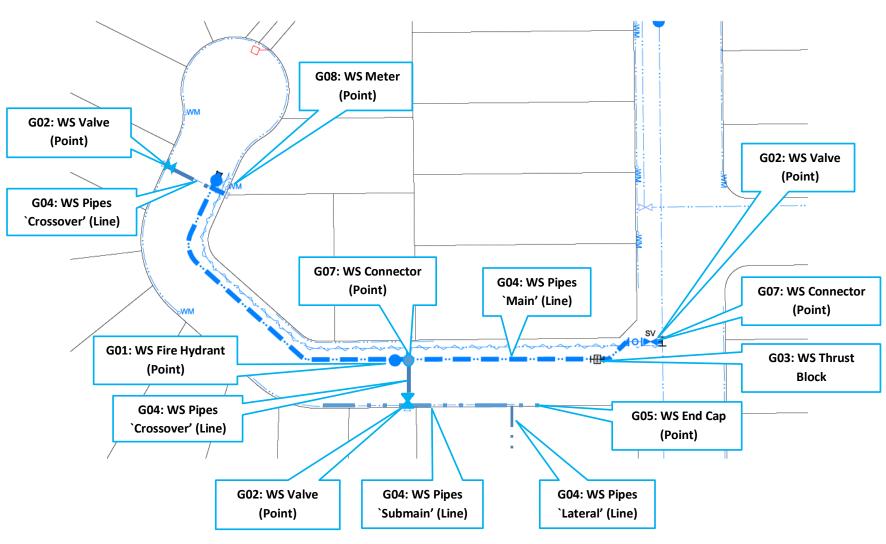


Appendix G As-built Requirements for Water Supply

Appendix G As-built Requirements for Water Supply1
G01: WS Fire Hydrant3
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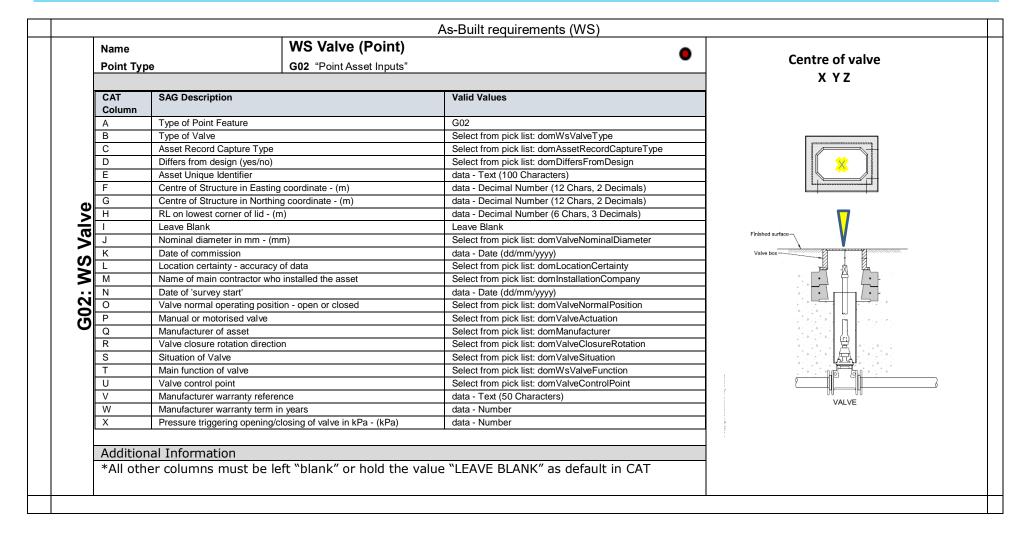






