miscellaneous Grounding Closure (2	Each	\$2.00	\$4.0
	ISP MPOE/CPE Civil	Relay Shelf	3	Each	\$2.00	\$6.0
	ISP MPOE/CPE Civil	DSX-1 Panel	3	Each	\$2.00	\$6.0
					Total	\$14,248.0

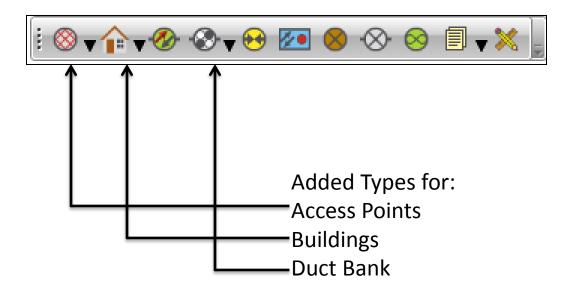


Work Order – Labor Task List

The labor required to complete the build

0		Labor Task	List - Parks	Build		- 🗆 🗙
Export	Refresh					
Summary	Details					
Categor T	Sub Category T	Description T	Quantit T	Unit T	Unit Price T	Total Price T
U/G	Pull Fiber Optic Cable (FOCA)	Pull FOCA in Duct, 300' to 1000' (ea	307	ft	\$3.00	\$921.00
U/G	Miscellaneous	Pump / De-Gas M.H.	1	ea	\$3.00	\$3.00
U/G	Existing Conduit/Duct Prep	Place Locate Wire in Existing Duct	327	ft	\$3.00	\$981.00
U/G	Pull Fiber Optic Cable (FOCA)	Pull FOCA in Duct, 300' to 1000'	327	ft	\$3.00	\$981.00
U/G	Existing Conduit/Duct Prep	Place Pull Rope in Existing Duct (re	327	ft	\$3.00	\$981.00
U/G	Trench < 300'	36" minimum cover	0	ft	\$3.00	\$0.00
					Total	\$3,867.00





