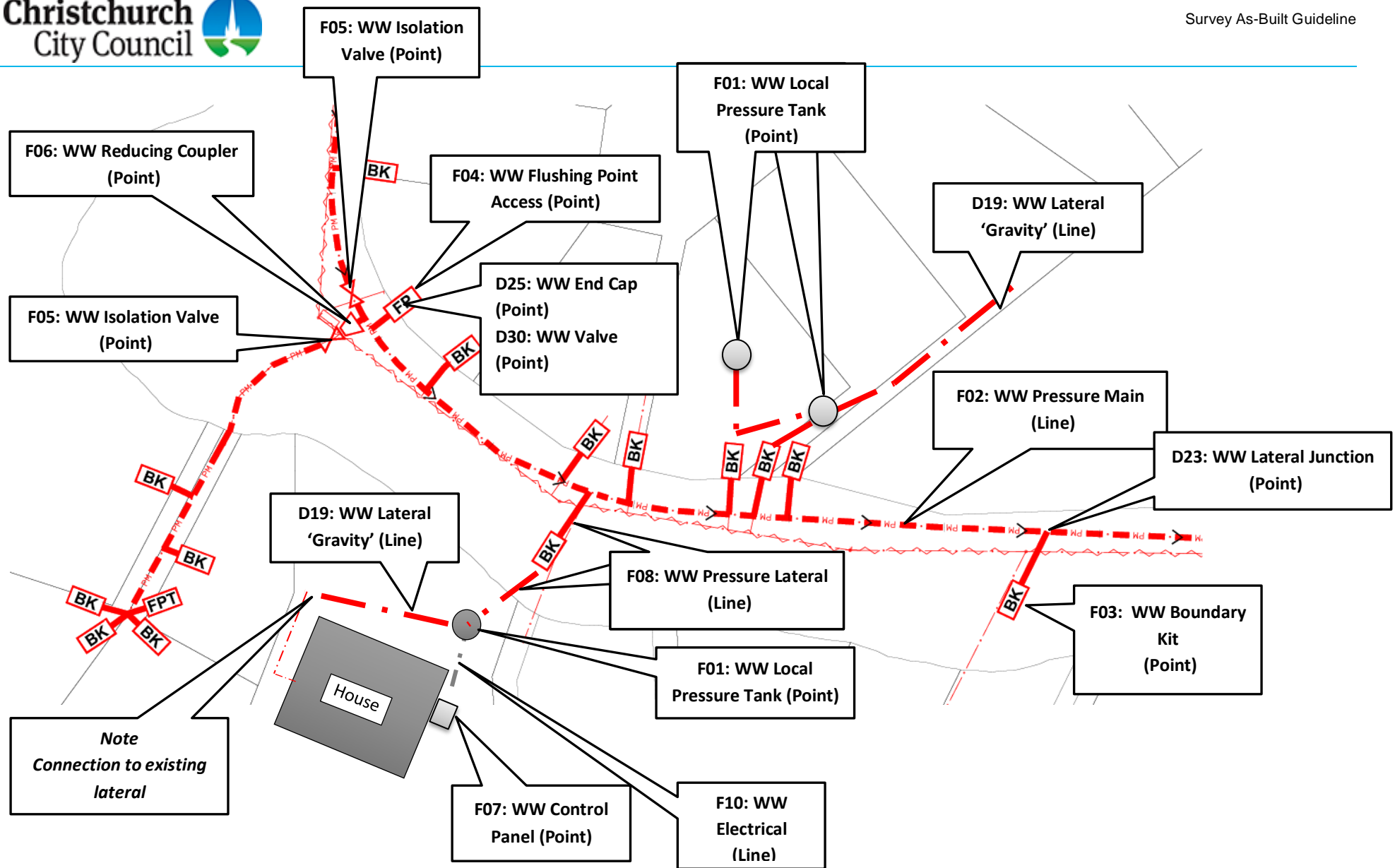

Appendix F As-built Requirements for Wastewater Pressure Sewer System

Appendix F As-built Requirements for Wastewater Pressure Sewer System	1
F01: WW Local Pressure Tank System.....	3
F02: WW Pressure Main.....	4
F03: WW Local Pressure Boundary Kit.....	5
F04: WW Flushing Point Access	6
F05: WW Isolation Valve.....	7
F06: WW Reducing Coupler	8
F07: WW Local Pressure Control Panel.....	9
F08: WW Pressure Lateral.....	10
F10: WW Electrical	11