Name		WS Fire Hydrant (Point)		Centre of hydrant
Point Type G01 "Point A		G01 "Point Asset Inputs"	,	X Y and Z
CAT Column	SAG Description		Valid Values	7. T 4.1.4 =
Α	Type of Point Feature		G01	
В	Type of Hydrant		Select from pick list: domWsHydrantType	
С	Asset Record Capture Typ	е	Select from pick list: domAssetRecordCaptureType	
D	Differs from design (yes/no)		Select from pick list: domDiffersFromDesign	
E F G H	Asset Unique Identifier		data - Text (100 Characters)	
F	Centre of Structure in East	ing coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)	
G	Centre of Structure in North		data - Decimal Number (12 Chars, 2 Decimals)	·
Н	RL on lowest corner of lid -	(m)	data - Decimal Number (6 Chars, 3 Decimals)	
1	Leave Blank		Leave Blank	
J	Leave Blank		Leave Blank	
K	Date of commission		data - Date (dd/mm/yyyy)	
L	Location certainty - accura	cy of data	Select from pick list: domLocationCertainty	\ \
M	Name of main contractor w	ho installed the asset	Select from pick list: domInstallationCompany	V
N	Date of 'survey start'		data - Date (dd/mm/yyyy)	
0	Leave Blank		Leave Blank	
Р	Leave Blank		Leave Blank	
Q	Manufacturer of asset		Select from pick list: domManufacturer	
	nal Information er columns must be	left "blank" or hold the	e value "LEAVE BLANK" as default in CAT	FIRE HYDRANT







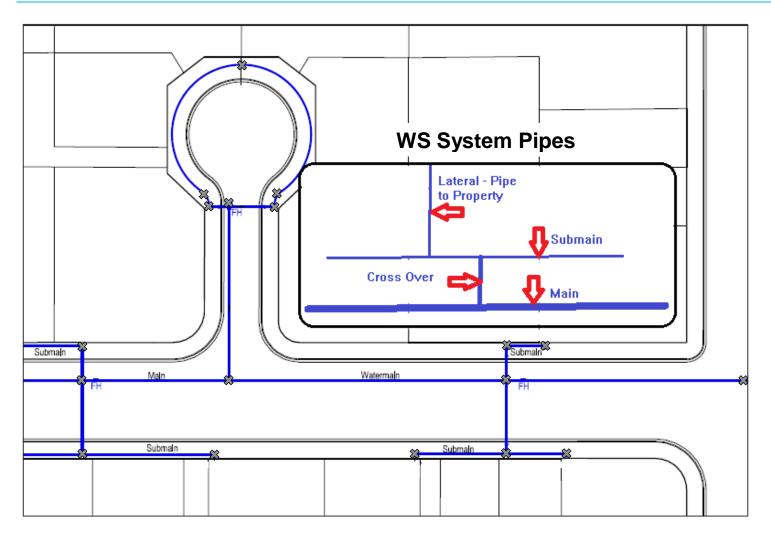


Figure WS System Pipes



As-Built requirements (WS) **WS Pipes (Line)** Name Line Type G04 "Line Asset Inputs" Centre of pipe vertex CAT **SAG Description** Valid Values XY Column Type of Line Feature G04 RWSystem Pipes Select from pick list: domWsPipeType Type of Pipe Select from pick list: domAssetRecordCaptureType С Asset Record Capture Type Lateral - Pipe D Differs from design (yes/no) Select from pick list: domDiffersFromDesign to Property Asset Unique Identifier data - Text (100 Characters) Line Vertex Easting coordinate - (m) data - Decimal Number (12 Chars, 2 Decimals) G Line Vertex Northing coordinate - (m) data - Decimal Number (12 Chars, 2 Decimals) data - Decimal Number (6 Chars, 3 Decimals) Н Invert level at vertex - (m) Cross Over Number of Vertex (point along line) data - Number Material of pipe Ö Select from pick list: domWsPipeConstruction Pip Nominal diameter in mm - (mm) Select from pick list: domPipeNominalDiameter Leave Blank Leave Blank М Leave Blank Leave Blank Manufacturer of asset Select from pick list: domManufacturer ⋛ 0 Name of main contractor who installed the asset Select from pick list: domInstallationCompany Pressure class (PN) Select from pick list: domPipePressureClass **G04** Stiffness rating (SN) Select from pick list: domPipeStiffnessClass Concrete Load Class Select from pick list: domPipeLoadClass Date of commission data - Date (dd/mm/yyyy) Select from pick list: domLocationCertainty Location certainty - accuracy of data U Date of 'survey start' data - Date (dd/mm/yyyy) Leave Blank Leave Blank Average burial depth to invert of pipe - (m) data - Decimal Number (6 Chars, 3 Decimals) W Method by which the pipe was installed Select from pick list: domPipeInstallationMethod Additional Information *All other columns must be left "blank" or hold the value "LEAVE BLANK" as default in CAT Use this feature for all WS pipe types incl. laterals. All bends, start/end points to be surveyed. Create one CAT row per surveyed point. This feature requires at least two row entries.