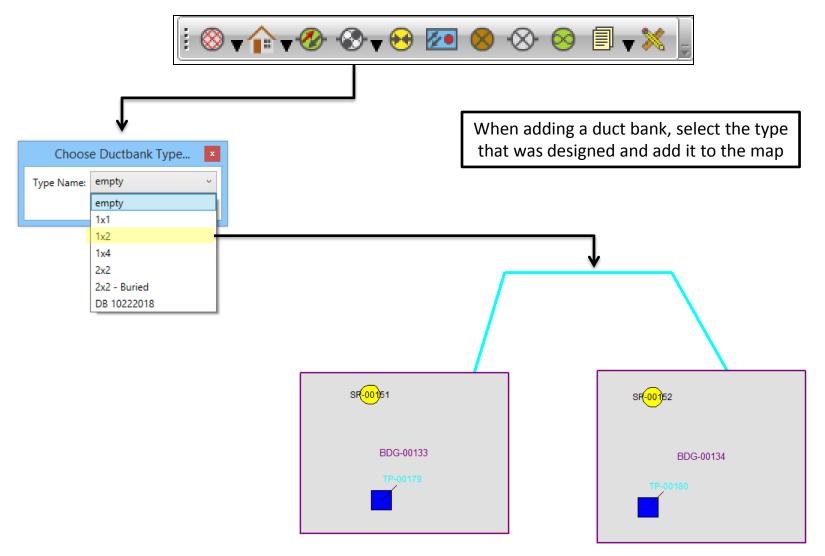


File		Auto Terminate Options Custom Styles Editor Equipment Editor	Map Window I		s		cr		esign a du ection an		nk with a ted materials	
		Patch Editor ×					,	,				
		Rings (Cable Spans)	0			[ouct Bank Cross Se	ection Ty	pe Editor*		_ [×
		Master Task List Editor	1x2	• Name: 1x2		Open Tasks						
		Price Lists Editor	τ	name T diam T	diam T ga	auc T material	τ	color T	updatetime T	updater T	taskid	
	-		Duct Bank	1x2					11/5/2018 7:15:30	Randy		
	7	Undo Ctrl+Z	 Superduct 	6	in	Conduit: 6	" HDPE SDR-11		11/5/2018 7:16:44	Randy	Conduit: 6" HDPE SDR-11 (384)	
	\triangle	Reshape Ctrl+R	Innerduct	1	in		" HDPE - Corrugated		11/5/2018 7:16:44	,	Conduit: 1" HDPE - Corrugated (374)	
	-	Rotate	Innerduct	1	in	Conduit: 1	" HDPE - Corrugated	none	11/5/2018 7:16:44	Randy	Conduit: 1" HDPE - Corrugated (374)	
		Get Info F7	-									Þ
Relat	tions	More Info.								New	Delete OK Cancel	Apply
BDG		39 (139)	1									

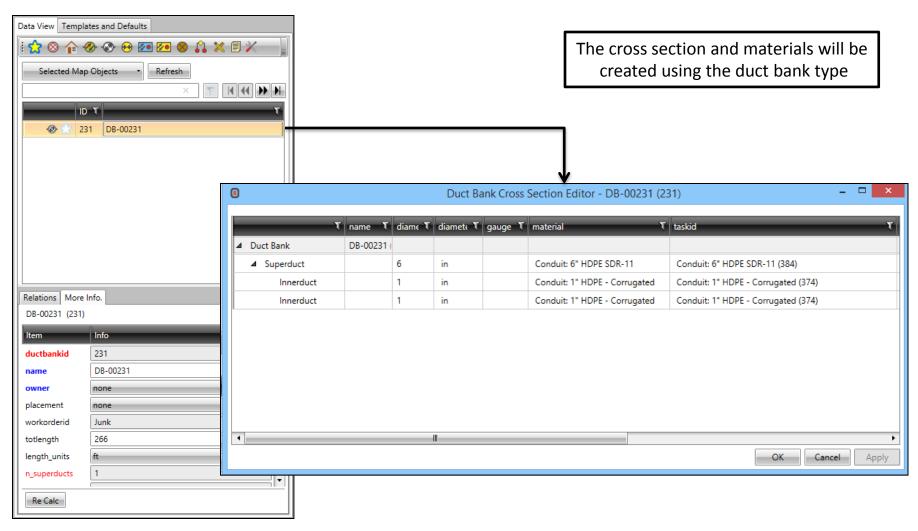


Materials for inked to the m	•					ection Ty	vpe Editor*			- 🗆 🗙
1x2	- Nam	e: 1x2		Ор	en Tasks					
T	name T	liam T	diam T	gau <u>c</u> T	material	color	updatetime	τ	updateu T	taskid
Duct Bank	1x2						11/5/2018	7:15:30	Randy	
 Superduct 	6	5	in		Conduit: 6" HDPE SDR-11		11/5/2018	7:16:44	Randy	Conduit: 6" HDPE SDR-11 (384)
Innerduct	1		in		Conduit: 1" HDPE - Corrugated	none	11/5/2018	7:16:44	Randy	Conduit: 1" HDPE - Corrugated (374)
Innerduct	1		in		Conduit: 1" HDPE - Corrugated	none	11/5/20 <mark>18 -</mark>	7.16.44	Randy	Conduit: 1" HDPE - Corrugated (374)
•							Conduit Plug: 1- Conduit Plug: 1- Conduit Plug: 2" Conduit Plug: 2" Conduit Plug: 4"	1/4" Blan 1/4" with Blank Ja with Cab Blank Ja W/ Inner Conduit Pl	nk Jackmoon e n Cable Simple ckmoon equiv ble Simplex Plu ckmoon equiv rduct (Triplex/C lug Jackmoon	ug Jackmoon equivalent (452)









