Sunshine Coast COUNCIL

ADAC
Asset Data Dictionary

4th April 2022

V5.01.00

GROUP	Project	DESCRIPTION	Data structure constraining information for Project.

ASSET ELEMENT	DESCRIPTION	FEATURE	DESCRIPTION	DETAIL	DESCRIPTION	DETAIL	DESCRIPTION
ADAC	***The ADAC element is the root element of an ADAC XML. It constrains all enclosed elements as follows. There can be no other element in the root level of the document.***	Project	*The Project element encloses all data that is common to the whole project.* *In Version 4.1.0, for technical simplicity, only a single project may exist within an instance document, but in future it may be feasible for multiple independent projects to be delivered in a single instance.* *In version 4.2.0 while this limitation remains, certain fields at the project level have been repeated at the asset level to allow assets to differ from the global values set in Project*	ExportDateTime	*Export date and time in UTC. Format is yyyy-mm-ddThh:mm:ssZ (eg 2006-08-08T20:00:00Z) ISO 8601.*		
				Name	*The project or development name.*		
				Owner	*Are assets for the whole project owned by Council or another entity.*		
				Receiver	*The receiver of the ADAC file*		
				WorksApprovalID	*The works approval ID for the development that this information represents.*		
				DrawingNumber	*The Council drawing number of the as constructed plans. This may not be known at the time of compilation.*		
				DrawingRevision	*Date the drawing was revised. ISO 8601 is the accepted format.*		
				ConstructionDate	*The accepted date of construction for the whole project. Usually the project completion date. ISO 8601 is the accepted format.* *Date may be used to calculate remaining life in an asset management system.*		
				CoordinateSystem	*Records the particulars of the horizontal and vertical coordinate systems for the whole project.*	HorizontalCoordinateSystem	*Specifies the horizontal coordinate system used. e.g. MGA56. Well known projections may be referred to by name only. All spatial information in the project will be considered to be referenced to this system. If custom local plane systems or projections are used by agreement with the receiver, then any parameters should be specified in the notes.*
						HorizontalDatum	*To Specifiy the Datum that the Horizontal Coordinate System is based on. E.g. GDA94.*
						VerticalDatum	*To Specifiy the Datum of Height values. E.g. AHD.*
						IsApproximate	*Are the values supplied accurate or approximations. If data is plane rectangular approximating MGA-56 then set to true*
						OriginMark	*When data is plane rectangular this is the Permanent Survey Mark used as the origin.*
						Notes	*To contain any additional data required to specify the coordinate system*
				DrawingExtents	*The rectangular coordinate envelope enclosing the project area*	SouthWest	*The coordinates of the southwest corner.*
						NorthEast	*The coordinates of the northeast corner.*
				Description	*Descriptive text summarising the project.*		
				ProjectStatus	*The reason for the ADAC file creation. This is not the same as Asset_status, which is at the asset level Submission Status is usually related to the development assesment process or to data transfer between entities or systems*		
				Software	*Details of the software product used to create the ADAC data set.*	Product	*The name of the software product.*
						Version	*The version or release number of the product.*
				Surveyor	*Structure containing information from the certifying surveyor.*	SurveyorName	*The name of the surveyor.*
						DateFinalSurvey	*The date of the final survey. ISO 8601 is the accepted format.*
						DateApproved	*The date of the final approval. ISO 8601 is the accepted format.*
				Engineer	*Structure containing information from the certifying engineer.*	EngineerName	*The name of the consulting engineer*
						DateApproved	*The date of approval. ISO 8601 is the accepted format.*
				ProjectData		Sewerage	*The Sewerage element encloses all sewerage (waste water) feature descriptions.*
						Transport	*The Roads element encloses all roads feature descriptions.*
						WaterSupply	*The Water element encloses all water supply feature descriptions.*
						StormWater	*The StormWater element encloses all stormwater feature descriptions.*
						OpenSpace	*The OpenSpace element encloses all public open space feature descriptions.*
						Cadastre	*The Cadastre element encloses all cadastral feature descriptions.*
						Surface	*The Surface element encloses Supplementary surface feature descriptions.*
						Enhancements	*The Enhancements element encloses enhacements such as annotations and dimensions.*
						Supplementary	*The Supplementary element encloses all feature data not described specifically in the schema. It is recommended to keep the use of unstructured data to a bare minimum.*

ASSET GROUP	Transport	DESCRIPTION	Data structure constraining information for Road related features.

ASSET TYPE	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION	DESCRIPTION
Pavement	***Represents an area of road pavement.***	Name	*The gazetted, or proposed, road name.*		String_254				
		Surface	*Data container for surface characteristics.*	SurfaceType	*The surface type of the road or street*	AC	*Asphalt*		
						FDA	*Full Depth Asphalt*		
						2CBS	*2 Coat Prime and Seal*		
						1CBS	*1 Coat Prime and Seal*		
						DUST	*Dust Seal*		
						SMA	*Stone Mastic Asphalt*		
						SSSL	*Slurry Seal*		
						CPAV	*Concrete Pavers*		
						Concrete	*Concrete, Stencilled/Aggregate*		
						BPAV	*Brick Pavers*		
						GRVL	*Gravel Road*		
						PMB	*Poly Modified Bitumen*		
						Earth	Earth		
						GCELL	Grass Cell		
				SurfaceThickness_mm	*The surface thickness in millimetres*		positiveInteger		
				SurfaceNomWidth_m	*The nominal width of the surface of the road or street as a decimal number in metres.*		Float_Positive_NonZero		
		PavementStructure	*Data container for pavement structure characteristics.*	PavementType	*Pavement construction type*	Flexible	*Flexible pavement*		
						Rigid	*Rigid pavement*		
						Floodway	*Pavement section hardened for flood passage.*		
				BaseLayer	*Describes the pavement base layer*	LayerType	*Construction type of the base layer. Must be Concrete if PavementType is Rigid, otherwise must not be Concrete*	GR21	*Gravel 2.1 CBR80*
								GR22	*Gravel 2.2 CBR60-80*
								GR23	*Gravel 2.3 CBR45-60*
								GR24	*Gravel 2.4 CBR35-45*
								GR25	*Gravel 2.5 CBR15-35*
								NGRL	*Natural Gravel/Conglomerate*
								Earth	*Earth*
								AC	*Asphalt*
								Concrete	*Concrete*
						LayerDepth_mm	*Base layer depth in millimetres*		Float_Positive_NonZero
						Stabilisation	*Base layer stabilisation method*	Lime	*Lime*
								Foamed Bitumen	*Foamed Bitumen*
								Geogrid	*Earth Reinforcing Mat*
								Cement	*Cement*
				SubBaseLayer	*Describes the pavement sub-base layer*	LayerType	*Construction type of the sub-base layer.*	GR21	*Gravel 2.1 CBR80*
								GR22	*Gravel 2.2 CBR60-80*
								GR23	*Gravel 2.3 CBR45-60*
								GR24	*Gravel 2.4 CBR35-45*
								GR25	*Gravel 2.5 CBR15-35*
								NGRL	*Natural Gravel/Conglomerate*
								Earth	*Earth*
						LayerDepth_mm	*Sub-base layer depth in millimetres*		Float_Positive_NonZero
						Stabilisation	*Sub-base layer stabilisation method*	Lime	*Lime*
								Foamed Bitumen	*Foamed Bitumen*
								Geogrid	*Earth Reinforcing Mat*
								Cement	*Cement*
				LowerSubBaseLayer	*Describes the pavement lower sub-base layer*	LayerType	*Construction type of the lower sub-base layer.*	GEOT	*Geotextile*
								Rock	*Rock*
								GTRK	*Geotectile/Rock*
								GR25	*Gravel 2.5 CBR15-35*
						LayerDepth_mm	*Lower sub-base layer depth in millimetres*		Float_Positive_NonZero
						Stabilisation	*Lower sub-base layer stabilisation method*	Lime	*Lime*
								Foamed Bitumen	*Foamed Bitumen*
								Geogrid	*Earth Reinforcing Mat*
								Cement	*Cement*
		PavementGeoTextile	*Pavement geotextile type. Road Pavement Geotextile Types As per MRS11-27 Table 3.*	Class A	*G Rating range 900 up to 1350*				
				Class B	*G Rating range 1350 up to 2000*				
				Class C	*G Rating range 2000 up to 3000*				
				Class D	*G Rating range 3000 up to 4500*				
				Class E	*G Rating 4500*				
		SubGrade	*Data container for subgrade structure characteristics.*	CBR	*California Bearing Ratio. An expression of the load bearing and shear properties of the material.*		positiveInteger		
				Stabilisation	*Subgrade stabilisation method*	Lime	*Lime*		
						Foamed Bitumen	*Foamed Bitumen*		
						Geogrid	*Earth Reinforcing Mat*		
						Cement	*Cement*		
		Geometry	*Polygon geometry delineating the pavement area in coordinate space.*				geometry_area_multipatch_complex		
Parking	***Represents an area of parking pavement.***	Name	*Parking area name*		String_254				
		NoOfCarparks	*Number of individual vehicle spaces.*		positiveInteger				
		OnOffStreet	*Value indicating whether the parking is an uninterupted part of the road pavement, or*	On Street	*On street parking*				
				Off Street	*Off street parking*				
		Surface	*Data container for surface characteristics.*	SurfaceType	*The surface type of the parking area*	AC	*Asphalt*		
						FDA	*Full Depth Asphalt*		
						2CBS	*2 Coat Prime and Seal*		
						1CBS	*1 Coat Prime and Seal*		
						DUST	*Dust Seal*		
						SMA	*Stone Mastic Asphalt*		
						SSSL	*Slurry Seal*		
						CPAV	*Concrete Pavers*		
						CONC	*Concrete, Stencilled/Aggregate*		
						BPAV	*Brick Pavers*		
						GRVL	*Gravel Road*		
						PMB	*Poly Modified Bitumen*		
						Earth	*Earth*		
						GCELL	*Grass Cell*		
				SurfaceThickness_mm	*The surface thickness in millimetres*		positiveInteger		
				SurfaceArea_sqm	*The area of the parking surface as a decimal number in square metres.*		Float_Positive_NonZero		
		PavementStructure	*Data container for pavement structure characteristics.*	PavementType	*Pavement construction type*	Flexible	*Flexible pavement*		
						Rigid	*Rigid pavement*		
						Floodway	*Pavement section hardened for flood passage*		
				BaseLayer	*Describes the pavement base layer*	LayerType	*Construction type of the base layer. Must be Concrete if PavementType is Rigid, otherwise must not be Concrete*	GR21	*Gravel 2.1 CBR80*
								GR22	*Gravel 2.2 CBR60-80*
								GR23	*Gravel 2.3 CBR45-60*

ASSET TYPE	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION	DESCRIPTION
								GR24	*Gravel 2.4 CBR35-45*
								GR25	*Gravel 2.5 CBR15-35*
								NGRL	*Natural Gravel/Conglomerate*
								ERTH	*Earth*
								AC	*Asphalt*
								Concrete	*Concrete*
						LayerDepth_mm	*Base layer depth in millimetres*		Float_Positive_NonZero
						Stabilisation	*Base layer stabilisation method*	Lime	*Lime*
								Foamed Bitumen	*Foamed Bitumen*
								Geogrid	*Earth Reinforcing Mat*
								Cement	*Cement*
				SubBaseLayer	*Describes the pavement sub-base layer*	LayerType	*Construction type of the sub-base layer.*	GR21	*Gravel 2.1 CBR80*
								GR22	*Gravel 2.2 CBR60-80*
								GR23	*Gravel 2.3 CBR45-60*
								GR24	*Gravel 2.4 CBR35-45*
								GR25	*Gravel 2.5 CBR15-35*
								NGRL	*Natural Gravel/Conglomerate*
								ERTH	*Earth*
						LayerDepth_mm	*Sub-base layer depth in millimetres*		Float_Positive_NonZero
						Stabilisation	*Sub-base layer stabilisation method*	Lime	*Lime*
								Foamed Bitumen	*Foamed Bitumen*
								Geogrid	*Earth Reinforcing Mat*
								Cement	*Cement*
									Default Value
				LowerSubBaseLayer	*Describes the pavement lower sub-base layer*	LayerType	*Construction type of the lower sub-base layer.*	GEOT	*Geotextile*
								Rock	*Rock*
								GTRK	*Geotectile/Rock*
								GR25	*Gravel 2.5 CBR15-35*
						LayerDepth_mm	*Lower sub-base layer depth in millimetres*		Float_Positive_NonZero
						Stabilisation	*Lower sub-base layer stabilisation method*	Lime	*Lime*
								Foamed Bitumen	*Foamed Bitumen*
								Geogrid	*Earth Reinforcing Mat*
								Cement	*Cement*
		PavementGeoTextile	*Pavement geotextile type.*	Class A	*G Rating range 900 up to 1350*				
				Class B	*G Rating range 1350 up to 2000*				
				Class C	*G Rating range 2000 up to 3000*				
				Class D	*G Rating range 3000 up to 4500*				
				Class E	*G Rating 4500*				
		SubGrade	*Data container for subgrade structure characteristics.*	CBR	*California Bearing Ratio. An expression of the load bearing and shear properties of the material.*		positiveInteger		
				Stabilisation	*Subgrade stabilisation method*	Lime	*Lime*		
						Foamed Bitumen	*Foamed Bitumen*		
						Geogrid	*Earth Reinforcing Mat*		
						Cement	*Cement*		
		Geometry	*Polygon geometry delineating the pavement area in coordinate space.*		geometry_area_multipatch_complex				
RoadEdge	***Represents an edge feature of a pavement area.***	Type	*Road edge configuration*	Barrier Kerb	*Barrier Kerb*				
				Barrier Kerb and Channel	*Barrier Kerb and Channel*				
				Semi-Mountable Kerb	*Semi-Mountable Kerb*				
				Semi-Mountable Kerb and Channel	*Semi-Mountable Kerb and Channel*				
				Mountable Kerb	*Mountable Kerb*				
				Mountable Kerb and Channel	*Mountable Kerb and Channel*				
				Edge Restraint	*Edge Restraint*				
				Channel	*Channel*				
				Separation Kerb	*Separation Kerb*				
		Material	*Material of Road Edge.*	Concrete	*Concrete*				
				Reinforced Concrete	*Reinforced Concrete*				
				Asphalt	*Asphalt*				
				Other	*Other*				
		Width_mm	*Width in millimetres of the Edge feature.*		positiveInteger				
		Length_m	*Length in metres of edge material.*		Float_Positive_NonZero				
		PavementExtension_mm	*The pavement extension, in millimetres, behind the back of kerb.*		positiveInteger				
		Geometry	*Polyline geometry describing the feature in coordinate space.*		geometry_linear_multipath_complex				
RoadIsland	***Represents an area of road island , local traffic calming, or median structure. Where the structure incorporates water sensitive urban design (WSUD) features, those features should be independently captured.***	Type	*Type of Road Island*	Splitter	*Splitter Island*				
				Pedestrian Refuge	*Pedestrian Refuge*				
				Center Median	*Center Median*				
				Roundabout	*Roundabout*				
				Road Hump	*Road Hump - speed management measure*				
				Chicane	*Chicane - often constricting passage to a single lane*				
				LATM	*Local Area Traffic Management feature*				
		Area_sqm	*The area, in square metres, of the infill.*		Float_Positive_NonZero				
		InfillType	*Type of Road Island Infill*	AC	*Asphalt*				
				Concrete	*Concrete*				
				Grass	*Grass*				
				Gravel	*Gravel*				
				Landscape	*Landscape*				
				Pavers	*Pavers*				
				Synthetic Grass	*Synthetic Grass*				
				Rubber	*Rubber*				
				Other Material	*Other Material*				
		Geometry	*Polygon geometry describing the feature in coordinate space.*		geometry_area_multipatch_complex				
Pathway	***Represents an on-ground footpath or cycleway feature. Do not use to describe on-road cycleway.***	Use	*Intended traffic use of the structure.*	Shared	*Shared Pedestrian and Cycleway*				
				CycleWay	*Bicycles only*				
				Pedestrian	*Pedestrians only*				
				Horse Trail	*Defined use horse trail*				
				Mountain Bike	*Defined use mountain bike trail*				
				Fire Trail	*Fire Trail*				
		Structure	*Type of pathway structure. A fixed value of In Ground is required for this sub type*	In Ground (hardcoded)	String_32				
		SurfaceMaterial	*Surface material of the structure.*	Concrete	*Concrete*				
				CPAV	*Concrete Pavers*				
				BPAV	*Brick Pavers*				
				Bitumen	*Bitument*				
				Gravel	*Gravel*				