Revision 2.0

Col I: enter number of vertex along line starting with the downstream end



D - 1 - 4 T	_	WS End Cap (Point)		
Point Typ	<u>e</u>	G05 "Point Asset Inpu	uts"	_
CAT Column	SAG Description		Valid Values	
Α	Type of Point Feature		G05	
В	Type of Fitting		Select from pick list: domWsFittingType	
С	Asset Record Capture Type		Select from pick list: domAssetRecordCaptureType	
D	Differs from design (yes/no)		Select from pick list: domDiffersFromDesign	PVC 74 A PVC
Е	Asset Unique Identifier		data - Text (100 Characters)	••• []
F	Centre of Structure in Easting	, ,	data - Decimal Number (12 Chars, 2 Decimals)	
G	Centre of Structure in Northin	g coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)	
Н	Leave Blank		Leave Blank	
1	Leave Blank		Leave Blank	
J	Leave Blank		Leave Blank	
K	Date of commission		data - Date (dd/mm/yyyy)	
L	Location certainty - accuracy		Select from pick list: domLocationCertainty	
М	Name of main contractor who	installed the asset	Select from pick list: domInstallationCompany	
N	Date of 'survey start'		data - Date (dd/mm/yyyy)	
	al Information er columns must be le	ft "blank" or hold t	the value "LEAVE BLANK" as default in CAT	



As-Built requirements (WS)

Name	WS Pump (Point)	•
Point Type	G06 "Point Asset Inputs"	•

CAT Column	SAG Description	Valid Values		
A	Type of Point Feature	G06		
В	Type of Pump	Select from pick list: domWsPumpType		
С	Asset Record Capture Type	Select from pick list: domAssetRecordCaptureType		
D	Differs from design (yes/no)	Select from pick list: domDiffersFromDesign		
E	Asset Unique Identifier	data - Text (100 Characters)		
F	Centre of Structure in Easting coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)		
G	Centre of Structure in Northing coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)		
Н	Height above datum - (m)	data - Decimal Number (6 Chars, 3 Decimals)		
I	Leave Blank	Leave Blank		
J	Leave Blank	Leave Blank		
K	Date of commission	data - Date (dd/mm/yyyy)		
L	Location certainty - accuracy of data	Select from pick list: domLocationCertainty		
М	Name of main contractor who installed the asset	Select from pick list: domInstallationCompany		
N	Date of 'survey start'	data - Date (dd/mm/yyyy)		
0	Name and/or number of pump station	data - Text (50 Characters)		
P	Leave Blank	Leave Blank		
Q	Manufacturer of asset	Select from pick list: domManufacturer		
R	Serial number of asset	data - Text (50 Characters)		
S	Backup energy source	Select from pick list: domBackupEnergySource		
Т	Situation of Pump	Select from pick list: domPumpSituation		
U	Maximum capacity of pump in litres per hour	data - Number		
V	Manufacturer warranty reference	data - Text (50 Characters)		
W	Manufacturer warranty term in years	data - Number		

Centre of Pump X Y and Z (on pump)



Additional Information

*All other columns must be left "blank" or hold the value "LEAVE BLANK" as default in CAT



Name		WS Connector (Point)	
Point Typ	e	G07 "Point Asset Inputs	39	Centre of Connector
CAT	CAO December	Valid Values		X Y
Column	SAG Description		valid values	Α.
Α	Type of Point Feature		G07	
В	Type of Fitting		Select from pick list: domWsFittingType	\
С	Asset Record Capture Ty	ре	Select from pick list: domAssetRecordCaptureType	, A A
D	Differs from design (yes/r	10)	Select from pick list: domDiffersFromDesign	
E	Asset Unique Identifier		data - Text (100 Characters)	(• d ⊟ b
F	Centre of Structure in East		data - Decimal Number (12 Chars, 2 Decimals)	λ]Π[
G H I J K I I	Centre of Structure in No	rthing coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)	() ¶Ħ₽
5 H	Leave Blank		Leave Blank	
וֹשׁ	Leave Blank		Leave Blank	
J	Leave Blank		Leave Blank	
K	Date of commission		data - Date (dd/mm/yyyy)	
	Location certainty - accur	•	Select from pick list: domLocationCertainty	
M	Name of main contractor Date of 'survey start'	who installed the asset	Select from pick list: domInstallationCompany data - Date (dd/mm/yyyy)	
ON				
*All oth			e value "LEAVE BLANK" as default in CAT submains are not required.	