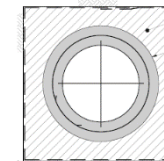
Wastewater Pressure – Overview

As-Built requirements (WW)

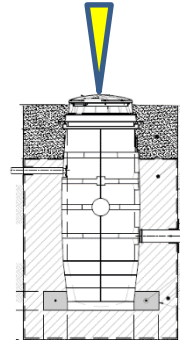
F01: WW Local Pressure Tank System

Name		WW Local Pressure Tank System (Point)
Point Type		F01 "Point Asset Inputs"
CAT Column	SAG Description	Valid Values
A	Type of Point Feature	F01
B	Type of Pressure Tank	Select from pick list: domWwLocalPressureTankSystemType
C	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)
H	RL on centre of cover - (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
M	Name of main contractor who installed the asset	Select from pick list: domInstallationCompany
N	Date of 'survey start'	data - Date (dd/mm/yyyy)
O	Trafficable or non trafficable structure	Select from pick list: domTrafficable
P	Leave Blank	Leave Blank
Q	Manufacturer of asset	Select from pick list: domManufacturer
R	Serial number of Pump	data - Text (50 Characters)
S	Serial number of Tank	data - Text (50 Characters)
T	Number of pumps operating in tank	data - Number
U	Leave Blank	Leave Blank
V	Manufacturer warranty reference	data - Text (50 Characters)
W	Manufacturer warranty term in years	data - Number
Additional Information		
*All other columns must be left "blank" or hold the value "LEAVE BLANK" as default in CAT		

Centre of structure
X Y Z

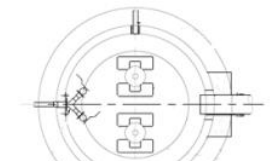


PLAN AT FOOTING LEVEL

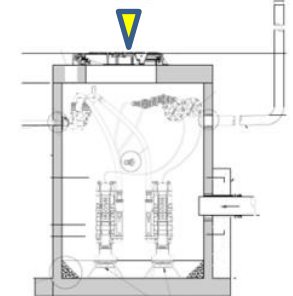


SECTION

non-trafficable



PLAN



SECTION

trafficable

As-Built requirements (WW)

Name	WW Pressure Main (Line)
Line Type	F02 "Line Asset Inputs"