ASSET TYPE	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION	DESCRIPTION
				Earth	*Earth*				
				Steel	*Steel*				
				Stone	*Stone*				
				Timber	*Timber*				
				Sand	*Sand*				
		Width_m	*Nominal width of the pathway in metres.*		Float_Positive_NonZero				
		Depth_mm	*The nominal depth of the pathway material in millimetres.*		positiveInteger				
		Geometry	*Polyline geometry describing the feature in coordinate space.*		geometry_linear_singlepath_complex				
RoadPathway	***Represents a linear section of on-road cycleway.***	Use	*Intended traffic use of the structure. A fixed value of CycleWay is applied to this sub type.*	Shared	*Shared Pedestrian and Cycleway*				
				CycleWay (hardcoded)	*Bicycles only*				
				Pedestrian	*Pedestrians only*				
				Horse Trail	*Defined use horse trail*				
				Mountain Bike	*Defined use mountain bike trail*				
				Fire Trail	*Fire Trail*				
		Structure	*Type of pathway structure. A fixed value of On Road is required for this sub type*	On Road (hardcoded)	String_32				
		SurfaceMaterial	*Surface material of the structure. A fixed value of Road Pavement is applied to this sub type.*	Road Pavement (hardcoded)	String_32				
		Width_m	*Nominal width of the marked pathway in metres.*		Float_Positive_NonZero				
		Geometry	*Polyline geometry describing the feature in coordinate space.*		geometry_linear_singlepath_complex				
PathStructure	***Represents a structure functioning as a linear section of footpath or cycleway. Do not use to describe on-road cycleway.***	Use	*Intended traffic use of the structure.*	Shared	*Shared Pedestrian and Cycleway*				
				CycleWay	*Bicycles only*				
				Pedestrian	*Pedestrians only*				
				Horse Trail	*Defined use horse trail*				
				Mountain Bike	*Defined use mountain bike trail*				
				Fire Trail	*Fire Trail*				
		Structure	*Type of pathway structure.*	Boardwalk	*Boardwalk*				
				Causeway	*Causeway*				
				Foot Bridge	*Foot Bridge*				
				Stairs	*Stairs*				
				Ramp	*Ramp*				
				Underpass	*Underpass*				
		SurfaceMaterial	*Surface material of the structure.*	Concrete	*Concrete*				
				CPAV	*Concrete Pavers*				
				BPAV	*Brick Pavers*				
				Bitumen	*Bitumen*				
				Gravel	*Gravel*				
				Earth	*Earth*				
				Steel	*Steel*				
				Stone	*Stone*				
				Timber	*Timber*				
				Sand	*Sand*				
		SubStructureMaterial	*Material of the sub structure.*	Concrete	*Concrete*				
				Steel	*Steel*				
				Stone	*Stone*				
				Brick	*Brick*				
				Timber	*Timber*				
		Width_m	*Nominal width of the pathway in metres.*		Float_Positive_NonZero				
		Geometry	*Polyline geometry describing the feature in coordinate space.*		geometry_linear_singlepath_complex				
RoadSafetyBarrier	***Represents a barrier dedicated to transport features.***	Type	*The type of road safety barrier employed.*	Energy-absorbing Bollard	*Energy-absorbing Bollard*				
				Energy-absorbing Terminal	*Energy-absorbing Terminal*				
				Flexible	*Wire Rope*				
				Flexible/Rigid Combination	*Combination of wire rope and concrete or similar barrier*				
				Flexible/Semi-rigid Combination	*Flexible/Semi-rigid Combination*				
				Rigid	*Concrete barrier or similar with very little deflection*				
				Rigid/Semi-rigid Combination	*Combination of concrete or similar barrier and W or Thrie beam*				
				Semi-rigid	*W beam or Thrie beam*				
		LeadingEndTreatment	*The type of Leading End treatment.*	Breakmaster	*Breakmaster*				
				ET2000 Plus	*ET2000 Plus*				
				Extension 350	*Extension 350*				
				FLEAT	*FLEAT*				
				MELT	*MELT*				
				NEAT	*NEAT*				
				Omnistop	*Omnistop*				
				QuadGuard	*QuadGuard*				
				QuardGuard Elite	*QuardGuard Elite*				
				QuardGuard Wide	*QuardGuard Wide*				
				QuardTrend 350	*QuardTrend 350*				
				React 350	*React 350*				
				Rubber Crash Cushion	*Rubber Crash Cushion*				
				SKT	*SKT*				
				TAU II	*TAU II*				
				Thrie-Beam bull nose	*Thrie-Beam bull nose*				
				TRACC	*TRACC*				
		TrailingEndTreatment	*The type of Trailing End treatment.*	Breakmaster	*Breakmaster*				
				DOT	*DOT*				
				ET2000 Plus	*ET2000 Plus*				
				Extension 350	*Extension 350*				
				FLEAT	*FLEAT*				
				MELT	*MELT*				
				Omnistop	*Omnistop*				
				QuadGuard	*QuadGuard*				
				QuardGuard Elite	*QuardGuard Elite*				
				QuardGuard Wide	*QuardGuard Wide*				
				QuardTrend 350	*QuardTrend 350*				
				React 350	*React 350*				
				Rubber Crash Cushion	*Rubber Crash Cushion*				
				SKT	*SKT*				
				TAU II	*TAU II*				
				Thrie-Beam bull nose	*Thrie-Beam bull nose*				

ASSET TYPE	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION	DESCRIPTION
				TRACC	*TRACC*				
		StandardHeight	*Is barrier height standard?*		boolean				
		Height_m	*Nominal height of the barrier in metres.*		Float_Positive_NonZero				
		Length_m	*Nominal length of the barrier in metres including terminals.*		Float_Positive_NonZero				
		MotorcyclistProtectionType	*The type of motorcyclist protection rail.*	Rub Rail Hiasa Rail None	*Rub Rail* *Hiasa Rail* *None*				
		PedestrianProtectionSheeting	*as pedestrian protection sheeting been installed?*		boolean				
		BridgeTransition	*Is this a bridge transition?*		boolean				
		StandardPostSpacing	*Is the post spacing standard?*		boolean				
		PostSpacing_m	*Spacing of posts in metres.*		Float_Positive_NonZero				
		PostType	*The type of post installed with road safety barrier.*	Steel Timber	*Steel* *Timber*				
		RailType	*The type of rail installed with road safety barrier.*	Steel Timber	*Steel* *Timber*				
		HorizontalAlignment	*Horizontal alignment of road safety barrier.*	Straight Convex Concave	Straight Convex Concave				
		NumberOfBollards	*Number of bollards.*		positiveInteger				
		Geometry	*Polyline geometry describing the feature in coordinate space.*		geometry_linear_multipath_complex				
PramRamp	***Represents a pram ramp or disabled entry-point to a road edge as a point object***	Rotation	*Rotation angle (cartesian - anti-clockwise 0 degrees = East)*		Float_Direction				
		Geometry	*The geometry representing this feature in coordinate space.*		geometry_point_singlepoint				
PramRampPolygon	***Represents a pram ramp or disabled entry-point to a road edge as a polygon object***	Rotation	*Rotation angle (cartesian - anti-clockwise 0 degrees = East)*		Float_Direction				
		Geometry	*The geometry representing this feature in coordinate space.*		geometry_area_singlepatch_complex				
SubSoilDrain	***Represents a road sub-soil drain. Formerly called RoadSubsoilDrain in ADAC Version 3.0.1***	Use	*The use (orientation) of the drain.*	Side Drain Mitre Drain	*Parallel to the kerb* *Cross road drain*				
		Type	*The type (configuration) of the drain.*	Perforated Pipe Strip Filter	*Perforated Pipe with textile sleeve* *Strip Filter Drain*				
		Length_m	*The length in metres of the drain.*		Float_Positive_NonZero				
		Geometry	*Polyline geometry representing the centreline of the sub-soil drain in coordinate space.*		geometry_linear_singlepath_simple				
FlushPoint	***Represents a sub-soil drain flush point.***	Function	*The function of the flushing out point*	Cleanout Surface Outlet	*A cleanout flushpoint inlet generally protected by a sunken valve box. May have a removable cap on the pipe mouth.* *A subsoil drain outlet point discharging to the surface, rather than into a gully pit or manhole etc.*				
		Geometry	*Point geometry representing the flush point of the sub-soil drain in coordinate space.*		geometry_point_singlepoint				
BridgeExtent	***Describes the envelope or footprint for the whole structure and all of its parts. It holds properties that apply at the assembly level.***	BridgeID	*Unique identifier, used to associate components of the same bridge assembly.*		String_64				
		Name	*Road name or nearest road where bridge resides, or the recognised name of the bridge.*		String_254				
		Use	*Predominant use of bridge.*	Cycleway Fauna Pedestrian Rail Road Shared Stock	*Cycleway* *Fauna* *Pedestrians and/or bicycle.* *Rail* *Road* *Shared* *Stock*				
		Type	*Type of bridge construction.*	Arch Beam Box Girder Cable-Stayed Cantilever Deck Unit Moveable Open Girder Slab Suspension Tressle Truss	*Arch* *Beam* *Box Girder* *Cable-Stayed* *Cantilever* *Deck Unit* *Moveable* *Open Girder* *Slab* *Suspension* *Tressle* *Truss*				
		CrossingType	*The layout and configuration of this structure.*	Fresh Water Land Rail Road Salt Water	*Fresh Water* *Land* *Rail* *Road* *Salt Water*				
		Spans	*Number of spans.*		positiveInteger				
		MinimumClearance_m	*Minimum clearance in metres.*		float				
		PredominantMaterial	*Predominant Material of bridge.*	Aluminium Fibre Composite Prestressed Cast-Insitu Concrete Prestressed Precast Concrete Reinforced Concrete Steel Timber	*Aluminium* *Fibre Composite* *Prestressed Cast-Insitu Concrete* *Prestressed Precast Concrete* *Reinforced Concrete* *Steel* *Timber*				
		DesignLoad	*Design load of bridge as per AS5100.*		String_64				
		Geometry	*The geometry representing this feature in coordinate space.*		geometry_area_singlepatch_complex				
BridgeDeck	***Represents a single deck unit between abutments or supports. There may be one or more BridgeDeck objects for any given bridge assembly.***	BridgeID	*Unique identifier, used to associate components of the same bridge assembly.*		String_64				
		Material	*Material types for Bridge deck.*	Fibre Composite Prestressed Cast-Insitu Concrete Prestressed Precast Concrete Reinforced Concrete Steel	*Fibre Composite* *Prestressed Cast-Insitu Concrete* *Prestressed Precast Concrete* *Reinforced Concrete* *Steel*				

ASSET TYPE	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION	DESCRIPTION
				Timber	*Timber*				
		NomWidth_m	*Nominal Width of deck in metres.*		Float_Positive_NonZero				
		DeckLength_m	*Length of Bridge deck between joints at abutments in metres.*		Float_Positive_NonZero				
		Geometry	*The geometry representing this feature in coordinate space.*		geometry_area_multipatch_complex				
ContainmentClass	***Containment Class of Parapet/Railing as per AS5100.***	BridgeID	*Unique identifier, used to associate components of the same bridge assembly.*		String_64				
		ContainmentClass	*Containment Class of Parapet/Railing as per AS5100.*	Low Regular Medium Special	*Low* *Regular* *Medium* *Special*				
BridgeSuperstructure	***Represents superstructure of bridge.***	BridgeID	*Unique identifier, used to associate components of the same bridge assembly.*		String_64				
		Material	*Material types for the Superstructure.*	Fibre Composite Prestressed Cast-Insitu Concrete Prestressed Precast Concrete Reinforced Concrete Steel Timber	*Fibre Composite* *Prestressed Cast-Insitu Concrete* *Prestressed Precast Concrete* *Reinforced Concrete* *Steel* *Timber*				
		Geometry	*The geometry representing this feature in coordinate space.*		geometry_area_multipatch_complex				
BridgeAbutment	***Represents the extent of one abutment for a bridge assembly. A BridgeAbutment will be independently described at each end of the structure.***	BridgeID	*Unique identifier, used to associate components of the same bridge assembly.*		String_64				
		Material	*The predominant material of the abutment.*	Compressed Aggregate Masonry Prestressed Precast Concrete Reinforced Concrete Steel Timber	*Compressed Aggregate* *Masonry* *Prestressed Precast Concrete* *Reinforced Concrete* *Steel* *Timber*				
		Geometry	*The geometry representing this feature in coordinate space.*		geometry_area_multipatch_complex				
BridgePier	***Represents a single supporting structure that supports deck spans between abutments.***	BridgeID	*Unique identifier, used to associate components of the same bridge assembly.*		String_64				
		Material	*Predominant Pier material type.*	Composite Masonry Prestressed Precast Concrete Reinforced Concrete Steel Stone Timber	*Composite* *Masonry* *Prestressed Precast Concrete* *Reinforced Concrete* *Steel* *Stone* *Timber*				
		Geometry	*The geometry representing this feature in coordinate space.*		geometry_area_multipatch_complex				

ASSET GROUP	Stormwater	DESCRIPTION	Data structure constraining information for Stormwater features.

ASSET TYPE	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
Pit	***Represents a stormwater maintenance hole or pit feature.***	PitNumber	*The pit identifier.*		String_32						
		Use	*Purpose of the feature in the network.*	Maintenance Hole	*Maintenance or access point*						
				Pit	*Pit only - no access*						
				Kerb Inlet	*Kerb Inlet*						
				Field Inlet	*Field Inlet*						
				Roofwater Inspection Chamber	*Roofwater Inspection Chamber*						
				Roofwater Outlet	*Roofwater outlet to swale*						
		ChamberConstruction	*Method of chamber construction.*	Prefabricated	*Prefabricated*						
				Insitu	*Built or poured in-situ*						
		ChamberSize	*Represents the essential dimensions of the chamber. Contains a choice of structures that pertain to different configurations.*	Rectangular	*Dimensions of a rectangular chamber.*	Length_mm	*Length in millimetres*		positiveInteger		
						Width_mm	*Width in millimetres*		positiveInteger		
				Circular	*Dimensions of a circular chamber. Drainage Manhole Circular Internal Diameter.*	Diameter_mm	*Diameter in millimetres*		positiveInteger		
				Extended	*Dimensions of a circular chamber.*	Radius_mm	*Radius, in millimetres, of the circular ends*		positiveInteger		
						Extension_mm	*Distance, in millimetres, between the centre points of the circular ends*		positiveInteger		
		LidType	*The type of lid or grate covering the opening.*	Circ Cast Iron	*Circular Cast Iron Lid*						
				Circ Conc Infill	*Circular Concrete Infill Lid*						
				Sqr Cast Iron	*Square Cast Iron Lid*						
				Sqr Conc Infill	*Square Concrete Infill Lid*						
				Rect Cast Iron	*Rectangular Cast Iron*						
				Rect Conc Infill	*Rectangular Concrete Infill Lid*						
				CI Frame Conc Infill	*Cast Iron Frame Concrete Infill*						
				Precast Cover Slabs	*Long Rectangular Concrete Cover Slabs (usually 2 per pit)*						
		SurfaceLevel_m	*Surface level of this feature (in metres against the vertical datum).*		float						
		InvertLevel_m	*Invert level of this feature (in metres against the vertical datum).*		float						
		Depth_m	*The depth of the structure in metres. May be user-entered, or auto-calculated as the difference between the surface level and the invert level of the pit.*		Float_Positive_NonZero						
		Inlet	*Represents a surface inlet to the pit. Set to nil if this pit does not have a surface inlet*	InletConfig	*Positioning of the inlet against the pit.*	Left	*Left hand side*				
						Centre	*Centre*				
						Right	*Right hand side*				
				InletType	*The type of inlet employed.*	Galv Grate	*Galvanised Steel Grate*				
						Cast Iron Grate	*Cast Iron Grate*				
						Hydroflow Grate	*Hydroflow Grate*				
						Cast Iron Bike/Ped Safe Grate	*Cast Iron Bicycle and Pedestrian Safe Grate*				
						Field Inlet Dome Top Grade	*Galvanised, raised dome top grade for a field inlet*				
						Field Inlet Surcharge Grate	*Field Inlet Surcharge Grate*				
						Field Inlet Flush Grate	*Field Inlet Flush Grate*				
						KIL Gully	*Kerb Inline Gully Pit*				
						LIL Gully	*Lip Inline Gully Pit*				
						Anti-Ponding Gully	*Anti-Ponding Gully*				
						Bro-Pit Kerb Inlet	*Bro-Pit Kerb Inlet*				
						Drainway Kerb Inlet	*Drainway Kerb Inlet*				
						OTHER - Field Inlet	*Council Specific Field Inlet*				
						OTHER - KIL Gully	*Council Specific Kerb Inline Gully Pit*				
						OTHER - LIL Gully	*Council Specific Lip Inline Gully Pit*				
						OTHER - Side Entry Pit	*Council Specific Side Entry Pit*				
						OTHER - Trench Grate	*Council Specific Trench Grate*				
						Null Node	*Null asset only applicable when Use != Pit.*				
				InletSize	*Dimensions of the inlet e.g. Diameter or Length x Width.*		String_32				
		Lintel	*Represents the pit lintel. Set to nil if this pit does not have a lintel.*	LintelConstruction	*Method of lintel construction.*	Prefabricated	*Prefabricated*				
						Insitu	*Built or poured in-situ*				
				LintelLength_m	*Represents the length in metres of the lintel.*		Float_Positive_NonZero				
		OutletType	*The type of outlet for this pit.*	Dry	*Dry*						
				Surcharge	*Surcharge*						
		FireRetardant	*True of false value indicating whether fire retardant measures are incorporated.*		boolean						
		Rotation	*Rotation angle (cartesian - anti-clockwise 0 degrees = East)*		Float_Direction						
		Geometry	*Point geometry representing the manhole or pit feature in coordinate space.*		geometry_point_singlepoint						
EndStructure	***Represents a stormwater endstructure feature as a Point object***	StructureID	*The identifier for this end structure. Usually the textual identifier it would be labelled with on the face of a plan.*		String_32						
		StructureLevel_m	*The surface level of the structure in metres against the vertical datum for the project.*		float						
		EndWall	*Data structure representing the end wall. Set to nil if this End Structure does not have an end wall.*	Type	*The type of stormwater end wall structure*	Pipe Endwall	*Pipe Endwall*				
						Box Endwall	*Box Endwall*				
						Multi Cell Pipe Endwall	*Multi Cell Pipe Endwall*				
						Multi Cell Box Endwall	*Multi Cell Box Endwall*				
						Multi Cell Pipe and Box Endwall	*Multi Cell Pipe and Box Endwall*				
						Sloping Pipe Endwall	*Sloping Pipe Endwall*				
				Size	*Define the number of cells and sizes penetrating the End Structure ie. 3/750 or 2/1200x900 or 2/900x600+1/600.*		String_32				
				Length_m	*Represents the length in metres of the end wall.*		Float_Positive_Zero				
				Height_m	*Represents the height in metres of the end wall.*		Float_Positive_Zero				
				Thickness_m	*Represents the Thickness in metres of the end wall.*		Float_Positive_Zero				
				Material	*The predominant construction material of the end wall structure.*	Concrete	*Concrete*				
						Reinforced Concrete	*Reinforced Concrete*				
						Grouted Rock	*Grouted Rock*				
						Revetment Mattress	*Revetment Mattress*				
						N/A	*Not Applicable -- To be used if not present*				
				Construction	*The method of construction of the end wall structure.*	Prefabricated	*Prefabricated*				
						Insitu	*Built or poured in-situ*				
		WingWall	*Data structure representing the wing wall. Set to nil if this End Structure does not have any wing walls.*	LWW_Length_m	*Represents the length in metres of the left wing wall.*		Float_Positive_Zero				
				LWW_Height_m	*Represents the height in metres of the left wing wall.*		Float_Positive_Zero				
				LWW_Thickness_m	*Represents the thickness in metres of the left wing wall.*		Float_Positive_Zero				
				LWW_Material	*The predominant construction material of the left wing wall.*	Concrete	*Concrete*				
						Reinforced Concrete	*Reinforced Concrete*				
						Grouted Rock	*Grouted Rock*				
						Revetment Mattress	*Revetment Mattress*				
						N/A	*Not Applicable -- To be used if not present*				
				LWW_Construction	*The method of construction of the left wing wall.*	Prefabricated	*Prefabricated*				
						Insitu	*Built or poured in-situ*				
				RWW_Length_m	*Represents the length in metres of the right wing wall.*		Float_Positive_Zero				
				RWW_Height_m	*Represents the height in metres of the right wing wall.*		Float_Positive_Zero				
				RWW_Thickness_m	*Represents the thickness in metres of the right wing wall.*		Float_Positive_Zero				
				RWW_Material	*The predominant construction material of the right wing wall.*	Concrete	*Concrete*				
						Reinforced Concrete	*Reinforced Concrete*				
						Grouted Rock	*Grouted Rock*				
						Revetment Mattress	*Revetment Mattress*				
						N/A	*Not Applicable -- To be used if not present*				