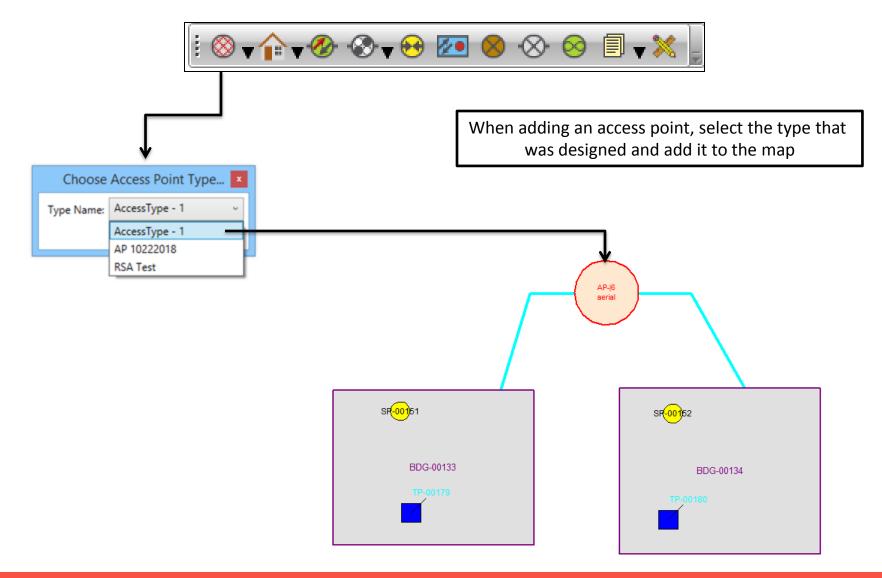


Access Point Type

0				Material Type Editor						- 🗆	×		
Access Point Hardware	Item	Info	_			-	_	_	_	_			
Building Hardware	access_pointtype	1											
Cable Hardware	name	AccessT	ype - 1										
Cable Reel Hardware	comments												
Color Codes	typesize	none											
Patch Type Hardware	typ	ceiling b	юх								•		
Splice Point Hardware	updatetime	9/17/20	18 3:52:59 PM										
Termination Point Hardware	updateuser	Randy	•			Tac	ks (access_pc	pinttype(1)				_ □	×
AccessType - 1	createtime	9/17/2	U			Tas	ks (access_pc	onittype.1)					
AP 10222018	createuser	Randy			_	_		1)		Filter: <			
RSA Test				MT Category	۲ ^		Code	۲	Task T	Units T	Materials	Optir T	۲ ^
			▲ MAT		-11	±	MAT-90920		8"x30" - With knock-ou		Materials		4
				nduit	-11	±	MAT-90930		6"x36" - With knock-ou		Materials	Only	/ =
			l	nduit Plugs	_	±	MAT-90940	Tier 15 - 17"x	18"x30" - With knock-o	L Each	Materials	-	4
				le U-Guard / Risers	_	±	MAT-90950	Tier 15 - 24"x	36"x36" - With knock-o	ι Each	Materials	Only	4
				ndhole / Manhole		±	MAT-90960	Tier 15 24"x60	0"x36"- With knock-out	s Each	Materials	Only	4
			An	ichors and Down Guys		÷	MAT-90970	Tier 15 30"x48	8"x36" - With knock-out	t Each	Materials	; Only	4
			Str	rand	- 11	±	MAT-90980	Tier 15 30"x60	0"x36" - With knock-out	t Each	Materials	Only	4
			Ca	ble		±	MAT-90990	Tier 15 48"x48	8"x48"- With knock-out	s Each	Materials	; Only	4
			Ae	rial Other Material	_	±	MAT-91000	Tier 15 72"x72	2"x72" - With knock-out	t Each	Materials	; Only	4
			ISF	MPOE/CPE Civil		÷	MAT-91010	Tier 22 17"x18	8"x30" - With knock-out	t Each	Materials	; Only	4
			ISI	MPOF/CPF Civil - AC Power	•	L.	MAT 01020	Time 22 245-24		- Carl	Meterial	- Oralia	, •
			Code T	Task T	Units	τQ	uantity 🔨 Mat	terials Option 🐧	Materials Note 🝸	Ta	ask Note		T
Create New Access Point Type			MAT-90920	Tier 8 - 17"x18"x30" - With knock-outs and	Each		3 Ma	terials Only					
Delete Selected Type	Revert Changes	Tas	MAT-91100	Tier H20 36" Round Concrete Manhole - W	Each		4 Ma	terials Only					
			MAT-91120	ISP Junction Box up to 12" x 12"	Each		5 Ma	terials Only					
			ОК	Cancel Apply]