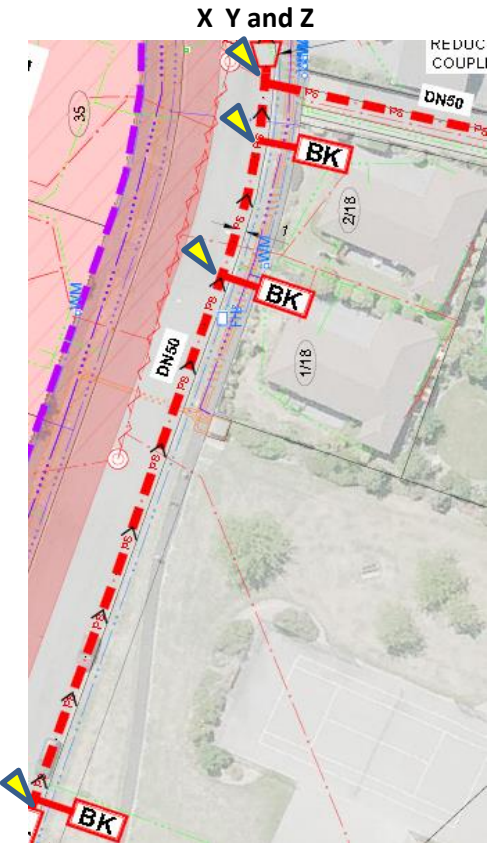


F02: WW Pressure Main

CAT Column	SAG Description	Valid Values
A	Type of Line Feature	F02
B	Type of Pipe	Select from pick list: domWwPipeType
C	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	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)
H	Invert level at vertex - (m)	data - Decimal Number (6 Chars, 3 Decimals)
I	Number of Vertex (point along line)	data - Number
J	Material of pipe	Select from pick list: domPipeConstruction
K	Nominal diameter in mm - (mm)	Select from pick list: domPipeNominalDiameter
L	At Node - Asset Unique Identifier	data - Text (50 Characters)
M	To Node - Asset Unique Identifier	data - Text (50 Characters)
N	Manufacturer of asset	Select from pick list: domWwPipeManufacturer
O	Name of main contractor who installed the asset	Select from pick list: domInstallationCompany
P	Pressure class (PN)	Select from pick list: domWwPipePressureClass
Q	Stiffness rating (SN)	Select from pick list: domPipeStiffnessClass
R	Concrete Load Class	Select from pick list: domPipeLoadClass
S	Date of commission	data - Date (dd/mm/yyyy)
T	Location certainty - accuracy of data	Select from pick list: domLocationCertainty
U	Date of 'survey start'	data - Date (dd/mm/yyyy)
V	Shape of pipe	Select from pick list: domPipeShape
W	Average burial depth to invert of pipe - (m)	data - Decimal Number (6 Chars, 3 Decimals)
X	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
 This feature requires at least two row entries.
 Col I: enter number of vertex along line starting with the downstream end
 See Appendix C.2.3 for a CAT example

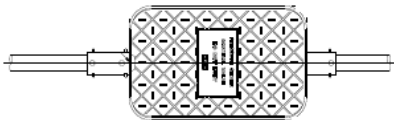


All bends, start/end points to be surveyed. Create one CAT row per surveyed point.

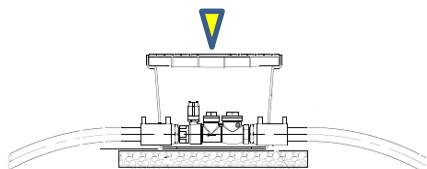
As-Built requirements (WW)		
Name		WW Pressure Sewer System Boundary Kit (Point)
Point Type		F03 "Point Asset Inputs"
CAT Column	SAG Description	Valid Values
A	Type of Point Feature	F03
B	Type of Boundary Kit	Select from pick list: domWwLocalPressureBoundaryKitType
C	Asset Record Capture Type	Select 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)
H	RL on centre of cover - (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
M	Name of main contractor who installed the asset	Select from pick list: domInstallationCompany
N	Date of 'survey start'	data - Date (dd/mm/yyyy)
O	Trafficable or non trafficable structure	Select from pick list: domTrafficable
P	Leave Blank	Leave Blank
Q	Manufacturer of asset	Select from pick list: domManufacturer
R	Leave Blank	Leave Blank
S	Leave Blank	Leave Blank
T	Leave Blank	Leave Blank
U	Leave Blank	Leave Blank
V	Manufacturer warranty reference	data - Text (50 Characters)
W	Manufacturer warranty term in years	data - Number
Additional Information		
*All other columns must be left "blank" or hold the value "LEAVE BLANK" as default in CAT		

F03: WW Local Pressure Boundary Kit

**Centre of structure
X Y and Z**



PLAN



SECTION

As-Built requirements (WW)			
F04: WW Flushing Point Access	Name	WW Flushing Point (Point)	
	Point Type	F04 "Point Asset Inputs"	
	CAT Column	SAG Description	Valid Values
	A	Type of Point Feature	F04
	B	Type of Manhole or Access	Select from pick list: domWwAccessType
	C	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)
H	RL on lowest corner of lid - (m)	data - Decimal Number (6 Chars, 3 Decimals)	
I	RL at base of pit (lowest point) - (m)	data - Decimal Number (6 Chars, 3 Decimals)	
J	Width and length of pit (e.g. 600x800) or diameter of pit - (mm)	data - Number	
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)	
O	Style of access lid	Select from pick list: domAccessLidStyle	
P	Shape of access lid	Select from pick list: domAccessLidShape	
Q	Manufacturer of asset	Select from pick list: domManufacturer	
R	Construction material	Select from pick list: domAccessConstruction	
S	Type of security on access	Select from pick list: domAccessSecurity	
T	Pit angle - orientation of inner structure to nearest 5 degrees (rectangular pits only) - (degrees)	data - Number	
Additional Information			
*All other columns must be left "blank" or hold the value "LEAVE BLANK" as default in CAT Col T: leave blank/unchanged for circular chambers See Appendix C.1.1 for a CAT example.			