Point Ty	pe	G08 "Point Asset Input	3"	Centre of structure
CAT Column	SAG Description		Valid Values	ХҮ
Α	Type of Point Feature		G08	
В	Type of Connection		Select from pick list: domWsConnectionType	
С	Asset Record Capture Type		Select from pick list: domAssetRecordCaptureType	
D	Differs from design (yes/no)		Select from pick list: domDiffersFromDesign	
Е	Asset Unique Identifier		data - Text (100 Characters)	(-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\
F G H	Centre of Structure in Eastin	g coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)	
G	Centre of Structure in Northi	ng coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)	
<u>υ</u>	Leave Blank		Leave Blank	
2	Leave Blank		Leave Blank	<u> </u>
O J	Nominal diameter in mm - (r	nm)	Select from pick list: domWsConnectionNominalDiameter	
K	Date of commission		data - Date (dd/mm/yyyy)	<u>PLAN</u>
L	Location certainty - accuracy		Select from pick list: domLocationCertainty	
M	Name of main contractor wh	o installed the asset	Select from pick list: domInstallationCompany	
S N	Date of 'survey start'		data - Date (dd/mm/yyyy)	
0	Leave Blank		Leave Blank	
Р	Leave Blank		Leave Blank	
Q	Manufacturer of asset		Select from pick list: domWsConnectionManufacturer	
R	Serial number of asset		data - Text (50 Characters)	
S	Type of Telemetry		Select from pick list: domTelemetryType	
Additio	nal Information			
		oft "blank" or hold th	e value "LEAVE BLANK" as default in CAT	



As-Built requirements (WS)

Name WS Reservoir (Outline)
Polygon Type G09 "Polygon Asset Inputs"



CAT Column	SAG Description	Valid Values		
A	Type of Polygon Feature	G09		
3	Type of Reservoir	Select from pick list: domWsReservoirType		
0	Asset Record Capture Type	Select from pick list: domAssetRecordCaptureType		
)	Differs from design (yes/no)	Select from pick list: domDiffersFromDesign		
	Asset Unique Identifier	data - Text (100 Characters)		
F	Polygon Vertex Easting coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)		
G	Polygon Vertex Northing coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)		
Н	Height above datum - (m)	data - Decimal Number (6 Chars, 3 Decimals)		
	Number of Vertex (point along outline)	data - Number		
J	Leave Blank	Leave Blank		
<	Leave Blank	Leave Blank		
_	Name of main contractor who installed the asset	Select from pick list: domInstallationCompany		
M	Date of commission	data - Date (dd/mm/yyyy)		
N	Location certainty - accuracy of data	Select from pick list: domLocationCertainty		
O	Date of 'survey start'	data - Date (dd/mm/yyyy)		
)	Name of reservoir	data - Text (50 Characters)		
Q	Volume in cubic metres	data - Number		
2	Type of security on access	Select from pick list: domAccessSecurity		

All corner points along outline to be surveyed.

Create one CAT row per surveyed point.

Additional Information

*All other columns must be left "blank" or hold the value "LEAVE BLANK" as default in CAT All corner points along outline to be surveyed. Create one CAT row per surveyed point. This feature requires at least three row entries.