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				RWW_Construction	*The method of construction of the right wing wall.*	Prefabricated Insitu	*Prefabricated* *Built or poured in-situ*				
		Apron	*Data structure representing the apron.*	Apron_Width_m	*Represents the width in metres of apron on the End Structure.*		Float_Positive_Zero				
				Apron_Thicknes_m	*Represents the thickness in metres of apron on the End Structure.*		Float_Positive_Zero				
				Apron_Area_m2	*Represents the area in square metres of apron on the End Structure.*		Float_Positive_Zero				
				Apron_Material	*The predominant construction material of apron on the End Structure.*	Grassed Concrete Stone Pitched Placed Rock Grouted Rock Revetment Mattress Rock Filled Wire Basket Geotextile Concrete Energy Dissepiment N/A	*Grassed banks* *Concrete* *Stone Pitched* *Placed Rock* *Grouted Rock* *Revetment Mattress* *Rock Filled Wire Basket* *Geotextile* *Concrete Energy Dissepiment* *Not Applicable – To be used if not present*				
				Apron_Construction	*The method of construction of apron on the End Structure.*	Prefabricated Insitu	*Prefabricated* *Built or poured in-situ*				
		GrateType	*Type of grate used, if applicable.*	Baffled Grated Stilling Basin None	*Baffled* *Grated* *Silting basin* *No grate fitted*						
		TideGate	*Type of tide or flood gate used, if applicable.*	Fibreglass Proprietary Fabricated Controlled Rubber None	*Fibreglass proprietary* *Fabricated* *Controlled* *Rubber* *No tidegate fitted*						
		Geometry	*Point geometry representing the EndStructure in coordinate space.*		geometry_point_singlepoint						
EndStructurePolyline	***Represents a stormwater endstructure feature as a Polyline object***	StructureID	*The identifier for this end structure. Usually the textual identifier it would be labelled with on the face of a plan.*		String_32						
		StructureLevel_m	*The surface level of the structure in metres against the vertical datum for the project.*		float						
		EndWall	*Data structure representing the end wall. Set to nil if this End Structure does not have an end wall.*	Type	*The type of stormwater end wall structure*	Pipe Endwall Box Endwall Multi Cell Pipe Endwall Multi Cell Box Endwall Multi Cell Pipe and Box Endwall Sloping Pipe Endwall	*Pipe Endwall* *Box Endwall* *Multi Cell Pipe Endwall* *Multi Cell Box Endwall* *Multi Cell Pipe and Box Endwall* *Sloping Pipe Endwall*				
				Size	*Define the number of cells and sizes penetrating the End Structure ie. 3/750 or 2/1200x900 or 2/900x600+1/600.*		String_32				
				Length_m	*Represents the length in metres of the end wall.*		Float_Positive_Zero				
				Height_m	*Represents the height in metres of the end wall.*		Float_Positive_Zero				
				Thickness_m	*Represents the Thickness in metres of the end wall.*		Float_Positive_Zero				
				Material	*The predominant construction material of the end wall structure.*	Concrete Reinforced Concrete Grouted Rock Revetment Mattress N/A	*Concrete* *Reinforced Concrete* *Grouted Rock* *Revetment Mattress* *Not Applicable – To be used if not present*				
				Construction	*The method of construction of the end wall structure.*	Prefabricated Insitu	*Prefabricated* *Built or poured in-situ*				
		WingWall	*Data structure representing the wing wall. Set to nil if this End Structure does not have any wing walls.*	LWW_Length_m	*Represents the length in metres of the left wing wall.*		Float_Positive_Zero				
				LWW_Height_m	*Represents the height in metres of the left wing wall.*		Float_Positive_Zero				
				LWW_Thickness_m	*Represents the thickness in metres of the left wing wall.*		Float_Positive_Zero				
				LWW_Material	*The predominant construction material of the left wing wall.*	Concrete Reinforced Concrete Grouted Rock Revetment Mattress N/A	*Concrete* *Reinforced Concrete* *Grouted Rock* *Revetment Mattress* *Not Applicable – To be used if not present*				
				LWW_Construction	*The method of construction of the left wing wall.*	Prefabricated Insitu	*Prefabricated* *Built or poured in-situ*				
				RWW_Length_m	*Represents the length in metres of the right wing wall.*		Float_Positive_Zero				
				RWW_Height_m	*Represents the height in metres of the right wing wall.*		Float_Positive_Zero				
				RWW_Thickness_m	*Represents the thickness in metres of the right wing wall.*		Float_Positive_Zero				
				RWW_Material	*The predominant construction material of the right wing wall.*	Concrete Reinforced Concrete Grouted Rock Revetment Mattress N/A	*Concrete* *Reinforced Concrete* *Grouted Rock* *Revetment Mattress* *Not Applicable – To be used if not present*				
				RWW_Construction	*The method of construction of the right wing wall.*	Prefabricated Insitu	*Prefabricated* *Built or poured in-situ*				
		Apron	*Data structure representing the apron.*	Apron_Width_m	*Represents the width in metres of apron on the End Structure.*		Float_Positive_Zero				
				Apron_Thicknes_m	*Represents the thickness in metres of apron on the End Structure.*		Float_Positive_Zero				
				Apron_Area_m2	*Represents the area in square metres of apron on the End Structure.*		Float_Positive_Zero				
				Apron_Material	*The predominant construction material of apron on the End Structure.*	Grassed Concrete Stone Pitched Placed Rock Grouted Rock Revetment Mattress Rock Filled Wire Basket Geotextile Concrete Energy Dissepiment N/A	*Grassed banks* *Concrete* *Stone Pitched* *Placed Rock* *Grouted Rock* *Revetment Mattress* *Rock Filled Wire Basket* *Geotextile* *Concrete Energy Dissepiment* *Not Applicable – To be used if not present*				
				Apron_Construction	*The method of construction of apron on the End Structure.*	Prefabricated Insitu	*Prefabricated* *Built or poured in-situ*				
		GrateType	*Type of grate used, if applicable.*	Baffled Grated Stilling Basin None	*Baffled* *Grated* *Silting basin* *No grate fitted*						
		TideGate	*Type of tide or flood gate used, if applicable.*	Fibreglass Proprietary Fabricated Controlled Rubber None	*Fibreglass proprietary* *Fabricated* *Controlled* *Rubber* *No tidegate fitted*						
		Geometry	*Point geometry representing the EndStructure in coordinate space.*		geometry_linear_singlepath_simple						
Fitting	***Represents a point fitting in a stormwater system.***	FittingType	*The type of stormwater fitting.*	End Cap Tide Gate Frog Flap Duckbill Valve	*A stormwater end cap* *Tide Gate* *Frog Flap* *Duckbill Valve*						
		Rotation	*Rotation angle (cartesian - anti-clockwise 0 degrees = East)*		Float_Direction						
		Geometry	*Point geometry representing the fitting in coordinate space.*		geometry_point_singlepoint						
Pipe	***Represents a stormwater pipe feature.***	US_InvertLevel_m	*Invert level of this piipe end (in metres against the vertical datum).*		float						

ASSET TYPE	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
		DS_InvertLevel_m	*Invert level of this pipe end (in metres against the vertical datum).*		float						
		US_SurfaceLevel_m	*Surface level (in metres against the vertical datum) vertically above this pipe end.*		float						
		DS_SurfaceLevel_m	*Surface level (in metres against the vertical datum) vertically above this pipe end.*		float						
		PipeStructure	*Container for a choice of pipe cross-sectional measures.*	CircPipe	*Data structure describing stormwater pipe with a circular cross section*	Diameter_mm	*The internal diameter of the pipe in millimetres.*		positiveInteger		
						Material	*The pipe wall material*	RCP FRC PVC-U HDPE PP RPP GRP CSP CAP SFRC	*Steel Reinforced Concrete Pipe* *Fibre Reinforced Concrete Pipe* *PolyVinylChloride Unplasticised* *High Density Polyethylene (includes the product known commercially as Haries Black Brute)* *Polypropylene Pipe (also known as Black Max)* *Ribbed Polypropylene Pipe (also known as RibStruct)* *Glass Reinforced Plastic (includes the product known commercially as Hobas)* *Helically Corrugated Galv Steel Pipe* *Helically Corrugated Aluminium Pipe* *Slotted fibre reinforced concrete*		
						Class	*The pipe wall class*	1 2 3 4 6 8 10 SN2 SN4 SN8	*Class 1* *Class 2* *Class 3* *Class 4* *Class 6* *Class 8* *Class 10* *Class SN2* *Class SN4* *Class SN8*		
						JointType	*The joint type of the pipe section*	FJ RRJ SWJ	*Flush Joint* *Rubber Ring Joint* *Solvent Welded Joint*		
				BoxPipe	*Rectangular pipe cross-sectional description.*	Height_mm	*Height in millimetres of the internal cross section*		positiveInteger		
						Width_mm	*Width in millimetres of the internal cross section*		positiveInteger		
						Material	*Wall material of the box section.*	RCBC SLBC RUBBLE	*Reinforced Concrete Box Culvert* *Slab Link Box Culvert* *Rubble Infiltration Drain*		
						Class	*The pipe wall class*	1 2 3 4 6 8 10 SN2 SN4 SN8	*Class 1* *Class 2* *Class 3* *Class 4* *Class 6* *Class 8* *Class 10* *Class SN2* *Class SN4* *Class SN8*		
		Cells	*The number of cells in the pipe course.*		positiveInteger						
		ConcreteCoverType	*The pipe protection regime employed.*	Standard Saltwater	*Standard* *Saltwater*						
		Grade	*Pipe gradient as a percentage. Derivable from invert levels and horizontal length.*		Float_Positive_Zero						
		Length_m	*Pipe material length in metres.*		Float_Positive_NonZero						
		Geometry	*Polyline geometry representing the feature in coordinate space.* *The recommendation for multicell courses is to store multiple paths within the polyline. It is recommended that all paths are digitised in the direction of flow.*		geometry_linear_multipath_simple						
SurfaceDrain	***Represents a linear surface drain. May include natural features as well as constructed where they function as part of a contributed asset.***	Type	*The type of drain or channel.*	Canal Open Drain Overland Flow Path Flat Open Surface Natural Waterway Infiltration Trench Batter Chute Diversion Drain	*Canal* *Open Drain* *Overland Flow Path* *Flat Open Surface* *Natural Waterway* *Infiltration Trench* *Structure to convey runoff down a cut or fill batter and discharge at either non-rosive velocities or onto a non-erodable surface.* *Diversion Drain. Also called Whoa Boy, check, cross or roll over banks. Constructed to divert water off a track without causing erosion.*						
		DrainShape	*Cross-sectional shape of the drain.*	Flat Bottom Drain Vee Drain Swale Drain Natural Channel Diversion Profile	*Flat Bottom Drain* *Vee Drain* *Swale Drain* *Natural Channel* *Diversion Profile*						
		LiningMaterial	*The material that the channel is lined with.*	Grassed Earth Concrete Stone Pitched Placed Rock Grouted Rock Revetment Mattress Rock Filled Wire Basket Natural Channel	*Grassed* *Earth* *Concrete* *Stone Pitched* *Placed Rock* *Grouted Rock* *Revetment Mattress* *Rock Filled Wire Basket* *Natural Channel*						
		LinedWidth_m	*The width, in metres, of the lined portion of the channel.*		Float_Positive_NonZero						
		BatterMaterial	*The material that the drain batter is lined with. A null value may be supplied where the drain has no batter.*	Grassed Earth Concrete Stone Pitched Placed Rock Grouted Rock Revetment Mattress Rock Filled Wire Basket Natural Channel	*Grassed* *Earth* *Concrete* *Stone Pitched* *Placed Rock* *Grouted Rock* *Revetment Mattress* *Rock Filled Wire Basket* *Natural Channel*						
		BatterWidth_m	*The total width, in metres, from lip of batter to opposite lip of batter. A null value may be supplied where the drain has no batter.*		Float_Positive_NonZero						
		US_InvertLevel_m	*Invert level of this piipe end (in metres against the vertical datum).*		float						
		DS_InvertLevel_m	*Invert level of this pipe end (in metres against the vertical datum).*		float						

ASSET TYPE	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
		AverageGrade	*The average gradient over the whole length of the feature, as a percentage. Derivable from the difference in invert levels and the horizontal length of the geometry.*		Float_Positive_Zero						
		Length_m	*The material length, in metres, of the centreline of the channel.*		Float_Positive_NonZero						
		Geometry	*Polyline geometry representing the feature in coordinate space.* *Digitise each individual length of channel as a single unbroken path.*		geometry_linear_singlepath_simple						
GPTComplex	***Represents a complex commerial or custom StormWater Quality Improvement Device (SQID).***	Sqid_Id	*The string identifier of the device, as it would appear on a plan.*		String_32						
		Construction		Commercial		Manufacturer	*The manufacturer of the unit*		String_64		
						Model	*The standard code, model number or part number for the unit*		String_64		
						Size	*The planimetric size of the device. This element is nillable because the manufacturer and model are mandatory, but if capture software designers wish to automatically populate the sizes from a list of known*	Rectangular	*Planimetric dimensions of a rectangular device.*	Length_mm Width_mm	*Length in millimetres* *Width in millimetres*
								Circular	*Planimetric dimensions of a circular device.*	Diameter_mm	*Diameter in millimetres*
				Custom		Size	*The dimensions of the device. This element is mandatory for custom built devices. The appropriate dimensions must be supplied*	Rectangular	*Planimetric dimensions of a rectangular device.*	Length_mm Width_mm	*Length in millimetres* *Width in millimetres*
								Circular	*Planimetric dimensions of a circular device.*	Diameter_mm	*Diameter in millimetres*
		Function1	*The first function of the WSUD point. The device must have at least one function. Usually Gross Pollutant Capture will be the most important function.*	Gross Pollutant Capture Sediment Capture Oil / Grit Separation Filtration	*Gross Pollutant Capture* *Sediment Capture* *Oil / Grit Separation* *Filtration of fine particulates from stormwater before discharging to a downstream drainage system.*						
		Function2	*The second function of the WSUD point, if applicable*	Gross Pollutant Capture Sediment Capture Oil / Grit Separation Filtration	*Gross Pollutant Capture* *Sediment Capture* *Oil / Grit Separation* *Filtration of fine particulates from stormwater before discharging to a downstream drainage system.*						
		Function3	*The third function of the device, if applicable*	Gross Pollutant Capture Sediment Capture Oil / Grit Separation Filtration	*Gross Pollutant Capture* *Sediment Capture* *Oil / Grit Separation* *Filtration of fine particulates from stormwater before discharging to a downstream drainage system.*						
		US_PipeDiameter_mm	*The upstream pipe diameter in millimetres*		positiveInteger						
		DS_PipeDiameter_mm	*The downstream pipe diameter in millimetres*		positiveInteger						
		SurfaceLevel_m	*The surface level at the top of the device*		float						
		US_InvertLevel_m	*Invert level of this pipe end (in metres against the vertical datum).*		float						
		DS_InvertLevel_m	*Invert level of this pipe end (in metres against the vertical datum).*		float						
		CleanoutLevel_m	*The level to which the device must be cleaned out, in metres against the vertical datum of the project.*		float						
		Depth_m	*The depth, in metres, of the device.*		Float_Positive_NonZero						
		SumpDepth_m	*The depth, in metres, of the sump, if applicable*		Float_Positive_NonZero						
		HasFilterMedia	*True if the device has filtration media or a filter capsule installed.*		boolean						
		HasBasket	*True if the device has a litter basket installed.*		boolean						
		HasBoards	*True if the device has drop-boards or penstock installed.*		boolean						
		DesignFlow_m3s	*Design Flow in cubic metres per second*		Float_Positive_NonZero						
		MaxContaminantVolume_m3	*Maximum contaminant retention volume in cubic metres.*		Float_Positive_NonZero						
		MaxInternalVolume_m3	*Maximum internal volume in cubic metres.*		Float_Positive_NonZero						
		MaintenanceCycle_mnths	*The minimum maintenance cycle in months (refer to specifications)*		positiveInteger						
		Rotation	*Rotation angle (cartesian - anti-clockwise 0 degrees = East)*		Float_Direction						
		Geometry	*Point geometry representing the feature in coordinate space.*		geometry_point_singlepoint						
GPTSimple	***Represents a Water Sensitive Urban Design point feature that is a simple grate, basket or net fitted to existing infrastructure.*** ***Includes custom In-Pit or End-of-Line features or In-Line features such as trash-racks on drainage lines. Spatially, these features must be collocated with pits, endstructures or placed on pipes or drainage lines. Therefore, as in reality, whether the feature is In-Pit, In-Line or End-of-Line is determined by its placement with other features.***	Sqid_Id	*The string identifier of the device, as it would appear on a plan.*		String_32						
		Construction	*The construction method*	Prefabricated Insitu	*Prefabricated* *Built or poured in-situ*						
		Manufacturer	*The manufacturer if applicable*		String_64						
		ModelNumber	*The model if applicable*		String_64						
		TreatmentMeasure	*Simple treatment measures fitted to existing infrastructure to intercept solid litter being transported in stormwater.*	Basket Net Vertical Grate Horizontal Grate	*A simple basket fitted to existing infrastructure to intercept solid litter being transported in stormwater.* *A simple net fitted to existing infrastructure to intercept solid litter being transported in stormwater.* *A vertical grate across a drainage line or endstructure to intercept solid litter being transported in stormwater.* *A horizontal grate across an inlet to intercept solid litter being transported in stormwater.*						
		Function1	*The first function of the WSUD point. Has a fixed value because all GPTSimple points are.*		String_32						
		Length_mm	*The length of the device*		positiveInteger						
		Width_mm	*The width of the device*		positiveInteger						
		Material	*Predominant material of device*		String_64						
		MaintenanceCycle_mnths	*The minimum maintenance cycle in months. This is the revisit interval for clearing captured rubbish.*		positiveInteger						
		Rotation	*Rotation angle (cartesian - anti-clockwise 0 degrees = East)*		Float_Direction						
		Geometry	*Point geometry representing the feature in coordinate space.*		geometry_point_singlepoint						
NonGPTSimple	***Represents a WSUD point feature that is not a simple litter trap, such as a small sand filter, sediment pond, aquifer storage, infiltration measure or energy dissipater.***	Sqid_Id	*The string identifier of the device, as it would appear on a plan.*		String_32						
		Construction	*The construction method*	Prefabricated Insitu	*Prefabricated* *Built or poured in-situ*						
		Manufacturer	*The manufacturer if applicable*		String_64						
		ModelNumber	*The model if applicable*		String_64						
		TreatmentMeasure	*Treatment measures applicable to WSUD points that are neither simple nor complex Gross Pollutant Traps*	Aquifer Storage Tank Energy Dissipater Floating Boom Infiltration Pond	*Aquifer Storage Tank* *An installation in a drainage line, usually of concrete or stone, designed to dissipate the kinetic energy of flowing stormwater, to minimise its potential for erosion and damage. Often placed immediately downstream of an endstructure, but may conceivably be anywhere needed in a drainage line.* *Floating Boom* *Infiltration measure designed to promote infiltration of appropriately treated water to surrounding soils. The primary function of these devices is runoff volume control rather than pollutant removal.*						