**Centre of structure
X Y and Z**

PLAN

SECTION

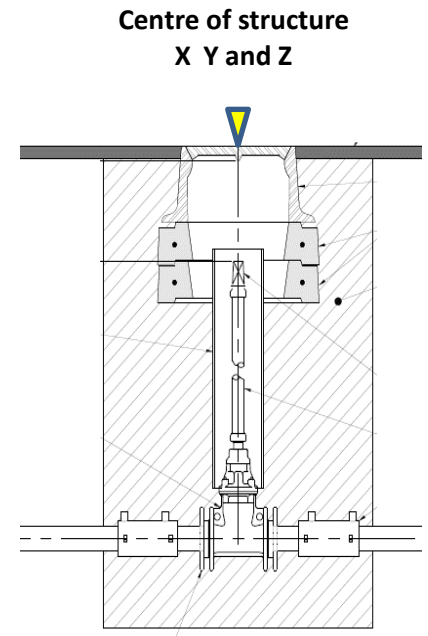
As-Built requirements (WW)

Name	WW Isolation Valve (Point)
Point Type	F05 "Point Asset Inputs"

F05: WW Isolation Valve


CAT Column	SAG Description	Valid Values
A	Type of Point Feature	F05
B	Type of Valve	Select from pick list: domWwValveType
C	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)
H	RL on lowest corner of lid - (m)	data - Decimal Number (6 Chars, 3 Decimals)
I	Leave Blank	Leave Blank
J	Nominal diameter in mm - (mm)	Select from pick list: domValveNominalDiameter
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)
O	Valve normal operating position - open or closed	Select from pick list: domValveNormalPosition
P	Manual or motorised valve	Select from pick list: domValveActuation
Q	Manufacturer of asset	Select from pick list: domManufacturer
R	Valve closure rotation direction	Select from pick list: domValveClosureRotation
S	Situation of Valve	Select from pick list: domValveSituation
T	Main function of valve	Select from pick list: domWwValveFunction
U	Valve control point	Select from pick list: domValveControlPoint
V	Manufacturer warranty reference	data - Text (50 Characters)
W	Manufacturer warranty term in years	data - Number

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

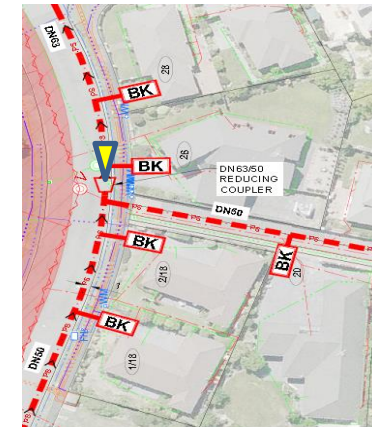


As-Built requirements (WW)

F06: WW Reducing Coupler

Name		WW Reducing Coupler (Point)	
Point Type		F06 "Point Asset Inputs"	
CAT Column	SAG Description	Valid Values	
A	Type of Point Feature	F06	
B	Type of Fitting	Select from pick list: domWwFittingType	
C	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)	
H	Leave Blank	Leave Blank	
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	
M	Name of main contractor who installed the asset	Select from pick list: domInstallationCompany	
N	Date of 'survey start'	data - Date (dd/mm/yyyy)	
Additional Information			
*All other columns must be left "blank" or hold the value "LEAVE BLANK" as default in CAT			