Col I: enter number of vertex along outline

Outline of structure X Y and Z







Point Typ	G10 "Point Asset In	7010	Centre of structure
CAT Column	SAG Description	Valid Values	хү
Α	Type of Point Feature	G10	
В	Asset type on which the Inlet/Outlet is installed	Select from pick list: domWsOutletType	
С	Asset Record Capture Type	Select from pick list: domAssetRecordCaptureType	
D	Differs from design (yes/no)	Select from pick list: domDiffersFromDesign	
E	Asset Unique Identifier	data - Text (100 Characters)	The state of the s
F	Centre of Structure in Easting coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)	
G	Centre of Structure in Northing coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)	
Н	Leave Blank	Leave Blank	
1	Leave Blank	Leave Blank	
J	Leave Blank	Leave Blank	
K	Date of commission	data - Date (dd/mm/yyyy)	
L	Location certainty - accuracy of data	Select from pick list: domLocationCertainty	
M	Name of main contractor who installed the asset	Select from pick list: domInstallationCompany	
N	Date of 'survey start'	data - Date (dd/mm/yyyy)	
	nal Information	the value "LEAVE BLANK" as default in CAT	

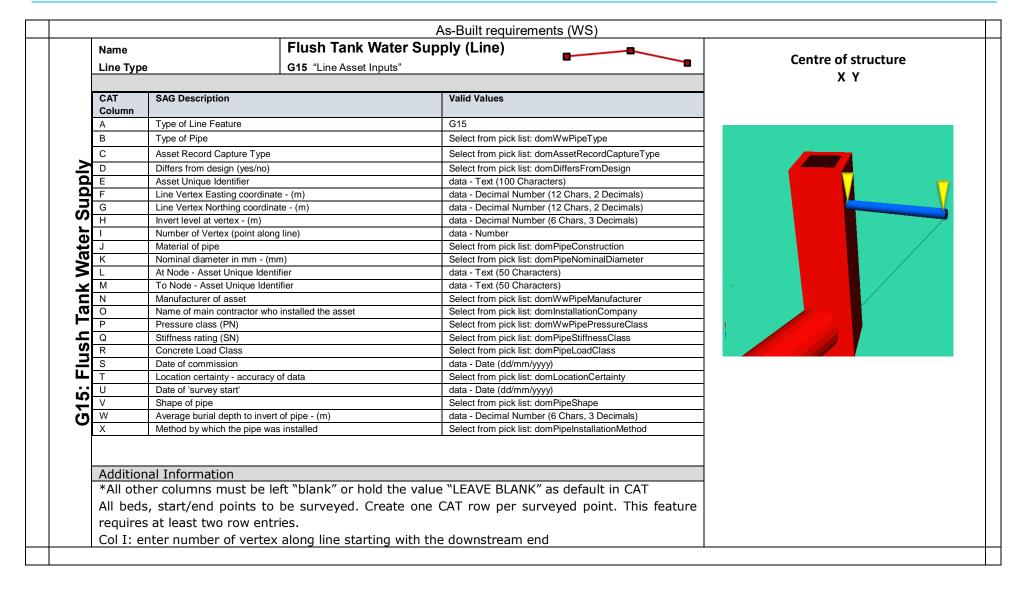


Name		WS Structure (C	As-Built requirements (WS)	
Polygon ⁻	Type	G11 "Polygon Asset Inputs"		
1 Olygon	Туре	puis	Outline of structure	
CAT Column	SAG Description		Valid Values	ΧΥ
A	Type of Polygon Feature		G11	
В	Type of Structure		Select from pick list: domWsStructureType	
С	Asset Record Capture Type		Select from pick list: domAssetRecordCaptureType	
D	Differs from design (yes/no)		Select from pick list: domDiffersFromDesign	
E	Asset Unique Identifier		data - Text (100 Characters)	
F	Polygon Vertex Easting coor	dinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)	
G	Polygon Vertex Northing cod	ordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)	
Н	Leave Blank		Leave Blank	
I	Number of Vertex (point alor	ng outline)	data - Number	
J	Predominant material of stru	ecture	Select from pick list: domAccessConstruction	
K	Leave Blank		Leave Blank	
L	Name of main contractor wh	o installed the asset	Select from pick list: domInstallationCompany	
M	Date of commission		data - Date (dd/mm/yyyy)	
N	Location certainty - accuracy	of data	Select from pick list: domLocationCertainty	/ \
0	Date of 'survey start'		data - Date (dd/mm/yyyy)	/
Р	Type of security on access		Select from pick list: domAccessSecurity	
Q	Tank Capacity - (Litres)		data - Number	G02: WS Valve (Point)
R	Construction style (for tanks))	Select from pick list: domWsStructureConstructionStyle	