Access Point Type





	Access Point Type	
Data View Templates and Defaults		
Selected Map Objects ID ID		The attributes and materials of the access point type will flow through to the newly created access point.
Structure Content of the second secon		\neg
		access_point:222) – 🗆 × Filter: <ali>• Code Task Units Materials Option Filter</ali>
MAT- MAT-	90920 Tier 8 - 17"x18"x30" - With knock-outs and Each Each 91100 Tier H20 36" Round Concrete Manhole - W Each 91120 ISP Junction Box up to 12" x 12" Each	y T Materials Option T Materials Note T Task Note T 3 Materials Only 4 Materials Only 5 Materials Only

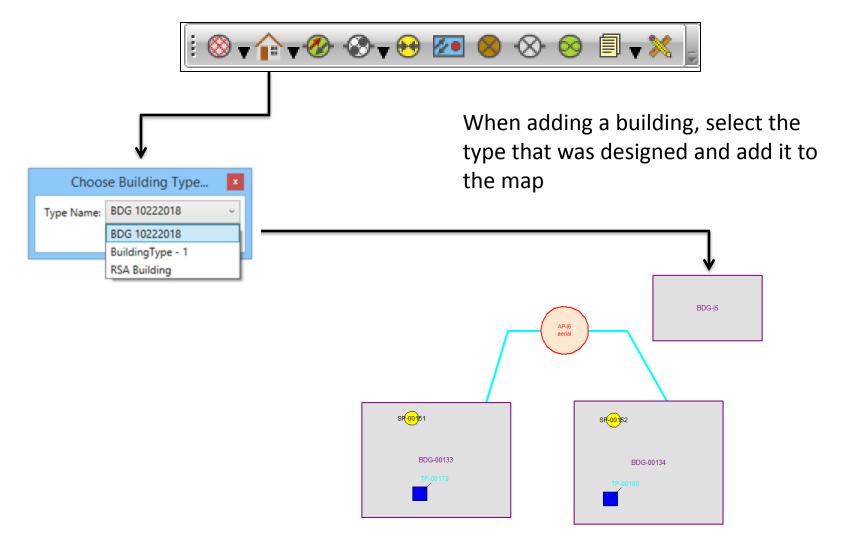


Building Type

0				Material Type Editor					- 🗆 🗙	
Access Point Hardware	ltem	Info	_		_	_	_			
Building Hardware	buildingtypeid	1								
Cable Hardware	name	Buildi	ngType - 1							
Cable Reel Hardware	comments									
Color Codes	floors	0								
Patch Type Hardware	basements	0								
Splice Point Hardware	diverse_entries	0	0			Tasks (bui	ldingtype:1)			_ 🗆 🗙
Termination Point Hardware	typ	Cent							Filter: Building Filter	
BDG 10222018	ispviewtypeid									
BuildingType - 1	updatetime	9/17		MT Category	, T	Code	T	Task	Units I Mai	terials Optiv 🍸 Fil 🍸
RSA Building	updateuser createtime	Ran 9/17	▲ Category ▷ U/G							
	createuser	Ran	AERIAL							
	createuser		⊳ B/E							
			SPLICIN	١G						
			▷ MISC.							
			Engine	ering						
			⊳ MAT							
			Fest Ca	t						
			Code T	Task	T Units T	ົQuantity ຈັ	Materials Option T	Materials Note T	Task N	ote T
			MAT-93350	Relay Rack: 2-Post, Non Seismic - 19"	Each	4	Materials Only			
Create New Building Type			MAT-91610	15A, 120V Single Phase Power Cable	Foot	200	Materials Only			
Delete Selected Type	Revert Change	s	MAT-94570	CAT5/6 Connectors	Each	18	Materials Only			
			MAT-94680	#4 AWG Wire Stranded	Foot	400	Materials Only			
			ОК	Cancel Apply						