Centre of structure
X Y



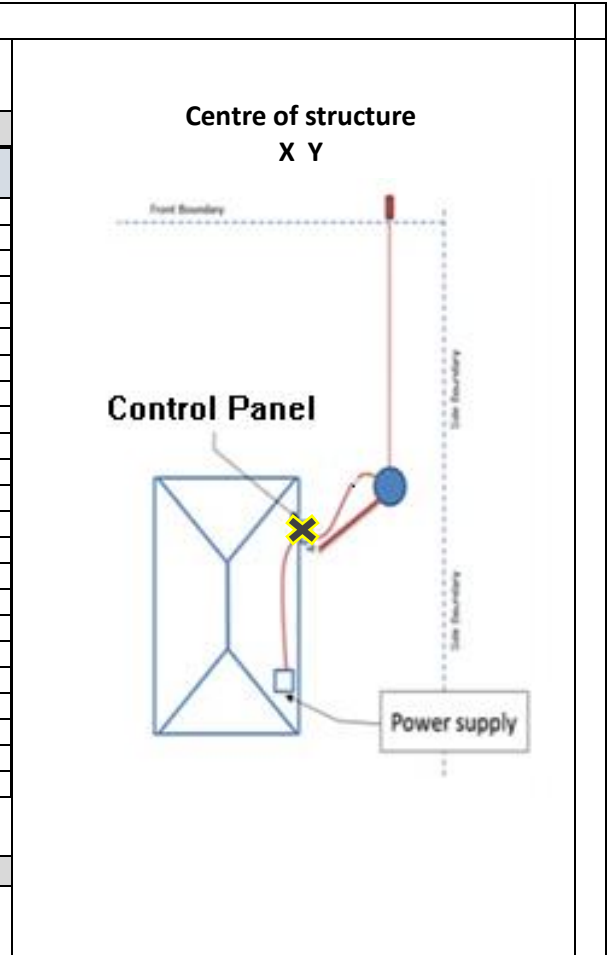
As-Built requirements (WW)

Name	WW Pressure Sewer System Control Panel (Point)
Point Type	F07 "Point Asset Inputs"

F07: WW Local Pressure Control Panel

CAT Column	SAG Description	Valid Values
A	Type of Point Feature	F07
B	Type of Panel	Select from pick list: domWwLocalPressureControlPanelType
C	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)
H	Leave Blank	Leave Blank
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
M	Name of main contractor who installed the asset	Select from pick list: domInstallationCompany
N	Date of 'survey start'	data - Date (dd/mm/yyyy)
O	Leave Blank	Leave Blank
P	Leave Blank	Leave Blank
Q	Manufacturer of asset	Select from pick list: domWwLocalPressureControlPanelManufacturer
R	Telemetry type	Select from pick list: domTelemetryType
S	Leave Blank	Leave Blank
T	Leave Blank	Leave Blank
U	Leave Blank	Leave Blank
V	Manufacturer warranty reference	data - Text (50 Characters)
W	Manufacturer warranty term in years	data - Number

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



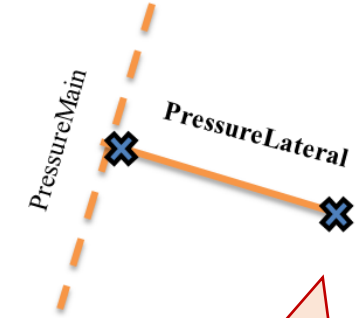
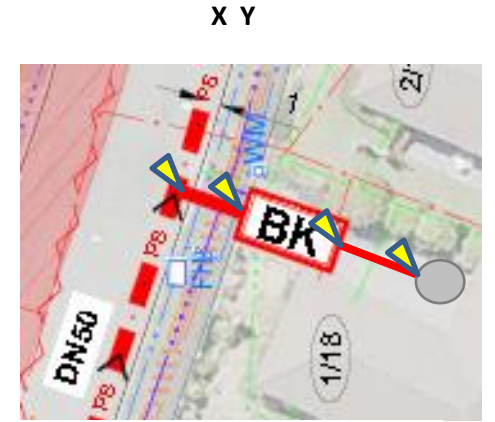
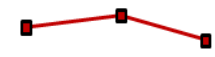
As-Built requirements (WW)

Name	WW Pressure Sewer System Lateral (Line)
Line Type	F08 "Line Asset Inputs"