Point Type		G12 "Point Asset Input	ts"	Centre of restrictor X Y
CAT Column	SAG Description		Description Valid Values	
Α	Type of Point Feature		G12	
В	Type of Connection		Select from pick list: domWsConnectionType	All and the second seco
С	Asset Record Capture Type		Select from pick list: domAssetRecordCaptureType	
D	Differs from design (yes/no)		Select from pick list: domDiffersFromDesign	
E	Asset Unique Identifier		data - Text (100 Characters)	
F	Centre of Structure in Easting	g coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)	
G H I	Centre of Structure in Northir	ng coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)	
Н	Leave Blank		Leave Blank	
1	Leave Blank		Leave Blank	
J	Nominal diameter in mm - (m	m)	Select from pick list: domWsConnectionNominalDiameter	AND THE PERSON OF THE PERSON O
K	Date of commission		data - Date (dd/mm/yyyy)	经验验 一个 以实现的 4 排
L	Location certainty - accuracy	of data	Select from pick list: domLocationCertainty	000
M	Name of main contractor who	installed the asset	Select from pick list: domInstallationCompany	
N	Date of 'survey start'		data - Date (dd/mm/yyyy)	The same of the sa
0	Leave Blank		Leave Blank	
Р	Leave Blank		Leave Blank	
Q	Manufacturer of asset		Select from pick list: domWsConnectionManufacturer	
R	Serial number of asset		data - Text (50 Characters)	
S	Type of Telemetry		Select from pick list: domTelemetryType	
Т	Flow rate in cubic metres per	day	Select from pick list: domWsConnectionRestrictorCapacity	







Name	Structural Pipe Protection (Line)			
Line Type		G16 "Line Asset Inpu	uts"	•
		Pipe Protection		
CAT Column	SAG Description	Valid Values		· xy
Α	Type of Line Feature		G16	
В	Type of Structural Pipe Pro	otection	Select from pick list: domWsPipeProtectionType	
С	Asset Record Capture Typ		Select from pick list: domAssetRecordCaptureType	
D	Differs from design (yes/no	o)	Select from pick list: domDiffersFromDesign	
E	Asset Unique Identifier		data - Text (100 Characters)	
F	Line Vertex Easting coording	nate - (m)	data - Decimal Number (12 Chars, 2 Decimals)	
G	Line Vertex Northing coord	linate - (m)	data - Decimal Number (12 Chars, 2 Decimals)	
Н	Leave Blank		Leave Blank	O MANAGEMENT OF THE PARTY OF TH
I	Number of Vertex (point ale	ong line)	data - Number	
J	Leave Blank		Leave Blank	
K	Leave Blank		Leave Blank	
L	Leave Blank		Leave Blank	
M	Leave Blank		Leave Blank	
N	Leave Blank		Leave Blank	The state of the s
0	Name of main contractor w	ho installed the asset	Select from pick list: domInstallationCompany	
Р	Leave Blank		Leave Blank	
Q	Leave Blank		Leave Blank	
R	Leave Blank		Leave Blank	
S	Date of commission		data - Date (dd/mm/yyyy)	
T	Location certainty - accura	cy of data	Select from pick list: domLocationCertainty	
U	Date of 'survey start'		data - Date (dd/mm/yyyy)	
Addition	al Information			
		left "hlank" or hold	the value "LEAVE BLANK" as default in CAT	
			the value LEAVE DEAINE as actually ill CAT	
	ture requires at leas			Create one CAT row per
Col I: er	nter number of verte	ex along line starting	g with the downstream end	surveyed point.
				Surveyed point.