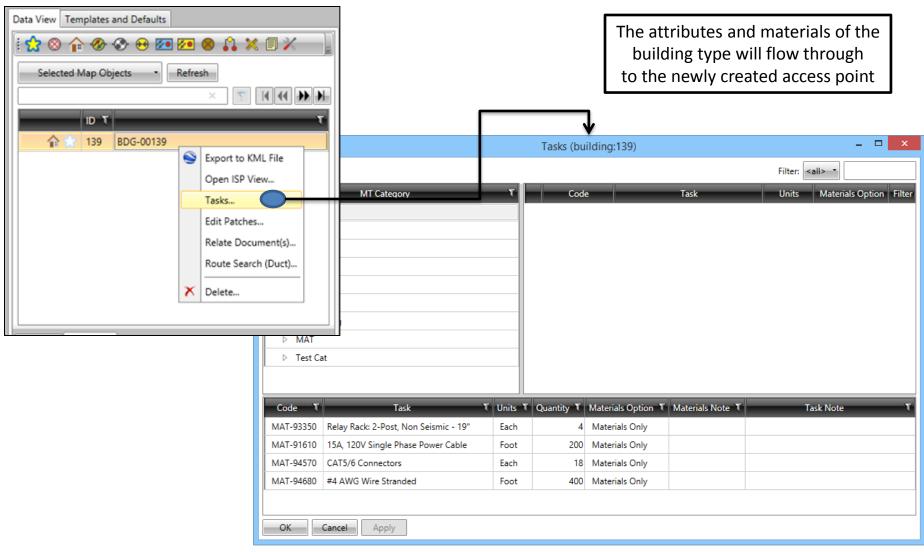


Building Type



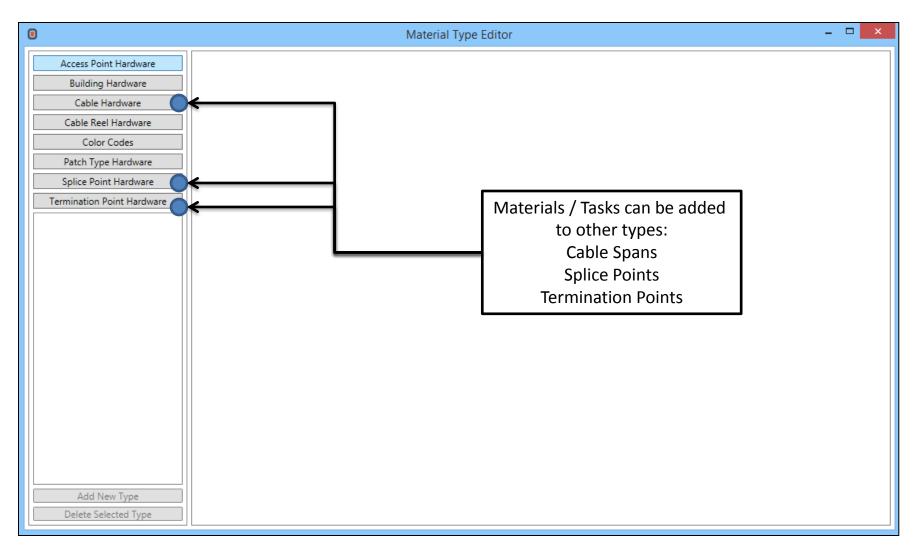


Access Point Type





Materials for other Types

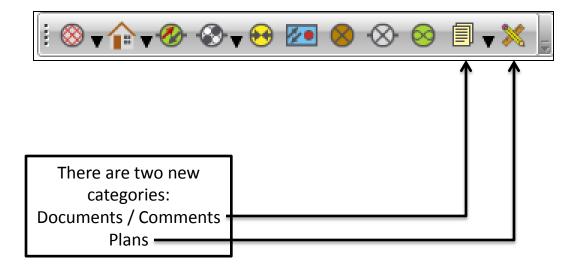


Data View Tem	Data View Templates and Defaults									
i 🟫 🛞 😭	i 🟫 🛯 🏠 🔗 😌 📨 🔽 🗶 🎧 💥 🗐 🗶 🏢									
Selected N	Selected Map Objects									
	ID T	τ								
🛛 😒 😒	222	AP-000222								
🟫 🏠	133	BDG-00133								
🟫 🏠	134	BDG-00134								
🟫 🏠	139	BDG-00139								
🐵 🏠	231	DB-00231								
ee 🖒	151	SP-00151								
ee 🏠	152	SP-00152								
20 😒	179	TP-00179								
20	180	TP-00180								