F08: WW Pressure Lateral

CAT Column	SAG Description	Valid Values
A	Type of Line Feature	F08
B	Type of Lateral	Select from pick list: domWwLateralType
C	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	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)
H	Leave Blank	Leave Blank
I	Number of Vertex (point along line)	data - Number
J	Material of pipe	Select from pick list: domPipeConstruction
K	Nominal diameter in mm - (mm)	Select from pick list: domPipeNominalDiameter
L	Leave Blank	Leave Blank
M	Leave Blank	Leave Blank
N	Manufacturer of asset	Select from pick list: domManufacturer
O	Name of main contractor who installed the asset	Select from pick list: domInstallationCompany
P	Pressure class (PN)	Select from pick list: domPipePressureClass
Q	Stiffness rating (SN)	Select from pick list: domPipeStiffnessClass
R	Concrete Load Class	Select from pick list: domPipeLoadClass
S	Date of commission	data - Date (dd/mm/yyyy)
T	Location certainty - accuracy of data	Select from pick list: domLocationCertainty
U	Date of 'survey start'	data - Date (dd/mm/yyyy)
V	Shape of pipe	Select from pick list: domPipeShape
W	Average burial depth to invert of pipe - (m)	data - Decimal Number (6 Chars, 3 Decimals)
X	Method by which the pipe was installed	Select from pick list: domPipeInstallationMethod
Y	Leave Blank	Leave Blank
Z	Do several units share this lateral? (yes/no)	Select from pick list: domLateralSharedConnection
AA	Type of lateral junction	Select from pick list: domWwEyeType
AB	Distance of IP from lateral start (from connection to existing private lateral) - (mm)	data - Decimal Number (9 Chars, 3 Decimals)

Additional Information
 *All other columns must be left "blank" or hold the value "LEAVE BLANK" as default in CAT
 This feature requires at least two row entries.
 Col I: enter number of vertex along line starting with the downstream end

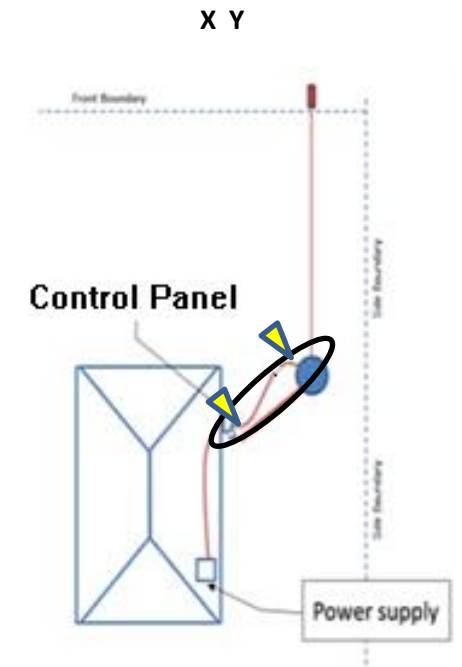


All bends, start/end points to be surveyed.
 Create one CAT row per surveyed point.

As-Built requirements (WW, SW, WS)

F10: WW Electrical

Name		WW Electrical (Line)
Line Type		F10 "Line Asset Inputs"
CAT Column	SAG Description	Valid Values
A	Type of Line Feature	F10
B	Type of Cable	Select from pick list: domCableType
C	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	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)
H	Leave Blank	Leave Blank
I	Number of Vertex (point along line)	data - Number
J	Conduit Material	Select from pick list: domCableConduitConstruction
K	Conduit Diameter - (mm)	data - Number
L	Leave Blank	Leave Blank
M	Leave Blank	Leave Blank
N	Leave Blank	Leave Blank
O	Name of main contractor who installed the asset	Select from pick list: domInstallationCompany
P	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 - accuracy of data	Select from pick list: domLocationCertainty
U	Date of 'survey start'	data - Date (dd/mm/yyyy)
V	Leave Blank	Leave Blank
W	Leave Blank	Leave Blank
X	Method by which the cable was installed	Select from pick list: domCableInstallationMethod
Additional Information		
*All other columns must be left "blank" or hold the value "LEAVE BLANK" as default in CAT		
This feature requires at least two row entries.		
Col I: enter number of vertex along line starting with the downstream end		



All bends, start/end points to be surveyed.
Create one CAT row per surveyed point.