ASSET TYPE	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
				Infiltration Tank	*Infiltration measure designed to promote infiltration of appropriately treated water to surrounding soils. The primary function of these devices is runoff volume control rather than pollutant removal.*						
				Rubble Pit	*A rubble pit designed to promote infiltration of untreated runoff to surrounding soils.*						
				Sand Filter	*A sand filter is a sand layer designed to filter fine particulates from stormwater before discharging to a downstream drainage system.*						
				Sediment Forebay	*A Sediment Forebay, usually associated with a WSUD area to intercept coarse sediment.*						
		Function1	*The first function of the WSUD point. Must be supplied.*	Sediment Capture	*Sediment Capture*						
				Sand Filtration	*Sand Filtration occurs in a sand layer designed to filter fine particulates from stormwater before discharging to a downstream drainage system.*						
				Infiltration	*Infiltration measures typically consist of holding pond or tank designed to promote infiltration of appropriately treated water to surrounding soils. The primary function of these devices is runoff volume control rather than pollutant removal.*						
				Aquifer Storage	*Aquifer Storage*						
				Energy Dissipation	*The dissipation of kinetic energy from flowing storwater to reduce its potential for erosion and damage.*						
		Function2	*The second function of the WSUD point, if applicable*	Sediment Capture	*Sediment Capture*						
				Sand Filtration	*Sand Filtration occurs in a sand layer designed to filter fine particulates from stormwater before discharging to a downstream drainage system.*						
				Infiltration	*Infiltration measures typically consist of holding pond or tank designed to promote infiltration of appropriately treated water to surrounding soils. The primary function of these devices is runoff volume control rather than pollutant removal.*						
				Aquifer Storage	*Aquifer Storage*						
				Energy Dissipation	*The dissipation of kinetic energy from flowing storwater to reduce its potential for erosion and damage.*						
		Function3	*The third function of the device, if applicable*	Sediment Capture	*Sediment Capture*						
				Sand Filtration	*Sand Filtration occurs in a sand layer designed to filter fine particulates from stormwater before discharging to a downstream drainage system.*						
				Infiltration	*Infiltration measures typically consist of holding pond or tank designed to promote infiltration of appropriately treated water to surrounding soils. The primary function of these devices is runoff volume control rather than pollutant removal.*						
				Aquifer Storage	*Aquifer Storage*						
				Energy Dissipation	*The dissipation of kinetic energy from flowing storwater to reduce its potential for erosion and damage.*						
		Length_mm	*The length of the device*		positiveInteger						
		Width_mm	*The width of the device*		positiveInteger						
		MaintenanceCycle_mnths	*The minimum maintenance cycle in months. This is the revisit interval for maintenance or inspection, if applicable.*		positiveInteger						
		Rotation	*Rotation angle (cartesian - anti-clockwise 0 degrees = East).*		Float_Direction						
		Geometry	*Point geometry representing the feature in coordinate space.*		geometry_point_singlepoint						
Flow Management Device	***Represents a Flow Management Device. Also often called a Stormwater Quality Improvement Device (SQID).***	Sqid_Id	*The string identifier of the device, as it would appear on a plan.*		String_32						
		Type	*Stormwater Flow Management Device Type*	Levee	*Levee*						
				Spillway	*Spillway*						
				Weir	*Weir*						
		Material	*The predominant material of the Stormwater Flow Management Device.*	Concrete	*Concrete*						
				Earth	*Earth*						
				Grassed	*Grassed*						
				Grouted Rock	*Grouted Rock*						
				Metal	*Metal*						
				Placed Rock	*Placed Rock*						
				Timber	*Timber*						
		Length_m			Float_Positive_NonZero						
		CrestElevation_m			Float						
		Geometry	*Polyline geometry representing the feature in coordinate space.*		geometry_linear_multipath_simple						
WSUD Area	***Represents a Water Sensitive Urban Design (WSUD) area feature. Also often called a StormWater Quality Improvement Device (SQID). Use area features to represent constructed wetlands, bioretention basins, biofiltration beds, swales etc.***	Sqid_Id	*The string identifier of the device, as it would appear on a plan.*		String_32						
		TreatmentMeasure	*The treatment measure employed. Choose from a list relevant to complex area features.*	Buffer Strip	*A buffer strip is a vegetated slope. Stormwater flows across a buffer strip. Treatment is provided by infiltration to the soil and by filtration of shallow flow through the vegetation.*						
				Swale	*A swale is a shallow trapezoidal channel lined with vegetation. Stormwater flows along a swale. Treatment is provided by infiltration to the soil and by filtration of shallow flow through the vegetation.*						
				Bioretention Swale	*Bioretention swales include a vegetated infiltration trench within the invert of a swale. Incorporating the infiltration trench enhances removal of both particles and nutrients.*						
				Sedimentation Basin	*A sedimentation basin is a small pond, about 1m deep, designed to capture coarse to medium sediment from urban catchments. Treatment is provided primary through settling of suspended particles.*						
				Bioretention Basin	*A bioretention basin is a vegetated bed of filter material, such as sand and gravel. The basin is designed to capture stormwater runoff which then drains through the filter media. Pollutants are removed by filtration and by biological uptake of nutrients.*						
				Constructed Wetland	*Constructed wetland systems are shallow, vegetated water bodies the use enhanced sedimentation, fine filtration and biological uptake processes to remove pollutants from stormwater.*						
		Function1	*The first function of the WSUD area. At least one function must be supplied. Choose from a list relevant to complex area features.*	Gross Pollutant Capture	*Gross Pollutant Capture is the function of removing coarse particulate matter from stormwater.*						
				Sediment Capture	*Sediment Capture is the function of capturing coarse to medium sediment from urban catchments. Treatment is provided primarily through settling of suspended particles.*						
				Oil / Grit Separation	*Oil / Grit Separation*						
				Sand Filtration	*Sand Filtration occurs in a sand layer designed to filter fine particulates from stormwater before discharging to a downstream drainage system.*						
				Permeation	*Permeation allows water to penetrate the surface and join subterranean flows*						
				Vegetated Filtration	*Vegetated Filtration*						
				Bioretention	*Bioretention*						
		Function2	*The second function of the WSUD area, if applicable.*	Gross Pollutant Capture	*Gross Pollutant Capture is the function of removing coarse particulate matter from stormwater.*						

ASSET TYPE	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
				Sediment Capture	*Sediment Capture is the function of capturing coarse to medium sediment from urban catchments. Treatment is provided primarily through settling of suspended particles.*						
				Oil / Grit Separation	*Oil / Grit Separation*						
				Sand Filtration	*Sand Filtration occurs in a sand layer designed to filter fine particulates from stormwater before discharging to a downstream drainage system.*						
				Permeation	*Permeation allows water to penetrate the surface and join subterranean flows*						
				Vegetated Filtration	*Vegetated Filtration*						
				Bioretention	*Bioretention*						
		Function3	*The third function of the WSUD area, if applicable.*	Gross Pollutant Capture	*Gross Pollutant Capture is the function of removing coarse particulate matter from stormwater.*						
				Sediment Capture	*Sediment Capture is the function of capturing coarse to medium sediment from urban catchments. Treatment is provided primarily through settling of suspended particles.*						
				Oil / Grit Separation	*Oil / Grit Separation*						
				Sand Filtration	*Sand Filtration occurs in a sand layer designed to filter fine particulates from stormwater before discharging to a downstream drainage system.*						
				Permeation	*Permeation allows water to penetrate the surface and join subterranean flows*						
				Vegetated Filtration	*Vegetated Filtration*						
				Bioretention	*Bioretention*						
		PondingArea_m2	*Area of Temporary Ponding or Extended Detention in square metres.*		Float_Positive_NonZero						
		PondingDepth_m	*Average depth of Temporary Ponding or Extended Detention in metres.*		Float_Positive_NonZero						
		FilterArea_m2	*Area of Bioretention filter media in square metres.*		Float_Positive_NonZero						
		FilterDepth_m	*Depth of Bioretention filter media in metres.*		Float_Positive_NonZero						
		TransitionDepth_m	*Depth of the Bioretention Transition Layer in metres.*		Float_Positive_NonZero						
		DrainageDepth_m	*Depth of the Bioretention Drainage Layer in metres.*		Float_Positive_NonZero						
		MacrophyteZoneArea_m2	*The vegetated area in square metres (may be zero). Area of vegetated portion of constructed wetland (macrophyte zone)*		Float_Positive_Zero						
		MacrophyteZoneDepth_m	*Average depth of vegetated portion of constructed wetland (macrophyte zone).*		Float_Positive_NonZero						
		CoarseSedimentArea_m2	*Maximum area of ponding (for coarse sediment capture) before bypass.*		Float_Positive_Zero						
		SedimentVolume_m3	*Volume of sediment capacity in cubic metres*		Float_Positive_NonZero						
		MinSurfaceLevel_m	*Minimum surface level within structure (above or below water surface level).*		float						
		PermanentPondLevel_m	*Water surface level during normal dry weather.*		float						
		OutletLevel_m	*The surface level in metres of the bypass, or spillway, or other overflow outlet structure.*		float						
		DesignFlow_m3s	*The maximum design flow of the feature in cubic metres per second*		Float_Positive_NonZero						
		HasSpillway	*Whether the feature has a spillway*		boolean						
		MaintenanceCycle_mnths	*The minimum maintenance cycle in months (refer to specifications)*		positiveInteger						
		Geometry	*Polygon geometry representing the feature in coordinate space.*		geometry_area_multipath_complex						

ASSET GROUP	Open Space	DESCRIPTION	Data structure constraining information for Open Space features.

ASSET TYPE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
OpenSpaceArea	***Represents a top-level area of open space regarded as a single functional area, such as a park or recreation area. May be, but not necessarily, coincident with cadastral boundary***	Name	*The offical name or description of the Open Space area (eg: Smith St Park, Stockland Park Sporting complex)*		String_64		
		Type	*The type of Open Space area eg: Recreational, Bushland, Sporting Complex*	Recreational Bushland Road Reserve Special Facility	*Recreational* *Bushland* *Road Reserve* *Special Facility*		
		Geometry	*The geometry representing this feature in coordinate space.*		geometry_area_multipatch_complex		
ActivityArea	***Represents an activity area such as a playground or excercise area***	Use	*The type of use for the Activity Site eg: Animal, Fitness, Play, Sport*	Animal Fitness General Play Sports	*Animal* *Fitness* *General* *Play* *Sports*		
		Type	*The type of Activity Site. Eg: Sports Field, Cycling Facility*		String_64		
		Material	*The material type of Undersurfacing eg: Bark, Rubber, Grassed*	Bark Bitumen Concrete Grass Gravel Rubber Matting Sand Synthetic Grass	*Bark* *Bitumen* *Concrete* *Grass* *Gravel* *Rubber Matting* *Sand* *Synthetic Grass*		
		Thickness_mm	*Thickness of material in millimetres.*		Float_Positive_NonZero		
		Geometry	*The geometry representing this feature in coordinate space.*		geometry_area_multipatch_complex		
Edging	***Represents the Edging of an Activity Area or Landscaped Area***	Material	*The material type of edging*	Aluminium Brick Concrete Paver Plastic Rock Rubber Timber	*Aluminium* *Brick* *Concrete* *Paver* *Plastic* *Rock* *Rubber* *Timber*		
		Length_mm	*Length of material in millimetres.*		positiveInteger		
		Width_mm	*Width of material in millimetres.*		positiveInteger		
		Geometry	*The geometry representing this feature in coordinate space.*		geometry_linear_singlepath_complex		
ActivityPoint	***Represents an activity point feature. E.g: Animal, Fitness, Play or Sports activity item.***	Use	*The activity use category*	Animal Fitness Play Sports	*Animal* *Fitness* *Play* *Sports*		
		Type	*The activity item type*		String_64		
		Material	*The material type of Activity Item eg: Timber, Aluminium*	Aluminium Combination Fibreglass Plastic Rubber Steel Galvanised Steel Powder Coated Stainless Steel Timber	*Aluminium* *Combination* *Fibreglass* *Plastic* *Rubber* *Steel Galvanised* *Steel Powder Coated* *Stainless Steel* *Timber*		
		Theme	*The theme of the Activity item. Eg: Kangaroo, Boat, Fort, Car*		String_64		
		Units	*The number of units present eg: 1, 2, 3*		positiveInteger		
		Manufacturer	*The Manufacturer of the unit*		String_64		
		ModelNumber	*The standard code, model number or part number for the unit*		String_64		
		Geometry	*The geometry representing this feature in coordinate space.*		geometry_point_singlepoint		
Barbeque	***Represents an individual barbeque facility***	EnergySource	*The Source of energy for the BBQ. Ie: Mains, Bottled, Solar*	Main Solar Bottled Gas Wood	*Mains power* *Solar power* *Bottled gas* *Wood fired*		
		Plates	*The number of plates fitted in the BBQ structure.*	Minimum (Inclusive) Value: 1 Maximum (Inclusive) Value: 10	*At least one plate must be recorded.* *Up to ten plates are provided for, where they are built into a single structure.*		
		SurroundingMaterial	*The material type of the surround structure ie: brick, steel and Timber*	Masonry Steel and Timber	*Masonry* *Steel and Timber*		
		TopMaterial	*The material type of the top structure ie: Tiled, marble, steel*	Concrete Tiled Marble Stainless Steel	*Concrete* *Tiled* *Marble* *Stainless Steel*		
		Manufacturer	*The Manufacturer of the unit*		String_64		
		ModelNumber	*The standard code, model number or part number for the unit*		String_64		
		Geometry	*The geometry representing this feature in coordinate space.*		geometry_point_singlepoint		
Table	***Represents a table unit that may include fixed seating. Not to be used for seating that does not include a table as its main feature.***	Type	*The type of Unit eg: Table, Bench or counter.*	Bench Counter Table	*Bench* *Counter* *Table*		
		Seating	*Seating details. Element should be nil if no seating is present.*	SeatType	*The configuration of the associated seating.*	Bench Post and Stool	*Bench seat* *Fixed post with stool top*