After an object is created, materials can also be added to individual objects

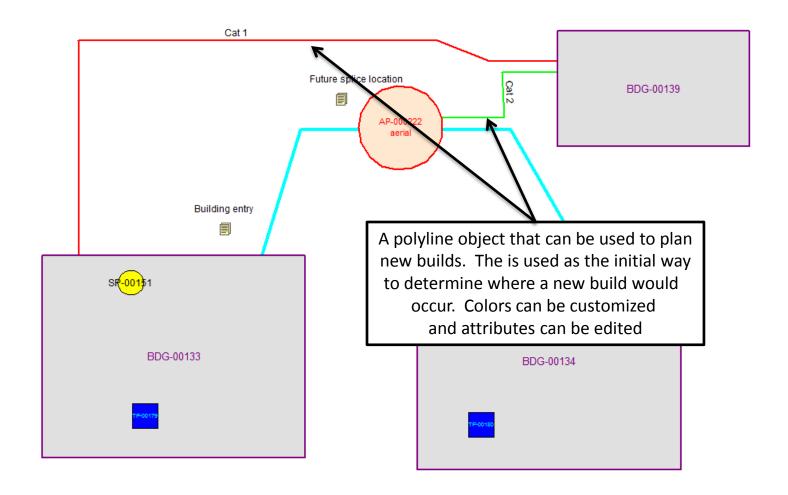


New Categories



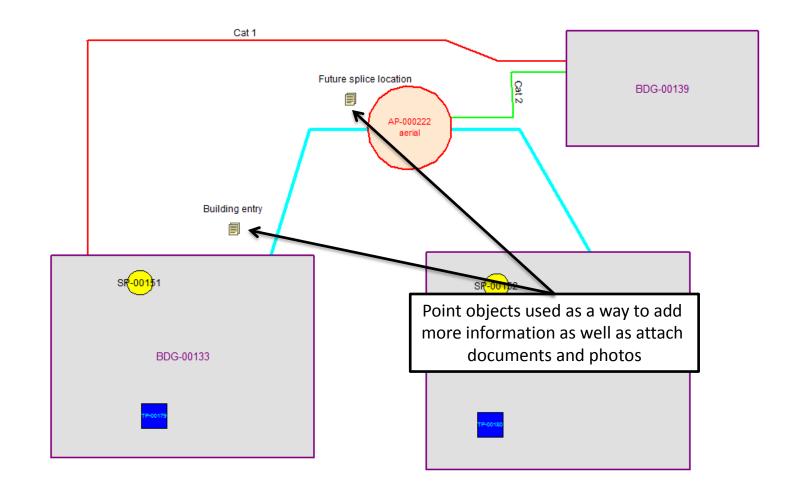


Plan Category





Document / Comments Category





Master Task List

						Filter: <all></all>
MT Category T			Code	Task	T Units T	Materials Option $ au$ Filter
Category		÷	1031	Rock Saw Excavation	ft	Incl w/Labor
⊿ U/G		÷	1032	Trench Rock Adder (in addition to units 1001-1029)	ft	Incl w/Labor
Trench < 300'		÷	1033	Trench Rock Adder 12" Additional Depth	ft	Incl w/Labor
Trench 300' to 1000'	=	÷	1034	Bore, Rock Adder (per ft in addition to units 1083-1159)	ft	Incl w/Labor
Trench > 1000'		+	1035	Manhole Excavation-Rock	sq ft	Incl w/Labor
Rock/Rock Saw		+	1036	Trench Frozen Ground Adder (in addition to units 1001-1029)	ft	Incl w/Labor
Trench - Hand Dig		÷	1037	Pit Excavation-Rock	sq ft	Incl w/Labor
Conduit - Place in Trench						
Select Backfill						
Bore < 300'				This is where all labor tasks		
Bore 300' to 1000'						
Bore > 1000'				and material tasks are maintained		
Existing Conduit/Duct Prep				for use throughout the application.		
Place Innderduct in Existing Conduit						
Conduit Plugs						
Pull Fiber Optic Cable (FOCA)						
Pole Risers	-					

Price List Editor

•				Pr	ice Lists Editor					
Export										All Rows
Price List	T Drag	g a column header a	nd drop it here to gr	oup by that column						