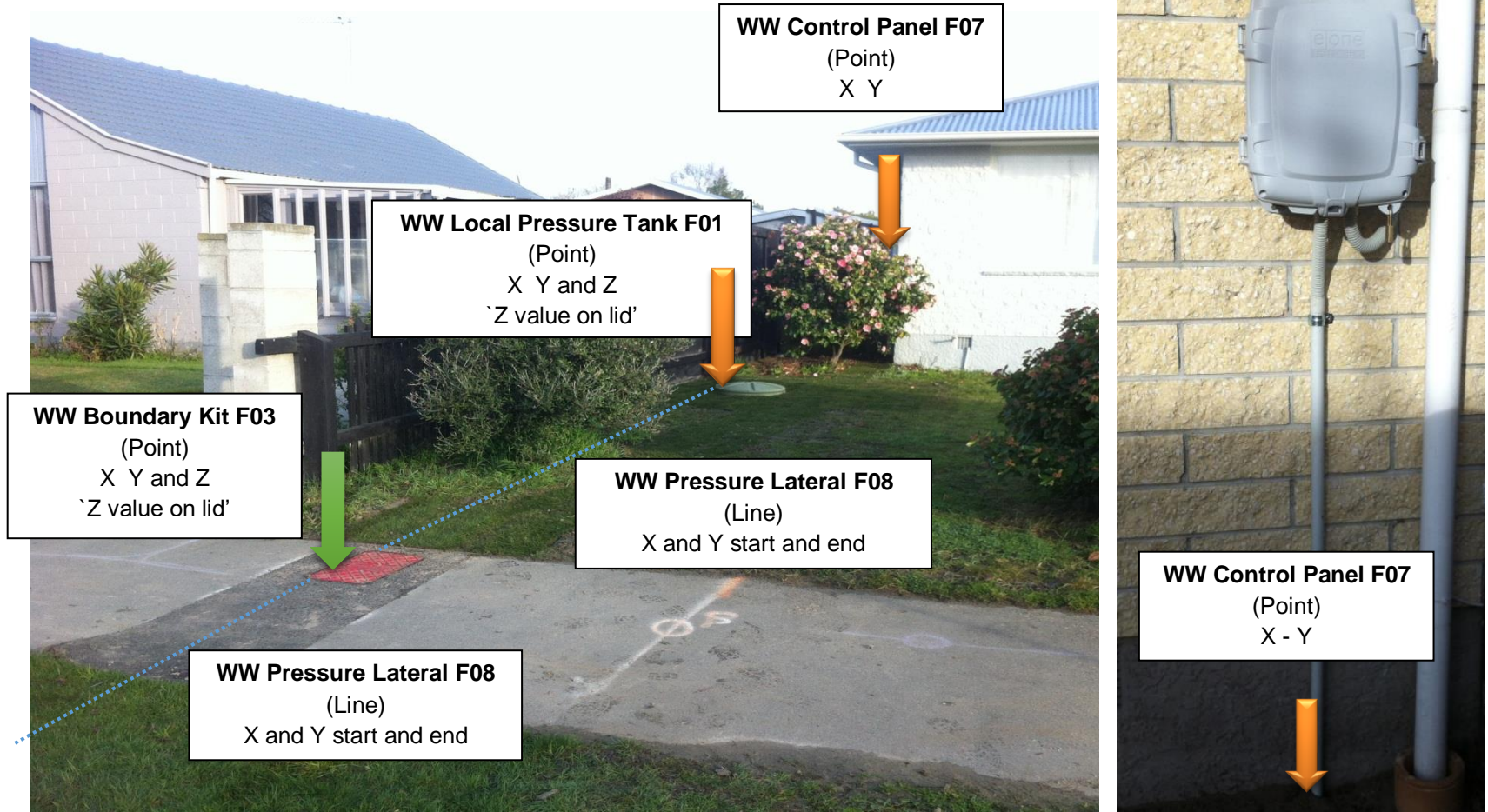


Figure 34: Pressure System Layout for a Typical Household