ASSET TYPE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
						Post and Seat	*Fixed post with non-swivelling seat*
						Post and Swivel Seat	*Fixed post with swivelling seat*
				Places	*The number of individuals the seating is designed for. This attribute may be used to help determine the capacity of a recreational facility.*		positiveInteger
		Material	*The material type of Table/Seat eg: Timber, Aluminium*	Aluminium	*Aluminium*		
				Concrete	*Concrete*		
				Plastic	*Plastic*		
				Stainless Steel	*Stainless Steel*		
				Steel Galvanised	*Steel Galvanised*		
				Steel Powder Coated	*Steel Powder Coated*		
				Timber	*Timber*		
				Timber and Steel	*Timber and Steel*		
		Manufacturer	*The Manufacturer of the unit*		String_64		
		ModelNumber	*The standard code, model number or part number for the unit*		String_64		
		Geometry	*The geometry representing this feature in coordinate space.*		geometry_point_singlepoint		
Seat	***Represents a seat feature. Includes freestanding seats and border seating mounted in garden walls. Represents a seat unit that does not include a table as its main feature.***	SeatType	*The configuration of the seating.*	Freestanding	*Freestanding bench seat*		
				Border	*Border seating set in garden wall or similar low structure.*		
		Places	*The number of individuals the seating is designed for. This attribute may be used to help determine the capacity of a recreational facility.*		positiveInteger		
		Material	*The primary material type of Seat eg: Timber, Aluminium*	Aluminium	*Aluminium*		
				Concrete	*Concrete*		
				Plastic	*Plastic*		
				Stainless Steel	*Stainless Steel*		
				Steel Galvanised	*Steel Galvanised*		
				Steel Powder Coated	*Steel Powder Coated*		
				Timber	*Timber*		
				Timber and Steel	*Timber and Steel*		
		Manufacturer	*The Manufacturer of the unit*		String_64		
		ModelNumber	*The standard code, model number or part number for the unit*		String_64		
		Geometry	*The geometry representing this feature in coordinate space.*		geometry_point_singlepoint		
WasteCollectionPoint	***Represents a waste collection point feature***	Type	*The type of Bin/Waste collection point eg: Std Litter Bin, Wheelie Bin Enclosure*	Recycle Bin	*Recycle Bin*		
				Standard Litter Bin	*Standard Litter Bin*		
				Wheelie Bin Enclosure	*Wheelie Bin Enclosure*		
				Wheelie Bin Stand	*Wheelie Bin Stand*		
		Material	*The material type of Bin/Waste collection point eg: Aluminium, Steel*	Aluminium	*Aluminium*		
				Plastic	*Plastic*		
				Stainless Steel	*Stainless Steel*		
				Steel Galvanised	*Steel Galvanised*		
				Steel Powder Coated	*Steel Powder Coated*		
				Timber	*Timber*		
				Timber and Steel	*Timber and Steel*		
		Manufacturer	*The Manufacturer of the unit*		String_64		
		ModelNumber	*The standard code, model number or part number for the unit*		String_64		
		Geometry	*The geometry representing this feature in coordinate space.*		geometry_point_singlepoint		
BicycleFitting	***Represents a bicycle fitting feature*** ***Represents an individual fitting for the use or safety of cyclists.***	Type	*The type of Bicycle fitting eg: Bicycle Rack, Bannana Rail*	Banana Rail	*Banana Rail*		
				Bicycle Rack	*Bicycle Rack*		
				Chicane	*Chicane*		
		Material	*The material type of Bicycle fitting eg: Timber, Aluminium*	Aluminium	*Aluminium*		
				Stainless Steel	*Stainless Steel*		
				Steel Galvanised	*Steel Galvanised*		
				Steel Powder Coated	*Steel Powder Coated*		
				Timber	*Timber*		
				Timber and Steel	*Timber and Steel*		
		Manufacturer	*The Manufacturer of the unit*		String_64		
		ModelNumber	*The standard code, model number or part number for the unit*		String_64		
		Geometry	*The geometry representing this feature in coordinate space.*		geometry_point_singlepoint		
GeneralFixture	***Represents a general fixture feature. This is a class of minor point based fixtures not complex enough for a specific feature class.***	Type	*The type of Fixture eg: Dog bag dispensers, Fish cleaning station*		String_32		
		Material	*The material type of Fixture eg: Timber, Aluminium*	Aluminium	*Aluminium*		
				Plastic	*Plastic*		
				Stainless Steel	*Stainless Steel*		
				Steel Galvanised	*Steel Galvanised*		
				Steel Powder Coated	*Steel Powder Coated*		
				Timber	*Timber*		
				Masonry	*Masonry*		
				Combination	*Combination*		
		Manufacturer	*The Manufacturer of the unit*		String_64		
		ModelNumber	*The standard code, model number or part number for the unit*		String_64		
		Geometry	*The geometry representing this feature in coordinate space.*		geometry_point_singlepoint		
BarrierContinuous	***Represents a continuous linear barrier feature, such as fencing, walls, handrail or bollard run.***	Type	*The type of Barrier eg: Safety Fencing, Bollard Run, Gate*	Bollard Run	*Bollard Run*		
				Dunal Fencing	*Dunal Fencing*		

ASSET TYPE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
	Do not use for retaining walls.			General Fencing	*General Fencing*		
				Handrail	*Handrail*		
				Noise Barrier	*An acoustic barrier fence, normally between road or rail and residential areas.*		
				Pedestrian Gate	*Pedestrian Gate*		
				Safety Fencing	*Safety Fencing*		
				Slide Rail	*A lockable slide bar between two fixed uprights.*		
				Stock Fencing	*Stock Fencing*		
				Vehicle Gate	*Vehicle Gate*		
				Wall	*Wall*		
		UprightMaterial	*The material type of Barrier Uprights eg: Timber, Aluminium*	Aluminium	*Aluminium*		
				Concrete	*Concrete*		
				Steel	*Steel*		
				Stainless Steel	*Stainless Steel*		
				Steel Galvanised	*Steel Galvanised*		
				Steel Powder Coated	*Steel Powder Coated*		
				Stone Boulder	*Stone Boulder*		
				Timber	*Timber*		
		LinkMaterial	*The material type of Barrier Link Material eg: None, Chain, Wire*	None	*None*		
				Aluminium	*Aluminium*		
				Brick	*Brick*		
				Chain	*Chain*		
				Concrete	*Concrete*		
				Concrete Block	*Concrete Block*		
				Safety Glass	*Safety Glass*		
				Timber Panel	*Timber Panel*		
				Timber Paling	*Timber Paling*		
				Wire Mesh	*Wire Mesh*		
				Wire Strand	*Wire Strand*		
				Chain Wire	*Chain Wire*		
				Steel Wire Rope	*Steel Wire Rope*		
				Corrugated Galvanised Steel	*Corrugated galvanised steel sheeting*		
				Coated Rolled Steel	*Rolled steel sheeting, with a primed and painted or baked finish. (includes the product commercially known as Colorbond)*		
				Palisade	*Abutting vertical posts, driven.*		
		TopMaterial	*The material type of Barrier Topping Material eg: None, Chain, Barbed Wire*	None	*None*		
				Aluminium	*Aluminium*		
				Chain	*Chain*		
				Steel Rail	*Steel Rail*		
				Timber Rail	*Timber Rail*		
				Wire Barbed	*Wire Barbed*		
				Wire Strand	*Wire Strand*		
				Plastic	*Plastic*		
		Length_m	*The lineal length of the barrier in metres*		Float_Positive_NonZero		
		Height_m	*The height of the barrier in metres*		Float_Positive_NonZero		
		UprightNumber	*Total number of uprights in the run. For fencing, this will be the number of posts. For a bollard run, it will be the number of bollards.*		positiveInteger		
		Geometry	*The geometry representing this feature in coordinate space.* *It is recommended, but not mandatory, that each vertex represents an upright, particularly for bollard runs. This allows the geometry to be exploited to identify the individual features if necessary.*		geometry_linear_singlepath_complex		
BarrierPoint	***Represents a barrier feature that controls access at a single point, such as a locking post or single bollard.***	Type	*The type of Barrier Point eg: Bollard, Locking Post*	Bollard	*A permanently fixed individual bollard, usual forming a barrier to vehicle entry, while permiting pedestrians or cyclists. Runs of bollards forming a barrier line may be better described by BarrierContinuous, especially if linked with a joining material such as chain or stainless wire rope.*		
				Bollard Removable	*A removeable bollard, usually with a fixed base mounting to accept a padlock or similar security device.*		
				Horse Stepovers	*Horse Stepovers*		
				Locking Post	*A simple removeable post, usually with a fixed base mounting to accept a padlock or similar security device.*		
		UprightMaterial	*The material type of Barrier Uprights eg: Timber, Aluminium*	Aluminium	*Aluminium*		
				Concrete	*Concrete*		
				Steel	*Steel*		
				Stainless Steel	*Stainless Steel*		
				Steel Galvanised	*Steel Galvanised*		
				Steel Powder Coated	*Steel Powder Coated*		
				Stone Boulder	*Stone Boulder*		
				Timber	*Timber*		
		Geometry	*The geometry representing this feature in coordinate space.*		geometry_point_singlepoint		
RetainingWall	***Represents a continuous retaining wall feature. Includes***	Use	*Context of use for this wall. i.e Terrestrial or Marine*	Terrestrial	*Terrestrial (land based) revetment wall*		

ASSET TYPE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
	terrestrial, freshwater and marine revetment walls.			Freshwater	*Freshwater revetment wall. Designed to cope with freshwater flood levels. Also engineered walls for pools and ponds.*		
				Marine	*Marine revetment wall*		
		Material	*The material/type of Retaining Wall eg: Rock, Conc. Block, Conc. Crib*	Boulder	*Boulder*		
				Concrete	*Concrete, poured in situ.*		
				Concrete crib	*Concrete crib*		
				Precast Concrete Slab	*Precast Concrete Slab*		
				Masonry	*Masonry bricks or blocks*		
				Rock	*Rock or stone, either placed, or mortared*		
				Timber Sleeper	*Timber sleepers or logs*		
				Timber Crib	*Timber Crib*		
				Shot Binding	*Pneumatically projected binding material, usually concrete or stabilising mortar*		
		Construction	*Construction principle of this wall (eg: Gravity, Piled, Cantilever)*	Gravity	*These walls use their own weight and any captured soil or fill weight to resist the lateral soil pressure.*		
				Piled	*These walls use the embedded depth of vertical posts and the strength of the posts to resist lateral soil forces.*		
				Cantilever	*These walls cantilever vertically from the concrete footing and typically resist overturning by the mass of the soil or material on the heel of the footing.*		
		Length_m	*The lineal length of the wall in metres*		Float_Positive_NonZero		
		Height_m	*The height (or average height) of the wall in metres*		Float_Positive_NonZero		
		Geometry	*The geometry representing this feature in coordinate space.*		geometry_linear_multipath_complex		
Shelter	***Represents an individual open space shelter feature as a point object***	Type	*The type of structure eg: Sail, Rigid*	Rigid	*Rigid*		
				Sail	*Sail*		
		ConstructionType	*The type of shelter constructed eg: Prefab or Built insitu*	Prefabricated	*Prefabricated*		
				Insitu	*Built or poured in-situ*		
		FloorMaterial	*The material type of the Floor eg: Concrete, Timber*	Concrete	*Concrete*		
				Paved	*Paved*		
				Timber	*Timber*		
		WallMaterial	*The material type of the Walls eg: Timber/cladding, Reinforced Block*	None	*None*		
				Concrete	*Concrete*		
				Cladding	*Cladding*		
				Masonry	*Masonry*		
				Stainless Steel	*Stainless Steel*		
				Galvanised Steel	*Galvanised Steel*		
				Powder Coated Steel	*Powder Coated Steel*		
				Timber	*Timber*		
		RoofMaterial	*The material type of the Roof eg: Steel Sheeting, Masonary tiles*	Masonry Tiles	*Masonry Tiles*		
				Sail	*Sail*		
				Steel Sheets	*Steel Sheets*		
				Timber slats	*Timber slats*		
		Manufacturer	*The Manufacturer of the unit*		String_64		
		ModelNumber	*The standard code, model number or part number for the unit*		String_64		
		Geometry	*The geometry representing this feature in coordinate space.*		geometry_point_singlepoint		
ShelterPolygon	***Represents an individual open space shelter feature as a polygon object***	Type	*The type of structure eg: Sail, Rigid*	Rigid	*Rigid*		
				Sail	*Sail*		
		ConstructionType	*The type of shelter constructed eg: Prefab or Built insitu*	Prefabricated	*Prefabricated*		
				Insitu	*Built or poured in-situ*		
		FloorMaterial	*The material type of the Floor eg: Concrete, Timber*	Concrete	*Concrete*		
				Paved	*Paved*		
				Timber	*Timber*		
		WallMaterial	*The material type of the Walls eg: Timber/cladding, Reinforced Block*	None	*None*		
				Concrete	*Concrete*		
				Cladding	*Cladding*		
				Masonry	*Masonry*		
				Stainless Steel	*Stainless Steel*		
				Galvanised Steel	*Galvanised Steel*		
				Powder Coated Steel	*Powder Coated Steel*		
				Timber	*Timber*		
		RoofMaterial	*The material type of the Roof eg: Steel Sheeting, Masonary tiles*	Masonry Tiles	*Masonry Tiles*		
				Sail	*Sail*		
				Steel Sheets	*Steel Sheets*		
				Timber slats	*Timber slats*		
		Manufacturer	*The Manufacturer of the unit*		String_64		
		ModelNumber	*The standard code, model number or part number for the unit*		String_64		
		Geometry	*The geometry representing this feature in coordinate space.*		geometry_area_singlepatch_complex		
Artwork	***Represents an individual instance of open space artwork***	Type	*The type of Artwork eg: Sculpture, Statue*	Entry Statement	*Entry Statement*		
				Memorial	*Memorial*		
				Monument	*Monument*		
				Mosaic	*Mosaic*		
				Plaque	*Plaque*		
				Sculpture	*Sculpture*		

ASSET TYPE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
				Statue	*Statue*		
				Other	*Other*		
		Material	*The material type of Artwork eg: Timber, Aluminium*	Aluminium	*Aluminium*		
				Bronze	*Bronze*		
				Concrete	*Concrete*		
				Fibreglass	*Fibreglass*		
				Masonry	*Masonry*		
				Plastic	*Plastic*		
				Stainless Steel	*Stainless Steel*		
				Steel Galvanised	*Steel Galvanised*		
				Steel Powder Coated	*Steel Powder Coated*		
				Stone	*Stone*		
				Tile	*Tile*		
				Timber	*Timber*		
				Combination	*Combination*		
		Geometry	*The geometry representing this feature in coordinate space.*		geometry_point_singlepoint		
Building	***Represents an open space building feature, such as a toilet block, bandstand. Not to be used for shelters.***	Type	*The type of Building eg: Grandstand, Bandstand*	Amenities	*Amenities*		
				Amphitheatre	*Amphitheatre*		
				Arbour	*Arbour*		
				Bandstand	*Bandstand*		
				Grandstand	*Grandstand*		
				Open Seating	*Open Seating*		
				Sheds	*Sheds*		
				Toilet Block	*Toilet Block*		
				Viewing Platform	*Viewing Platform*		
				Demountable	*Demountable site office*		
		Material	*The material type of Building eg: Timber, Brick*	Aluminium	*Aluminium*		
				Concrete	*Concrete*		
				Masonry	*Masonry*		
				Stainless Steel	*Stainless Steel*		
				Steel Galvanised	*Steel Galvanised*		
				Steel Powder Coated	*Steel Powder Coated*		
				Timber	*Timber*		
				Combination	*Combination*		
		Geometry	*The geometry representing this feature in coordinate space.*		geometry_area_singlepatch_complex		
BoatingFacilitiy	***Represents a boating facility feature, such as a pontoon, ramp or jetty.***	Type	*The type of Boating Facility eg: Jetty, Pier*	Jetty	*Jetty*		
				Pier	*Pier*		
				Ramp	*Ramp*		
				Slipway	*Slipway*		
		Material	*The material type of Boating Facility eg: Timber, Aluminium*	Aluminium	*Aluminium*		
				Concrete	*Concrete*		
				Stainless Steel	*Stainless Steel*		
				Steel Galvanised	*Steel Galvanised*		
				Steel Powder Coated	*Steel Powder Coated*		
				Timber	*Timber*		
				Combination	*Combination*		
		Geometry	*The geometry representing this feature in coordinate space.*		geometry_area_singlepatch_complex		
ElectricalFitting	***Represents an electrical fitting point feature, including lighting, whether freestanding or fixed to an existing structure.***	Type	*The type of Electrical Component eg: Light, Switch Board, Power Outlet*	Light	*Light*		
				Pit	*Pit*		
				Pole	*Pole*		
				Power Outlet	*Power Outlet*		
				Switch Board/Meter Box	*Switch Board/Meter Box*		
		Base	*The type of base (eg: Fixed or Slip)*	Fixed	*Fixed*		
				Slip	*Slip*		
		Material	*The material type of the component eg: Aluminium, Steel*	Aluminium	*Aluminium*		
				Concrete	*Concrete*		
				Plastic	*Plastic*		
				Stainless Steel	*Stainless Steel*		
				Galvanised Steel	*Galvanised Steel*		
				Powder Coated Steel	*Powder Coated Steel*		
				Stone	*Stone*		
				Wood	*Wood*		
		EnergySource	*The type of Power Source eg; Mains, Solar*	Main	*Main*		
				Solar	*Solar*		
		Manufacturer	*The Manufacturer of the unit*		String_64		
		ModelNumber	*The standard code, model number or part number for the unit*		String_64		
		Geometry	*The geometry representing this feature in coordinate space.*		geometry_point_singlepoint		
ElectricalConduit	***Represents a continuous linear course of electrical conduit.***	Type	*The conduit type eg: Medium Duty, Heavy Duty*	Medium Duty	*Medium Duty*		
				Heavy Duty	*Heavy Duty*		
		Material	*The conduit material type*	PVC	*PolyVinylChloride*		
		Diameter_mm	*The conduit diameter*		positiveInteger		
		Length_m	*The lineal length of the barrier in metres*		Float_Positive_NonZero		
		Protection	*The type of conduit protection used eg: Concrete encased, rubber mat, tape only*	Concrete Encased	*Concrete encased*		
				Rubber Mat	*Rubber Mat*		
				Tape Wrapped	*Tape Wrapped*		
		Geometry	*The geometry representing this feature in coordinate space.*		geometry_linear_multipath_complex		
LandscapeArea	***Represents a landscape area feature, such as a garden,***	Type	*The type of Garden/L'scape Area eg: Garden, Grass, Rem*	Garden	*Garden*		