As-Built requirements (WS) Air Gap Separator (Point) Name G17 "Point Asset Inputs" **Point Type Centre of structure** ΧY CAT SAG Description Valid Values Column Α Type of Point Feature G17 В Type of Air Gap Separator Air Gap Separator Separator С Asset Record Capture Type Select from pick list: domAssetRecordCaptureType D Differs from design (yes/no) Select from pick list: domDiffersFromDesign Е Asset Unique Identifier data - Text (100 Characters) Centre of structure in Easting coordinate - (m) data - Decimal Number (12 Chars, 2 Decimals) G Centre of structure in Northing coordinate - (m) data - Decimal Number (12 Chars, 2 Decimals) Leave Blank Leave Blank Leave Blank Leave Blank Q Nominal diameter in mm - (mm) Select from pick list: domAirGapSeparatorNominalDiameter a Date of commission data - Date (dd/mm/yyyy) Ü Location certainty - accuracy of data Select from pick list: domLocationCertainty Ą М Name of main contractor who installed the asset Select from pick list: domInstallationCompany Ν Date of 'survey start' data - Date (dd/mm/yyyy) 0 Leave Blank Leave Blank Р Leave Blank Leave Blank Manufacturer of asset Select from pick list: domManufacturer C R Leave Blank Leave Blank Type of security on access Select from pick list: domAccessSecurity Additional Information *All other columns must be left "blank" or hold the value "LEAVE BLANK" as default in CAT



Р	olygon [*]	Type G18 "Polygon Asset	Inputs"	
		1000	T. v. v. v.	
	CAT Column	SAG Description	Valid Values	Thrust Block Outline of
		Type of Polygon Feature	G18	Structure
	3	Type of Thrust Block	Select from pick list: domWsPipeRestraintType	
3	2	Asset Record Capture Type	Select from pick list: domAssetRecordCaptureType	ХҮ
)	Differs from design (yes/no)	Select from pick list: domDiffersFromDesign	
<u> </u>		Asset Unique Identifier	data - Text (100 Characters)	
	-	Polygon Vertex Easting coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)	
	3	Polygon Vertex Northing coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)	,
I	1	Leave Blank	Leave Blank	
5		Number of Vertex (point along outline)	data - Number	-EV
2 □	J	Predominant material of structure	Select from pick list: domAccessConstruction	
Z	<	Leave Blank	Leave Blank	
L	_	Name of main contractor who installed the asset	Select from pick list: domInstallationCompany	S
_ N	M	Date of commission	data - Date (dd/mm/yyyy)	
N	٧	Location certainty - accuracy of data	Select from pick list: domLocationCertainty	/ / 3/ \
2)	Date of 'survey start'	data - Date (dd/mm/yyyy)	
ם ד)	Type of security on access	Select from pick list: domAccessSecurity	,
_	2	Tank Capacity - (Litres)	data - Number	17
<u>n</u> F	₹	Construction style (for tanks)	Select from pick list: domWsStructureConstructionStyle	
				3
*	All oth	nal Information er columns must be left "blank" or hold ture requires at least two row entries.	the value "LEAVE BLANK" as default in CAT	
		·		
		-standard thrust blocks, all corner point nter number of vertex along outline	s along outline are to be surveyed.	



Name		WS Thrust Block – Standard (Point) G19 "Point Asset Inputs"		Thrust Block Centre of
Point Ty	oe			
CAT Column	SAG Description		Valid Values	Structure X Y
A	Type of Point Feature		G19	Α Ι
5 B	Type of Thrust Block		Select from pick list: domWsPipeRestraintType	
С	Asset Record Capture Typ	De .	Select from pick list: domAssetRecordCaptureType	
D	Differs from design (yes/n		Select from pick list: domDiffersFromDesign	23
≥	Asset Unique Identifier	•	data - Text (100 Characters)	
	Centre of Structure in Eas	ting coordinate - (m)	data - Decimal Number (12 Chars, 2 Decimals)	4/
G	Centre of Structure in Nor		data - Decimal Number (12 Chars, 2 Decimals)	
H	Leave Blank	- , ,	Leave Blank	
1	Leave Blank		Leave Blank	550
⊈ J	Leave Blank		Leave Blank	
K	Date of commission		data - Date (dd/mm/yyyy)	
J K L	Location certainty - accura	icy of data	Select from pick list: domLocationCertainty	(C+2)
М	Name of main contractor	vho installed the asset	Select from pick list: domInstallationCompany	
N	Date of 'survey start'		data - Date (dd/mm/yyyy)	
*All oth			e value "LEAVE BLANK" as default in CAT	