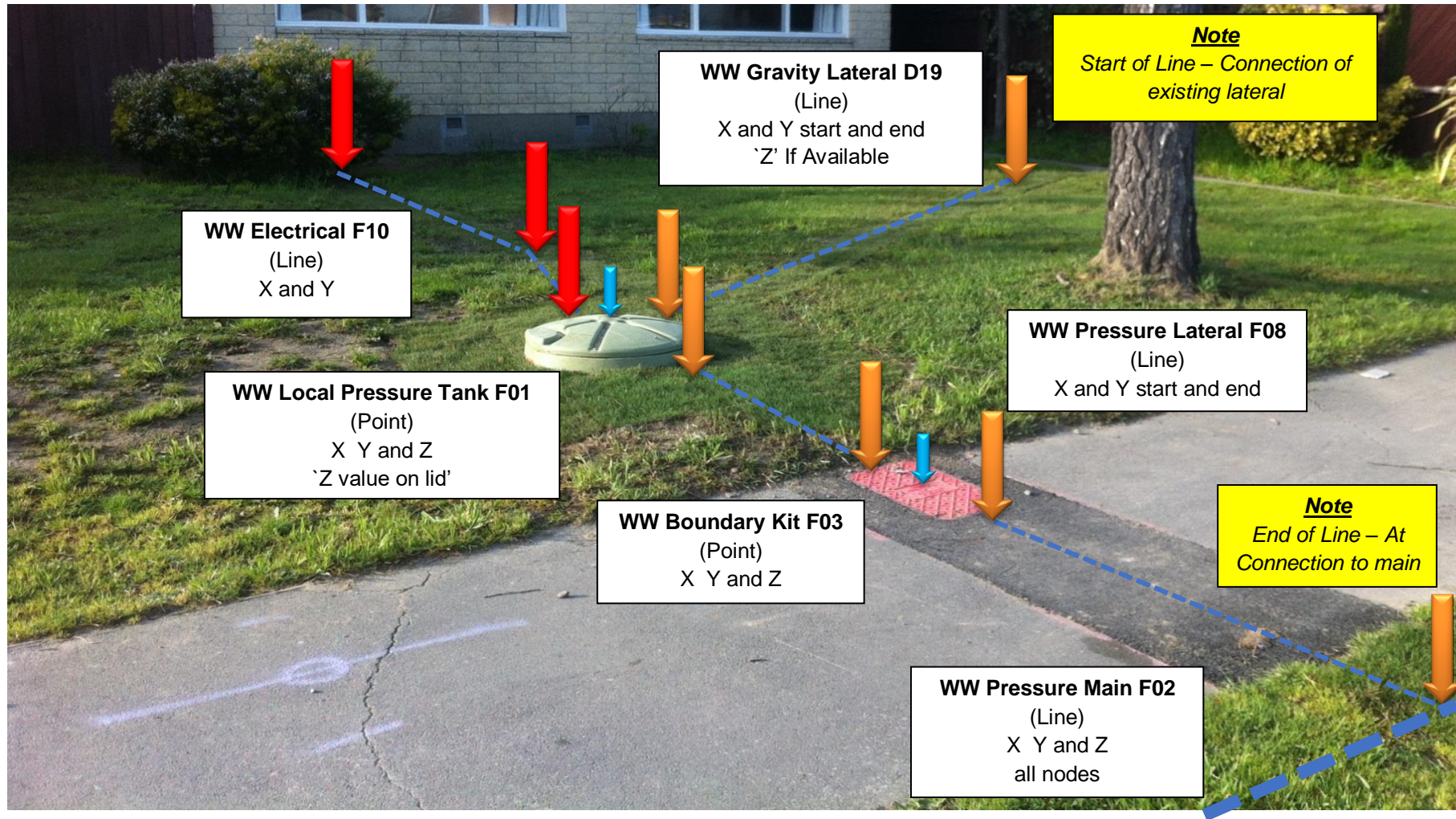


Figure 35: WW Pressure System Layout Overview