ASSET TYPE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
	shaped lawn, or landscape feature area.		*Vegetation*	Grass Gravel Earth Remnant Vegetation Revegetation Synthetic Grass	*Grass* *Gravel* *Earth* *Remnant Vegetation* *Revegetation* *Synthetic Grass*		
		RootBarrier	*Does Root Barrier exist - Yes or No*		boolean		
		Irrigated	*Is Landscaped Area irrigated?*		boolean		
		Geometry	*The geometry representing this feature in coordinate space.*		geometry_area_multipatch_complex		
Tree	***Represents a tree feature. Trees may qualify as assets when planted as street trees, or when significant specimens are retained or planted as part of an open space development.***	Species	*The Tree Species*		String_32		
		Genus	*The Tree Genus*		String_32		
		RootBarrier	*Does Root Barrier exist - Yes or No*		boolean		
		Grate	*Does Tree Grate exist - Yes or No*		boolean		
		Geometry	*The geometry representing this feature in coordinate space.*		geometry_point_singlepoint		
Sign	***Represents a sign. May also be used for transport signs***	Type	*The type of Sign eg: Regulatory, Naming, Information* *The purpose of a sign. Applied to individual sign blades as blades may have different purposes in a compound sign.*	Traffic Control Regulatory Information Direction Warning Naming	*Traffic control signs such as speed, parking, hazard, street name and guide signs. Signs with standard meanings or mandated specifications as defined in a Manual of Standard Traffic Control Devices relevant to a state or country should be given this value. Where this value is used, then the sign feature should also be attributed with the applicable standard identifying code in the ModelNumber property.* *Regulating non-traffic control matters such as council regulations, prohibited behaviours etc.* *Providing non-traffic control information of a historical, environmental or other topical nature.* *Providing non-traffic control directions, distances or maps to places of interest* *Providing non-traffic control warning of general hazards* *Non-traffic control sign identifying a locality, park, facility or place of interest*		
		Material	*The material type of sign eg: Timber, Steel/Aluminium, Carved stone*	Stainless Steel Aluminium Timber Masonry Steel Galvanised Plastic Steel Powder Coated Glass	*Stainless Steel* *Aluminium* *Timber* *Masonry* *Steel Galvanised* *Plastic* *Steel Powder Coated* *Glass*		
		Manufacturer	*The Manufacturer of the unit*		String_64		
		ModelNumber	*The standard code, model number or part number for the unit*		String_64		
		Structure	*The type of structure this sign blade is fixed to.*	Post Gantry Free Standing Monopole Overpass	*Fixed to an existing post or pole* *Fixed to a gantry* *Free standing, having its own poles or supports* *Fixed to a monopole* *Fixed to an overpass or bridge*		
		SignText	*Sign Text*		string		
		Rotation	*Rotation angle (cartesian - anti-clockwise 0 degrees = East)* *May be used to denote direction of facing.*		Float_Direction		
		Geometry	*The geometry representing this feature in coordinate space.*		geometry_point_singlepoint		

ASSET GROUP	Water Supply	DESCRIPTION	Data structure constraining information for Water Supply features.

ASSET TYPE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
WaterServices	***Represents the feature class of domestic sized water services***	WaterService	*Represents a domestic water service feature.*	Diameter_mm	*Nominal diameter of the pipe in millimetres.*	Minimum (Inclusive) Value: 20 Maximum (Inclusive) Value: 63	 *Minimum service diameter is 20mm* *Maximum service diameter to use this feature class is 63mm*
				Material	*The service pipe material.*	DI Copper PE M_1 Other Unknown	*Ductile Iron* *Copper* *Polyethylene* *A new material not in the schema as agreed with the receiving entity* *Material not currently in the schema* *Material Unknown at time of data submission*
				Class	*The service pipe class as specified by the manufacture and relevant to the material.*	PN6 PN6.3 PN8 PN9 PN10 PN12 PN12.5 PN16 PN18 PN20 PN35 Type A Other Unknown	*Class PN6 for poly services* *Class PN6.3 for poly services* *Class PN8 for poly services* *Class PN9 for poly services* *Class PN10 for poly services* *Class PN12 for poly services* *Class PN12.5 for poly services* *Class PN16 - default for PE-100, PVC-O and PVC-M* *Class PN18 for poly services* *Class PN20 for poly services* *Class PN35 (Standard for DI)* *Type A for copper services* *Some other service pipe class not included in the schema* *Service class unknown at time of data submission*
				Protection	*Provision of conduit or other protection*	Conduit No Conduit Other Unknown	*The water service is laid in a protective conduit* *The water service is not in a protective conduit* *Some other type of protection* *Service protection type unknown at time of data submission*
				Termination	*Fitting or valve at the customer end of the service*	Ball Valve No Valve Other Unknown	*Service ends in a Ball Valve* *Service ends in an open pipe or blank end* *Service ends in some other way* *Service termination unknown at time of data submission*
				WaterQuality	*Type of water supplied through water service:Drinking water, recycled water or disused service*	Drinking Water Recycled Aplus Recycled A Other Disused Unknown	*Service supplying drinking quality water to a premises* *Service providing class A+ or better recycled water to a premises served by dual reticulation for toilet flushing, laundry and external use* *Service providing class A recycled water to a premises via dual reticulation for outdoor uses only* *Another use not specified in the schema* *A disused water service* *Water service providing a type of water unknown at time of data submission*
				Length_m	*Material length of the pipe in metres.*		Float_Positive_NonZero
				Geometry	*Point geometry representing the feature in coordinate space.*		geometry_point_singlepoint
Pipes	***Represents the feature class of water supply pipes***	Pipe	*Represents a water supply pipe feature.*	Use	*The purpose of this feature in the network.*	Commercial Service Conduit Disused Fire Service Fire Domestic Fire Sprinkler Fire Service Thru Meter Intake Internal Irrigation Reticulation Scour Service Trunk Waste Other	*Commercial Service pipes.* *Pipe protecting a water pipe running inside it. Not hydraulically connected to the network* *Disused Main* *Fire Service - usually used for private customer-owned infrastructure not owned by the water service provider* *Domestic Fire Service - usually used for private customer-owned infrastructure not owned by the water service provider* *Dedicated un-metered fire sprinkler service - usually used for private customer-owned infrastructure not owned by the water service provider* *Metered Fire Service - usually used for private customer-owned infrastructure not owned by the water service provider* *Intake pipe feeding a water treatment plant or irrigation system (usualy with non potable water)* *Customer owned pipe on customer side of the meter distributing water from mains to internal fixtures* *Irrigation Pipe - usually used for private customer-owned infrastructure not owned by the water service provider* *Normal mains water distribution Pipe* *Scour main from reticulation to an outlet* *Used for service connections > DN63 from main to meter . Domestic Services use water service feature class* *Trunk Water Main being a reticulation main above a size as defined by the receiving entity* *Waste Pipe from a reservoir or tank* *Another use not specified in the schema*
				WaterQuality	*The quality of the water being carried by the pipe.*	Drinking Water Recycled Aplus Recycled A Treated Effluent Rain Water Raw Water Ground Water Process Water Other Unknown	*Drinking-quality (potable) water for normal mains supply by the municipal water service provider* *Class A+ tertiary treated with reverse osmosis recycled water for supply via dual reticulation for permitted interior and exterior uses* *Class A tertiary treated recycled water for supply via dual reticulation for permitted exterior uses* *Treated Effluent to class B through class D for irrigation only* *Rain Water collected directly into the system for irrigation* *Untreated water from a watercourse or pond used to feed a water treatment plant or irrigation system* *Untreated water from bores used to feed a water treatment plant or irrigation system* *Non-potable process water of some description* *Pipe conveying some other kind of water (not recycled class B and below which is considered as treated sewage effluent)* *Type of water carried by this pipe is unknown at time of submission*
				Alignment_m	*Offset from casdastral boundary to the main.*		Float_Positive_NonZero
				Diameter_mm	*Nominal diameter of the pipe in millimetres.*		positiveInteger
				Material	*The pipe material.*	DI PVC-U PVC-M PVC-O ABS Copper GRP	*Ductile Iron* *PolyVinylChloride Unplasticised* *PolyVinylChloride Modified* *PolyVinylChloride Orientated* *Acrylonitrile Butadiene Styrene* *Copper* *Glass Reinforced Plastic (includes the product known commercially as Hobas)*

ASSET TYPE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
						MS	*Mild Steel*
						SS	*Stainless Steel*
						PE-100	*Polyethylene 100*
						PE-80B	*Polyethylene 80B*
						RCP	*Reinforced Concrete Pipe*
						AC	*Asbestos Cement (Existing Infrastructure Only)*
						M_1	*A new material not in the schema as agreed with the receiving entity*
						M_2	*A new material not in the schema as agreed with the receiving entity*
						Other	*Material not currently in the schema*
						Unknown	*Material Unknown at time of data submission*
				Class	*The pipe class as specified by the manufacture. Pipe class refers to the wall thickness and performance of the material.*	SN5000	*Class SN5000*
						SN8000	*Class SN8000*
						SN10000	*Class SN10000*
						PN6	*Class PN6*
						PN6.3	*Class PN6.3*
						PN8	*Class PN8*
						PN9	*Class PN9*
						PN10	*Class PN10*
						PN12	*Class PN12*
						PN12.5	*Class PN12.5*
						PN16	*Class PN16 - default for PE-100, PVC-O and PVC-M*
						PN18	*Class PN18*
						PN20	*Class PN20*
						PN35	*Class PN35 (Standard for DI)*
						FLCL	*Class FLCL (ductile iron flanged class)*
						Type A	*Type A*
						Type B	*Type B*
						4.8mm	*4.8mm wall thickness class (Mild Steel)*
						5mm	*5mm wall thickness class (Mild Steel)*
						6mm	*6mm wall thickness class (Mild Steel)*
						7mm	*7mm wall thickness class (Mild Steel)*
						8mm	*8mm wall thickness class (Mild Steel)*
						9mm	*9mm wall thickness class (Mild Steel)*
						10mm	*10mm wall thickness class (Mild Steel)*
						11mm	*11mm wall thickness class (Mild Steel)*
						12mm	*12mm wall thickness class (Mild Steel)*
						16mm	*16mm wall thickness class (Mild Steel)*
						Other	*Another class not specified by the schema)*
						Unknown	*Pipe class unknown at time of data submission*
				Lining	*The internal corrosion protection method employed on the pipe material.*	CL	*Cement Lined normal (default for Ductile Iron and Mild Steel)*
						CL_SR	*Cement Lined - Sulphate Resistant (DI and MS)*
						CL_AC	*Cement Lined - Calcium Aluminate (DI and MS)*
						PVC	*Plasticised PVC (includes Humes Plastiline)*
						FBE	*Fusion Bonded Epoxy*
						Unlined	*Unlined*
						Unknown	*Lining type unknown at time of data submission*
						Other	*Another type of liner that is not currently in the Schema*
				Protection	*The external corrosion protection method employed on the pipe material.*	FBE	*Fusion Bonded Epoxy*
						FBPE	*Fusion Bonded Polyethelene (Includes the product known commercially as Sintakote)*
						Plastic Wrapped	*Plastic Wrapped*
						Concrete Encased	*Concrete Encased*
						Tape Wrapped	*Wrapped in pipe and flange protection anti-corrosion tape. Commonly a synthetic fabric tape coated with a neutral petrolium compound.*
						Uncoated	*Uncoated*
						Epoxy	*Epoxy paint or coating*
						P_1	*A new protection type not yet in the schema as agreed with the data receiving entity*
						P_2	*A new protection type not yet in the schema as agreed with the data receiving entity*
						Zinc	*Galvanized or zinc painted*
						Zinc-Aluminium Alloy	*Zinc Aluminium alloy coating (Petair Saint-Gobain)*
						Unknown	*Protection type unknown at time of data submission*
						Other	*Another type of protection not covered by the schema*
				JointType	*Pipe jointing method employed.*	RRJ	*Rubber Ring*
						RRRJ	*Rubber Ring Restrained Joint (Ductile Iron)*
						SWJ	*Solvent Welded Joint (PVC)*
						WJ	*Welded Joint (Mild Steel pipe)*
						FJ	*Flanged Joint*
						MCJ	*Mechanical Compression Joint (PE pipe and Copper)*
						BW	*Butt Weld (PE pipe)*
						EFW	*Electrofusion Weld (PE pipe)*
						JT_1	*A new joint type not yet included in the Schema used by agreement with the receiving entity.*
						Unknown	*Joint type unknown at time of data submission*
						Other	*A joint type not already included in the above choices*
				Depth_m	*The average depth in metres that the pipe is buried. This measure is useful in most residential developments, but will be less reliable in sharply changing terrain or where significant cuts and fills have been applied. Negative depths may be used to indicate exposed or suspended pipes above the surface.*		Float
				Embedment	*Embedment types.*	Natural	*Pipe laid directly on natural in-situ material*
						GBH	*Granular bed and haunch*
						GBS	*Granular bed and surround*
						GBSonConc	*Granular bed and surround on concrete support*
						GBSonGTP	*Granular bed and surround on geo-textile pillow*
						GBSonCSS	*Granular bed and surround on cement stabilised support*
						GBSonPiles	*Granular bed and surround on piles*
						CemStabBS	*Cement stabilised bed and surround*
						ConcBS	*Concrete bed and surround*
						ConcBSonPiles	*Concrete bed and surround on piles*
						Enveloped	*Within an enveloper pipe*
						Above Ground	*Pipe is above ground on piers or a bridge deck*
						None	*Thrust bored or Trenchless method*

ASSET TYPE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
						Unknown	*Embedment Type unknown at time of data submission*
						Other	*Another type of embedment type that is not already includesd in the standard types*
						EB_1	*A non-standard or new type of embedment as agreed with the data receiving entity*
						EB_2	*A non-standard or new type of embedment as agreed with the data receiving entity*
				Length_m	*Material length of the pipe in metres.*		Float_Positive_NonZero
				Geometry	*Polyline representing the geometry of the feature in coordinate space.*		geometry_linear_singlepath_simple
Valves	***Represents the feature class of water supply valves***	Valve	*Represents a water supply valve feature.*	Use	*The purpose of the valve in the network.*	Non-Return	*A valve allowing flow in only one direction of types Generic, Rubber Gate, Swing Check Wafer of RPZ*
						Stop	*A valve to prevent flow down a pipe.*
						Scour	*A valve that is opened to scour a water main*
						Diversion	*A valve the main function of which is to select an alternative flow path*
						Zone Boundary	*A Valve normally closed to separate water supply zones*
						Flow Control	*A valve used to control or stop the rate of flow*
						Pressure Control	*A valve designed to control the pressure in a water supply system of types Overflow, Pressure Relief, Altitude Valve, or Vacuum Release*
						Gas Release	*A valve used to purge air or gas from the high points of a water pipeline*
						Other	*A valve use for a use not provided for in the schema*
						Service	*A valve controlling flow between a water main and a water service*
				Type	*The type of valve.*	Generic NR	*A generic type of non return valve*
						Rubber Gate	*A rubber gate type non-return valve eg Val-Matic Swing-Flex*
						Swing Check	*A swing check type non-retun valve*
						Wafer	*A wafer type non-return valve*
						RPZ	*An Reduced Pressure Zone type non return valve*
						Gate	*A standard gate valve*
						Butterfly	*Butterfly Valve.*
						Knife Gate	*Knife Gate Valve.*
						Eccentric Plug	*An eccentric plug type control Valve*
						Globe	*Globe Valve*
						Ball Valve	*A ball valve for flow control*
						Vee Ported Ball	*A vee-ported ball valve*
						Control	*A generic or unknown type of control valve*
						Overflow	*An overflow valve*
						Pressure Relief	*An pressure releasing valve*
						Pressure Sustaining	*A pressure sustaining valve*
						Altitude Valve	*Altitude Valve.*
						Vacuum Release	*Vacuum Release or surge control valve*
						Air Valve	*Air valve for gas or air release*
						Special	*A special type of valve not specified elsewhere in the schema*
				Diameter_mm	*The nominal bore diameter of the valve.*		positiveInteger
				Manufacturer	*The Manufacturer of the unit*		String_64
				ModelNumber	*The standard code, model number or part number for the unit*		String_64
				Rotation	*Rotation angle (cartesian - anti-clockwise 0 degrees = East)*		Float_Direction
				WaterQuality	*The quality of the water in the network the valve is part of.*	Drinking Water	*Drinking-quality (potable) water for normal mains supply by the municipal water service provider*
						Recycled Aplus	*Class A+ tertiary treated with reverse osmosis recycled water for supply via dual reticulation for permitted interior and exterior uses*
						Recycled A	*Class A tertiary treated recycled water for supply via dual reticulation for permitted exterior uses*
						Treated Effluent	*Treated Effluent to class B through class D for irrigation only*
						Rain Water	*Rain Water collected directly into the system for irrigation*
						Raw Water	*Untreated water from a watercourse or pond used to feed a water treatment plant or irrigation system*
						Ground Water	*Untreated water from bores used to feed a water treatment plant or irrigation system*
						Process Water	*Non-potable process water of some description*
						Other	*Pipe conveying some other kind of water (not recycled class B and below which is considered as treated sewage effluent)*
						Unknown	*Type of water carried by this pipe is unknown at time of submission*
				Geometry	*Point geometry representing the feature in coordinate space.*		geometry_point_singlepoint
Hydrants	***Represents the feature class of water supply hydrants***	Hydrant	*Represents a water supply hydrant feature.*	Use	*The purpose of the hydrant in the network.*	Spring	*Spring Hydrant.*
						Filling Point	*Hydrant (usually of spring type) with a metered standpipe semi-permanently in place.*
						Pillar	*Pillar Hydrant.*
				Diameter_mm	*The nominal bore size of the hydrant.*		positiveInteger
				Rotation	*Rotation angle (cartesian - anti-clockwise 0 degrees = East)*		Float_Direction
				WaterQuality	*The quality of the water being delivered through the hydrant.*	Drinking Water	*Drinking-quality (potable) water for normal mains supply by the municipal water service provider*
						Recycled Aplus	*Class A+ tertiary treated with reverse osmosis recycled water for supply via dual reticulation for permitted interior and exterior uses*
						Recycled A	*Class A tertiary treated recycled water for supply via dual reticulation for permitted exterior uses*
						Treated Effluent	*Treated Effluent to class B through class D for irrigation only*
						Rain Water	*Rain Water collected directly into the system for irrigation*
						Raw Water	*Untreated water from a watercourse or pond used to feed a water treatment plant or irrigation system*
						Ground Water	*Untreated water from bores used to feed a water treatment plant or irrigation system*
						Process Water	*Non-potable process water of some description*
						Other	*Pipe conveying some other kind of water (not recycled class B and below which is considered as treated sewage effluent)*
						Unknown	*Type of water carried by this pipe is unknown at time of submission*
				Geometry	*Point geometry representing the feature in coordinate space.*		geometry_point_singlepoint
Meters	***Represents the feature class of water supply meters***	Meter	*Represents a water supply meter feature.*	Serial Number	*The manufacturers serial number, as stamped or fixed on the meter.*		String_64
				Type	*Configuration of the meter.*	Irrigation	*Small in-line meter used in irrigation systems to give a general indication of flow volumes but not at the accuracy needed for billing or control*
						Conventional	*Standard volumetric meter*
						Manifold	*Meter with built-in valve*
						Magflow	*Electro-magnetic Metering System with no moving parys*
						Turbine	*Meter using a turbine or moving vain to measure flow*
						Other	*Another unspecified type of water meter*
						Unknown	*Meter type unknown at time of data submission*
				Diameter_mm	*The nominal bore diameter of the meter.*		positiveInteger
				Dials	*The number of dials on the reading face.*		positiveInteger