10222018		Code T	Category T	Sub Category T	Task T	Un T	CBD T Su	uburban T	Rural T	General T
MyList	÷	1001	U/G	Trench < 300'	24" minimum cover	ft	\$3.00	\$0.00	\$0.00	\$0.00
new price list	Ð	1003	U/G	Trench < 300'	36" minimum cover	ft	\$3.00	\$0.00	\$0.00	\$0.00
RSA Test	Ð	1005	U/G	Trench < 300'	⁴² This is w	here	prices are	\$0.00	\$0.00	\$0.00
	÷	1007	U/G	Trench < 300'			tasks found	\$0.00	\$0.00	\$0.00
	÷	1009	U/G	Trench < 300'	-		r Task List	\$0.00	\$0.00	\$0.00
	Đ	1011	U/G	Trench 300' to 1000'		"	\$3.00	\$0.00	\$0.00	\$0.00
	Đ	1013	U/G	Trench 300' to 1000'	36" minimum cover	ft	\$3.00	\$0.00	\$0.00	\$0.00
	Đ	1015	U/G	Trench 300' to 1000'	42" minimum cover	ft	\$3.00	\$0.00	\$0.00	\$0.00
	+	1017	U/G	Trench 300' to 1000'	48" minimum cover	ft	\$3.00	\$0.00	\$0.00	\$0.00
	+	1019	U/G	Trench 300' to 1000'	60" minimum cover	ft	\$3.00	\$0.00	\$0.00	\$0.00
	•	1021	U/G	Trench > 1000'	24" minimum cover	ft	\$3.00	\$0.00	\$0.00	\$0.00
	÷	10222018_A	Test Cat	Test Sub Cat	Labor Foot	ft	\$1.50	\$2.50	\$3.50	\$4.50
	Ð	10222018_B	Test Cat	Test Sub Cat	Material Foot	ft	\$5.50	\$6.50	\$7.50	\$8.50
	Ð	10222018_C	Test Cat	Test Sub Cat	Labor Each	Each	\$9.50	\$10.50	\$11.50	\$12.50
	÷	10222018_D	Test Cat	Test Sub Cat	Material Each	Each	\$13.50	\$14.50	\$15.50	\$16.50
	Ð	10222018_E	Test Cat	Test Sub Cat	Retire Test	ft	\$17.50	\$18.50	\$19.50	\$20.50
		1022	U/G	Tropph > 1000'	26" minimum couor	4	\$2.00	\$0.00	\$0.00	\$0.00