ASSET TYPE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
				Manufacturer	*The Manufacturer of the unit*		String_64
				ModelNumber	*The standard code, model number or part number for the unit*		String_64
				InitialReading	*The reading on the meter face at the time of installation.*		integer
				PrivateBooster	*True indicates that the meter is associated with a private pressure boosting system.*		boolean
				OffsetSide	*Is the offset from the left or the right side boundary when looking from the road.*	Left Right	*Left hand side* *Right hand side*
				Offset_m	*The distance in metres to measure along the frontage from the indicated side.*		Float_Positive_Zero
				InstallationDate	*Installation Date of the meter. ISO 8601 is the accepted format.*		date
				LotNo	*The lot number as described on the originating survey plan*		String_32
				PlanNo	*The plan number of the originating survey plan.*		String_32
				Rotation	*Rotation angle (cartesian - anti-clockwise 0 degrees = East)*		Float_Direction
				WaterQuality	*The quality of the water being metered.*	Drinking Water Recycled Aplus Recycled A Treated Effluent Rain Water Raw Water Ground Water Process Water Other Unknown	*Drinking-quality (potable) water for normal mains supply by the municipal water service provider* *Class A+ tertiary treated with reverse osmosis recycled water for supply via dual reticulation for permitted interior and exterior uses* *Class A tertiary treated recycled water for supply via dual reticulation for permitted exterior uses* *Treated Effluent to class B through class D for irrigation only* *Rain Water collected directly into the system for irrigation* *Untreated water from a watercourse or pond used to feed a water treatment plant or irrigation system* *Untreated water from bores used to feed a water treatment plant or irrigation system* *Non-potable process water of some description* *Pipe conveying some other kind of water (not recycled class B and below which is considered as treated sewage effluent)* *Type of water carried by this pipe is unknown at time of submission*
				Geometry	*Point geometry representing the feature in coordinate space.*		geometry_point_singlepoint
Fittings	***Represents the feature class of water supply fittings***	Fitting	*Represents a water supply pipe fitting, other than a valve, meter or hydrant*	Type	*The fitting type.*	Bend Connector Cross Connection Connector Thrust Dismantling Joint Gibault Taper Tee Wye Cathodic Protection Point Dead Plate External Dead End Tee Branch Dead End Tee Branch Ext Dead End Puddle Flange Ready Tap Sampling Point Booster Pump Surge Vessel Tapping Band Flush Point Saddle	*Bend, a fitting not a recurved pipe that changes the direction of a pipeline* *A straight through connector with no change of direction* *A cross connection with 4 branches* *A straight through connector with no change of direction capable of transmitting axial thrust to the pipeline or a structure* *A straight connector specifically included to facilitate the dismantling of complex flanged pipework and valves.* *Standard gibault connection* *Taper. Joining pipes of unequal diameter.* *T - Joint with 3 arms one of which is at right angles to the axis joining the other 2.* *Y - Joint with 3 arms where the angle between any 2 arms is not 90 or 180 degrees* *Electrical connection point for cathodic protection* *Blank flange on the end of a flanged pipe or fitting* *Fitting such as an endcap that forms a dead end in a pipe run* *A dead end plate pre-fitted to one branch of a Tee for access or future connection* *Dead end on a Tee fitting with a side branch of extended length* *Puddle Flange on pipe to transmit thrust or seal pipe into a structure* *Ready Tap collar with prefabricated water service take off points* *Sampling Point to sample water quality* *Booster Pump to boost pressure or provide motive force to water in the network* *Surge Vessel fitted to control surge pressures (water hammer)* *Tapping Band for the off-take of a water service from a main* *Flush Point* *Saddle*
				Material	*The fitting material.*	ABS Brass Copper DI MS PVC PE AC M_1 M_2 Other Unknown	*Acrylonitrile Butadiene Styrene* *Brass* *Copper* *Ductile Iron* *Mild Steel* *PolyVinylChloride* *Polyethylene* *Asbestos Cement - Existing Infrastructure Only* *A new material not in the schema as agreed with the receiving entity* *A new material not in the schema as agreed with the receiving entity* *Another material not in the Schema* *Material unknown at time of data submission*
				Lining	*The internal corrosion protection method employed on the fitting material.*	CL CL_SR CL_AC PVC FBE Unlined Unknown Other	*Cement Lined normal (default for Ductile Iron and Mild Steel)* *Cement Lined - Sulphate Resistant (DI and MS)* *Cement Lined - Calcium Aluminate (DI and MS)* *Plasticised PVC (includes Humes Plastiline)* *Fusion Bonded Epoxy* *Unlined* *Lining type unknown at time of data submission* *Another type of liner that is not currently in the Schema*
				Protection	*The external corrosion protection method employed on the fitting material.*	FBE FBPE Plastic Wrapped Concrete Encased Tape Wrapped Uncoated Epoxy P_1 P_2 Zinc Zinc-Aluminium Alloy Unknown Other	*Fusion Bonded Epoxy* *Fusion Bonded Polyethelene (Includes the product known commercially as Sintakote)* *Plastic Wrapped* *Concrete Encased* *Wrapped in pipe and flange protection anti-corrosion tape. Commonly a synthetic fabric tape coated with a neutral petrolium compound.* *Uncoated* *Epoxy paint or coating* *A new protection type not yet in the schema as agreed with the data receiving entity* *A new protection type not yet in the schema as agreed with the data receiving entity* *Galvanized or zinc painted* *Zinc Aluminium alloy coating (Petair Saint-Gobain)* *Protection type unknown at time of data submission* *Another type of protection not covered by the schema*
				BodySize_mm	*The nominal diameter of the largest pipe entering the fitting. Although not constrained, software may use the simpleType water_fittings_boresize for a starting list of values*		positiveInteger

ASSET TYPE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
				BranchSize_mm	*The nominal diameter of the smallest pipe entering the fitting. Although not constrained, software may use the simpleType water_fittings_boresize for a starting list of values*		positiveInteger
				Rotation	*Rotation angle (cartesian - anti-clockwise 0 degrees = East)*		Float_Direction
				WaterQuality	*The quality of the water being carried by the network to which the fitting is a part*	Drinking Water	*Drinking-quality (potable) water for normal mains supply by the municipal water service provider*
						Recycled Aplus	*Class A+ tertiary treated with reverse osmosis recycled water for supply via dual reticulation for permitted interior and exterior uses*
						Recycled A	*Class A tertiary treated recycled water for supply via dual reticulation for permitted exterior uses*
						Treated Effluent	*Treated Effluent to class B through class D for irrigation only*
						Rain Water	*Rain Water collected directly into the system for irrigation*
						Raw Water	*Untreated water from a watercourse or pond used to feed a water treatment plant or irrigation system*
						Ground Water	*Untreated water from bores used to feed a water treatment plant or irrigation system*
						Process Water	*Non-potable process water of some description*
						Other	*Pipe conveying some other kind of water (not recycled class B and below which is considered as treated sewage effluent)*
						Unknown	*Type of water carried by this pipe is unknown at time of submission*
				Geometry	*Point geometry representing the feature in coordinate space.*		geometry_point_singlepoint
MaintenanceHoles	***Represents the feature class of water supply maintenance access holes***	MaintenanceHole	*Represents a water supply maintenance access hole feature.*	Use	*Purpose of Water maintenance hole.*	Valve Pit	*Valve Pit*
						Disused	*Valve Pit that is no longer used*
						Complex	*Valve Pit that houses a combination of valves and other equipment*
						Pressure Regulation	*Pit housing a pressure regulation or surge control device*
						Pump Station	*Water pumping station*
						Temporary Works	*Pit used during construction that is no longer used but has been left in place*
						Other	*Valve Pit with some other use not provided for in the schema*
						Unknown	*Valve Pit of a type that is unknown at time of data submission*
				ChamberSize	*Data structure describing the chamber configuration and dimensions.*	Rectangular	*Data container for rectangular dimensions.*
						Circular	*Data container for circular dimensions.*
				SurfaceLevel_m	*The height of the top surface of the lid, hatch, rim or roof. Surface level in metres against the vertical datum for this project.*		Float
				InvertLevel_m	*The height of the top surface of interior floor/bottom. Invert level in metres against the vertical datum for this project.*		Float
				FloorConstruction	*Method of chamber construction.*	Prefabricated	*Prefabricated*
						Insitu	*Built or poured in-situ*
				FloorMaterial	*Material type for chamber floor construction.*	PVC	PolyVinylChloride
						PE	Polyethylene
						PP	Polypropylene
						GRP	Glass Reinforced Plastic
						Concrete	Concrete
						M_1	*A new material not in the schema as agreed with the receiving entity*
						M_2	*A new material not in the schema as agreed with the receiving entity*
						Other	*Another material not included in the Schema*
						Unknown	*Material unknown at time of data submission*
				WallConstruction	*Method of chamber wall construction.*	Prefabricated	*Prefabricated*
						Insitu	*Built or poured in-situ*
				WallMaterial	*Material type for chamber wall construction.*	PVC	PolyVinylChloride
						PE	Polyethylene
						PP	Polypropylene
						GRP	Glass Reinforced Plastic
						Concrete	Concrete
						M_1	*A new material not in the schema as agreed with the receiving entity*
						M_2	*A new material not in the schema as agreed with the receiving entity*
						Other	*Another material not included in the Schema*
						Unknown	*Material unknown at time of data submission*
				RoofMaterial	*Material type for chamber roof construction.*	PVC	PolyVinylChloride
						PE	Polyethylene
						PP	Polypropylene
						Concrete	Concrete
						MS	Mild Steel
						SS	Stainless Steel
						Aluminium	Aluminium
						Cast Iron Frame	Cast Iron Frame
						Grid Mesh - GRP	Grid Mesh - GRP
						Grid Mesh - Aluminum	Grid Mesh - Aluminium
						Grid Mesh - SS	*Grid Mesh - Stainless Steel*
						No Roof	No Roof
						M_1	*A new roof material not in the schema as agreed with the receiving entity*
						M_2	*A new roof material not in the schema as agreed with the receiving entity*
						Other	*Another roof material not included in the Schema*
						Unknown	*Roof material unknown at time of data submission*
				LidMaterial	*Chamber lid configuration and material.*	Aluminium	Aluminium
						Cast Iron	Cast Iron
						Cl Conc Infill	Cast Iron Concrete Infill
						Concrete	Concrete
						GRP	*Glass Reinforced plastic*
						PVC	PolyVinylChloride
						PE	Polyethylene
						PP	Polypropylene
						MS	Mild Steel
						SS	Stainless Steel
						M_1	*A new lid material not in the schema as agreed with the receiving entity*
						M_2	*A new lid material not in the schema as agreed with the receiving entity*
						No Lid	*Valve pit is open topped and has no lid*
						Other	*Another lid material not included in the Schema*
						Unknown	*Lid material unknown at time of data submission*
				Rotation	*Rotation angle (cartesian - anti-clockwise 0 degrees = East)*		Float_Direction
				Geometry	*Point geometry representing the feature in coordinate space.*		geometry_point_singlepoint
ServiceFittings	***Represents the feature class of water service fittings***	ServiceFitting	*Represents a water service fitting feature.*	Type	*The type of service fitting*	Control Panel	*Irrigation control panel which may or may not be hydraulically connected*

ASSET TYPE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
						Dog Bowl	*Fixed animal drinking bowl attached to customer owned water connection*
						Drinking Fountain	*Drinking Fountain or bubbler to provide drinking water to patrons*
						Drip Line	*Fixed perforated pipe for drip irrigation*
						Fountain Decorative	*A decorative fountain*
						Filling Station	*Card-accessed water delivery point for commercial access*
						Filter	*In line filter to prevent irrigation line blockages*
						Goose Neck	*Downward pointing outlet on a vertical riser*
						Hot Water System	*Hot Water System. Normally attached to a structure.*
						Nipple	*Simple riser or short length of small bore pipe providing a point of discharge*
						Other	*Some other irrigation fitting - do not use for pipe fittings, valves pumps etc as these exist in other feature classes*
						Pop Up Sprinkler	*Pop-up type sprinkler head*
						Shower	*Open air public shower point, such as may be found at beachside parks*
						Spray Nozzle	*Fixed Irrigation sprayer, sprinkler, bubbler or drip nozzle*
						Tap	*Water delivery tap. Not a stopcock or control valve*
				BelowGround	*Is the fitting below ground*		boolean
				WaterSaver	*Does the fitting employ waste minimisation technology (other than auto shut-off)*		boolean
				AutoShutOff	*Does the fitting employ auto shut-off technology*		boolean
				Rotation	*Rotation angle (cartesian - anti-clockwise 0 degrees = East)*		Float_Direction
				WaterQuality	*The quality/source of the water being supplied through the service fitting.*	Drinking Water	*Drinking-quality (potable) water for normal mains supply by the municipal water service provider*
						Recycled Aplus	*Class A+ tertiary treated with reverse osmosis recycled water for supply via dual reticulation for permitted interior and exterior uses*
						Recycled A	*Class A tertiary treated recycled water for supply via dual reticulation for permitted exterior uses*
						Treated Effluent	*Treated Effluent to class B through class D for irrigation only*
						Rain Water	*Rain Water collected directly into the system for irrigation*
						Raw Water	*Untreated water from a watercourse or pond used to feed a water treatment plant or irrigation system*
						Ground Water	*Untreated water from bores used to feed a water treatment plant or irrigation system*
						Process Water	*Non-potable process water of some description*
						Other	*Pipe conveying some other kind of water (not recycled class B and below which is considered as treated sewage effluent)*
						Unknown	*Type of water carried by this pipe is unknown at time of submission*
				Geometry	*Point geometry representing the feature in coordinate space.*		geometry_point_singlepoint
StorageTanks	***Represents the feature class of water storage points***	StorageTank	*Represents a domestic storage tank feature. Includes roofwater storage not fed from mains service. Not to be used for bulk storage features that are part of the mains distribution network.*	Material	*The material that the storage tank is made from.*	Plastic	*Plastic*
						Steel	*Steel*
						Concrete	*Concrete*
						Other	*Tank made from another material not in the schema*
						Unknown	*Tank material is unknown*
				Source	*The source of water in the tank.*	Rain Water	*Roof water catchment*
						Ground Water	*Ground water extracted from a bore*
						Ponded Water	*Ponded water pumped from a surface water catchment*
						Mains Service	*Drawn from a mains water supply service*
				Manufacturer	*The Manufacturer of the unit*		String_64
				ModelNumber	*The standard code, model number or part number for the unit*		String_64
				Volume_m3	*The effective volume in cubic metres.*		Float_Positive_NonZero
				Rotation	*Rotation angle (cartesian - anti-clockwise 0 degrees = East)*		Float_Direction
				Geometry	*Point geometry representing the feature in coordinate space.*		geometry_point_singlepoint

ASSET GROUP	Sewerage	DESCRIPTION	Data structure constraining information for Sewerage features.

ASSET TYPE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
MaintenanceHoles	***Element representing the feature class of Sewerage Maintenance Holes (formerly Manholes)***	MaintenanceHole	*Element representing a sewerage Maintenance Hole (formerly Manhole).*	Use	*Use or purpose of this MaintenanceHole in the network*	Overflow	*Maintenance Hole with an overflow to the environment, receiving waters or an emergency storage*
						Blank End	*Maintenance hole with no incoming connection*
						Pump Station	*Pit housing a sewer pump station*
						Valve Pit	*Access Pit for a Sewer Valve*
						Grit Collector MH	*Grit Collector Maintenance Hole*
						Outlet	*Outlet*
						Rising Main Discharge MH	*A sewer MH that is the recieiving MH for a rising main discharge*
						Vacuum Sewerage Pump Station	*A pit housing a Vacuum Sewerage Pump Station*
						Vacuum Sewerage MH	*A Maintenance Hole on a vacuum system with incoming house connections or gravity sewers that may also containing a vacuum valve*
						Vacuum Lift	*A chamber on a vacuum system containing a lift or vacuum valve but no incoming laterals*
						Storage Tank	*An off-stream sewage storage tank for emergency or other use*
						Maintenance Hole	*A standard Sewerage Maintenance Hole also known as a Manhole*
						Maintenance Shaft	*A proprietary Maintenance Hole usually prefabricated and of smaller diameter than a standard MH*
						Temporary Works	*A shaft used during construction that is left in place but does not form part of the final infrastruture*
						TEP	*Terminal Entry Point type shaft*
						Unknown	*Chamber of unknown use at time of data submission*
						Other	*Type of maintenance structure other than those used as standard in the Schema*
				ChamberSize	*Data structure describing the chamber configuration and dimensions.*	Rectangular.Length_mm	*Data container for rectangular dimensions. Length in millimetres.*
						Rectangular.Width_mm	*Data container for rectangular dimensions. Width in millimetres.*
						Circular.Diameter_mm	*Data container for circular dimensions. Diameter in millimetres.*
						Custom.Area_sqm	*Custom Shaped chamber. Such a feature should be associated with a plan or document describing its layout and dimensions. Area in square metres.*
				SurfaceLevel_m	*The height of the top surface of the lid, hatch, rim or roof. Surface level in metres against the vertical datum for this project.*		float
				InvertLevel_m	*The height of the top surface of interior floor/bottom. Invert level in metres against the vertical datum for this project.*		float
				FloorConstruction	*Method of chamber floor construction.*	Prefabricated	*Prefabricated*
						Insitu	*Built or poured in-situ*
				FloorMaterial	*Material type for chamber construction*	Concrete	*Concrete*
						FRP	*Fibre Reinforced Concrete*
						GRP	*Glass Reinforced Plastic*
						PE	*Polyethylene*
						PP	*Polypropylene*
						PVC	*Poly Vinyl Chloride*
						M_1	*A new material not yet in the Schema as agreed with the receiving entity*
						M_2	*A new material not yet in the Schema as agreed with the receiving entity*
						Unknown	*Material is unknown at time of data submission*
						Other	*Another material not included in the Schema*
				WallConstruction	*Method of chamber wall construction.*	Prefabricated	*Prefabricated*
						Insitu	*Built or poured in-situ*
				WallMaterial	*Material type for chamber wall construction*	Concrete	*Concrete*
						FRP	*Fibre Reinforced Concrete*
						GRP	*Glass Reinforced Plastic*
						PE	*Polyethylene*
						PP	*Polypropylene*
						PVC	*Poly Vinyl Chloride*
						M_1	*A new material not yet in the Schema as agreed with the receiving entity*
						M_2	*A new material not yet in the Schema as agreed with the receiving entity*
						Unknown	*Material is unknown at time of data submission*
						Other	*Another material not included in the Schema*
				RoofMaterial	*Material type for chamber roof construction*	PVC	*Poly Vinyl Chloride*
						PE	*Polyethylene*
						PP	*Polypropylene*
						Concrete	*Concrete*
						FRP	*Fibre Reinforced Concrete*
						MS	*Mild Steel*
						SS	*Stainless Steel*
						Aluminium	*Aluminium*
						Cast Iron	*Cast Iron*
						Grid Mesh - GRP	*Grid Mesh - GRP*
						Grid Mesh - Aluminium	*Grid Mesh - Aluminium*
						No Roof	*No Roof*
						Grid Mesh - SS	*Grid Mesh - Stainless Steel*
						M_1	*A new material not yet in the Schema as agreed with the receiving entity*
						M_2	*A new material not yet in the Schema as agreed with the receiving entity*
						Unknown	*Material is unknown at time of data submission*
						Other	*Another material not included in the Schema*
				Lining	*Material type of chamber lining*	PVC	*Poly Vinyl Chloride*
						Epoxy	*Epoxy*
						Polyurea	*Polyurea*
						PE	*Polyethylene*

ASSET TYPE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
						M_1	*A new lining material not yet in the Schema as agreed with the receiving entity*
						M_2	*A new lining material not yet in the Schema as agreed with the receiving entity*
						Unknown	*Material is unknown at time of data submission*
						Unlined	*An alternative to entering a null value where there is no lining*
						Other	*Another lining material not included in the Schema*
				LidMaterial	*Chamber lid configuration and material*	Cast Iron	*Cast Iron* *Default Value*
						Aluminium	*Aluminium*
						CI Concrete Infill	*Cast Iron with Concrete Infill*
						Composite	*Composite*
						Concrete	*Concrete*
						DI	*Ductile Iron*
						PVC	*Poly Vinyl Chloride*
						PE	*Polyethylene*
						PP	*Polypropylene*
						MS	*Mild Steel*
						SS	*Stainless Steel*
						No Lid	*This structure has no lid (possibly because it has no roof)*
						M_1	*A new lid material not yet in the Schema as agreed with the receiving entity*
						M_2	*A new lid material not yet in the Schema as agreed with the receiving entity*
						Unknown	*Lid Material is unknown at time of data submission*
						Other	*Another lid material not included in the Schema*
				DropType	*Chamber drop types*	Straight Through MH	*Straight through MH with one entry, one exit, no change of direction, no backdrop but may have change of grade*
						Change In Direction Through MH	*Straight through MH with one entry, one exit, no backdrops, a change of direction and may also have change of grade*
						External Drop	*MH with one or more external backdrop vertical entries*
						Alternative External Drop	*Alternative drop type with complex access arrangement or modified benching as shown on WSAA drawing SEW-206*
						Internal Drop	*MH with one or more internal backdrop vertical entries*
						Oblique 45deg Backdrop	*MH with an oblique 45° backdrop entry*
				CatchmentPS	*The identifier of the pumpstation that this node flows to.*		String_32
				LineNumber	*The identifier of the line that this node connects to*		String_32
				MH_Number	*The identifier of this manhole or pit.*		String_32
				Chainage_m	*The distance upstream from end of line.*		Float_Positive_NonZero
				TieDistance_m	*The tie distance in metres to a cadastral corner*		Float_Positive_NonZero
				OffsetDistance_m	*The offset distance in metres from a cadastral boundary*		Float_Positive_NonZero
				Rotation	*Rotation angle (cartesian - anti-clockwise 0 degrees = East)*		Float_Direction
				Geometry	*The geometry representing this feature in coordinate space.*		geometry_point_singlepoint
PipesNonPressure	***Element representing the feature class of Sewerage Pipes Non-Pressure***	PipeNonPressure	*Element representing a sewer pipe non-pressurised. Includes all gravity reticulation and trunk gravity mains.*	LineNumber	*The sewer line identifier*		String_32
				Use	*The function of this pipe in the network.*	Conduit Pipe	*Conduit Pipe (enveloper), which does not connect hydraulically with the reticulation system*
						Disused	*Non-pressure (gravity) pipe that is no longer in use but still present*
						Effluent	*Pipe conveying treated effluent (usually from a treatment plant)*
						Overflow	*A pipe that directs excessive sewer flows to another system or the external environemnt*
						Reuse	*A pipe conveying low-grade (class B and below) treated effluent for reuse. Class A and A+ should use the water feature classes.*
						Stub	*A short length of pipe for a future connection pipe that is not connected at its upsteam end at time of data submission*
						Trunk	*A larger size sewer as defined by the receiving entity's standard definition*
						Vent	*A pipe to a vent pipe or deodorising apparatus, which not primarily designed to convey sewage*
						Syphon	*A gravity sewer that flows uphill over part of its length due to syphonic action*
						Vacuum	*A gravity sewer flowing into a vacuum sewerage system (vacuum system pipes are part of the pressure pipe schema).*
						Reticulation	*A standard reticulation sewer that is not a trunk sewer*
						Unknown	*Use unknown at time of submission*
						Other	*A use other than those specified above*
				Diameter_mm	*Nominal pipe diameter in millimetres.*		positiveInteger
				Material	*Pipe material*	PVC-U	*Unplasticised PolyVinylChloride*
						DI	*Ductile Iron*
						MS	*Mild Steel*
						RCP	*Steel Reinforced Concrete Pipe*
						FRC	*Fibre Reinforced Concrete*
						PRC	*Polyester Resin Concrete jacking pipe e.g. Iplex Polycrete*
						GRP	*Glass Reinforced Plastic (includes the product known commercially as Hobas)*
						ABS	*Acrylonitrile Butadiene Styrene*
						PE-100	*Medium Density Polyethylene*
						SWPP	*Structural Wall Polypropylene Pipe (includes commercial brands SewerMax and SewerPro)*
						HDPE	*High Density Polyethylene (includes the product known commercially as Haries Black Brute)*
						VC	*Vitrified Clay*
						AC	*Asbestos Cement (Only used for existing infrastructure not new works)*
						M_1	*A new material not yet in the Schema used by agreement with the recieiving entity*
						M_2	*A new material not yet in the Schema used by agreement with the recieiving entity*
						Unknown	*A pipe material that is unknown at the time of the submission*
						Other	*A pipe material other than those provided above*
				Class	*The pipe class as specified by the manufacture. Pipe class*	4	*Class 4*

ASSET TYPE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
					refers to the wall thickness and performance of the material.	6	*Class 6*
						8	*Class 8*
						9	*Class 9*
						10	*Class 10*
						12	*Class 12*
						16	*Class 16*
						18	*Class 18*
						20	*Class 20*
						SN4	*Class SN4, formerly Sewer Heavy*
						SN8	*Class SN8, formerly Sewer Extra Heavy*
						SN12	*Class SN12*
						SN5000	*SN5000*
						SN8000	*SN8000*
						SN10000	*SN10000*
						PN1	*PN1*
						PN6	*PN6*
						PN6.3	*PN6.3*
						PN8	*PN8*
						PN10	*PN10*
						PN12	*PN12*
						PN12.5	*PN12.5*
						PN16	*PN16*
						PN18	*PN18*
						PN20	*PN20*
						PN35	*PN35 (Standard for ductile iron)*
						FLCL	*Class FLCL (ductile iron flanged class)*
						X	*Class X (Reinforced Concrete)*
						Y	*Class Y(Reinforced Concrete)*
						Z	*Class Z(Reinforced Concrete)*
						SDR7.4	*SDR7.4*
						SDR9	*SDR9*
						SDR11	*SDR11*
						SDR13.5	*SDR13.5*
						SDR17	*SDR17*
						SDR21	*SDR21*
						Unknown	*Unknown at time of submission*
						Other	*A class other than provided above*
				Lining	*The internal corrosion protection method employed on the pipe material.*	CL	*Cement Lined Normal. Cetrifugally spun cement mortar (default for Ductile Iron and Mild Steel)*
						CL_SR	*Cement Lined - Sulphate Resistant (DI and MS)*
						CL_AC	*Cement Lined - Calcium Aluminate (DI and MS)*
						PVC	*Plasticised PVC (includes Humes Plastiline)*
						FBE	*Fusion Bonded Epoxy*
						Unlined	*Unlined (Default for plastic pipes)*
						L_1	*A new protection type not yet included in the Schema as agreed with the receiving entity.*
						L_2	*A new protection type not yet included in the Schema as agreed with the receiving entity.*
						Rehab_NS	*A non-structural rehabilitation liner.*
						Rehab_ST	*A structural rehabilitation liner.*
						Unknown	*The protection type is not known at the time of the data submission.*
						Other	*A protection type not included above.*
				Protection	*The external corrosion protection method employed on the pipe material.*	FBE	*Fusion Bonded Epoxy*
						FBPE	*Fusion Bonded Polyethylene (Includes the product known commercially as Sintakote)*
						Plastic Wrapped	*Plastic Wrapped*
						Tape Wrapped	*Tape Wrapped*
						Concrete Encased	*Concrete Encased*
						Sheathed	*Sheathed*
						Epoxy Paint	*Epoxy Paint*
						Uncoated	*Uncoated*
						Unknown	*Protection Type unknown at time of data submission*
						Other	*Another type of protection not covered in the schema choices above*
						P_1	*A new protection type not yet included in the Schema as agreed with the receiving entity.*
						P_2	*A new protection type not yet included in the Schema as agreed with the receiving entity.*
				JointType	*Pipe to pipe join method.*	RRJ	*Rubber Ring*
						RRRJ	*Rubber Ring Restrained Joint (Ductile Iron)*
						SWJ	*Solvent Welded Joint (PVC)*
						WJ	*Welded Joint (Mild Steel pipe)*
						FJ	*Flanged Joint*
						MCJ	*Mechanical Compression Joint (PE pipe and Copper)*
						BW	*Butt Weld (PE pipe)*
						EFW	*Electrofusion Weld (PE pipe)*
						JT_1	*A new joint type not yet included in the Schema used by agreement with the receiving entity.*
						Unknown	*Joint type unknown at time of data submission*
						Other	*A joint type not already included in the above choices*
				US_InvertLevel_m	*Invert level of this pipe end (in metres against the vertical datum).*		Float

ASSET TYPE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
				DS_InvertLevel_m	*Invert level of this pipe end (in metres against the vertical datum).*		Float
				US_SurfaceLevel_m	*Surface level (in metres against the vertical datum) vertically above this pipe end.*		Float
				DS_SurfaceLevel_m	*Surface level (in metres against the vertical datum) vertically above this pipe end.*		Float
				Alignment_m	*Average offset distance in metres from casdastral boundary to the main.*		Float_Positive_NonZero
				Depth_m	*Nominal depth in metres to the top of the pipe.*		Float
				Embedment	*Embedment type.*	Natural	*Pipe laid directly on natural in-situ material*
						GBH	*Granular bed and haunch*
						GBS	*Granular bed and surround*
						GBSonConc	*Granular bed and surround on concrete support*
						GBSonGTP	*Granular bed and surround on geo-textile pillow*
						GBSonCSS	*Granular bed and surround on cement stabilised support*
						GBSonPiles	*Granular bed and surround on piles*
						CemStabBS	*Cement stabilised bed and surround*
						ConcBS	*Concrete bed and surround*
						ConcBSonPiles	*Concrete bed and surround on piles*
						Enveloped	*Within an enveloper pipe*
						Above Ground	*Pipe is above ground on piers or a bridge deck*
						None	*Thrust bored or Trenchless method*
						Unknown	*Embedment Type unknown at time of data submission*
						Other	*Another type of embedment type that is not already includesd in the standard types*
						EB_1	*A non-standard or new type of embedment as agreed with the data receiving entity*
						EB_2	*A non-standard or new type of embedment as agreed with the data receiving entity*
				RockExcavated	*Value indicating whether rock was excavated from the pipe channel.*		boolean
				PipeGrade	*Pipe grade as a percentage. Derivable as the difference in invert levels divided by the horizontal length (not the length of pipe) multiplied by 100.*		Float_Positive_Zero
				Length_m	*Actual material length of the pipe. Not the horizontal length of the geometry.*		Float_Positive_NonZero
				Geometry	*The linear geometry of the pipe feature in coordinate space. At version 4.1.0 these features may include cruves due to modern flexible materials.*		geometry_linear_singlepath_complex
PipesPressure	***Element representing the feature class of Sewerage Pipes Pressure***	PipePressure	*Element representing a sewer pipe pressurised (rising main).*	Use	*The function of this pipe in the network.*	Disused	*Disused Pressure Pipe that remains in place*
						Effluent	*Pressure pipe conveying treated effluent (usually from a treatment plant)*
						Reuse	*Treated Wastewater Reuse Pipe for class B and below. Class A and A+ should use the water supply feature classes*
						Rising	*A standard rising main or pressure sewer*
						Scour	*A pipe maintained under pressure to scour a pressure main to a discharge point. Gravity scours should use the non-pressure pipe feature class*
						Vacuum	*A pressure pipe in a vacuum system that is subject to negative pressure*
						PressureSewerCollection	*The connection pipe from a household proprietary pressure sewer pump unit to the external pressure main*
						Unknown	*Use unknown at time of data submission*
						Other	*A use other than those provided above in the schema*
				Diameter_mm	*Nominal pipe diameter in millimetres.*		positiveInteger
				Material	*Pipe material*	ABS	*Acrylonitrile Butadiene Styrene*
						GRP	*Glass Reinforced Plastic (includes the product known commercially as Hobas)*
						DI	*Ductile Iron*
						MS	*Mild Steel*
						PE-100	*Polyethylene (100)*
						PE-80B	*Polyethylene (80B)*
						PVC-M	*Polyvinyl Chloride (Modified)*
						PVC-O	*Polyvinyl Chloride (Oriented)*
						PVC-U	*Polyvinyl Chloride (Unplasticised)*
						AC	*Asbestos Cement (not for new works - legacy pipes only)*
						FRC	*Fibre reinforced concrete*
						M_1	*New material not included in schema as agreed with data recieiving entity*
						M_2	*New material not included in schema as agreed with data recieiving entity*
						Unknown	*Material type unknown at time of data submission*
						Other	*A material not included in schema types provided above*
				Class	*The pipe class as specified by the manufacture. Pipe class refers to the wall thickness and performance of the material.*	SN5000	*Class SN5000*
						SN8000	*Class SN8000*
						SN10000	*Class SN10000*
						PN1	*Class PN1*
						PN6	*Class PN6*
						PN6.3	*Class PN6.3*
						PN8	*Class PN8*
						PN9	*Class PN9*
						PN10	*Class PN10*
						PN12	*Class PN12*
						PN12.5	*Class PN12.5*
						PN16	*Class PN16 - default for PE_100, PVC_O and PVC_M*
						PN18	*Class PN18*
						PN20	*Class PN20*
						PN35	*Class PN35 (Standard for DI)*

ASSET TYPE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
						FLCL	*Class FLCL (ductile iron flanged class)*
						X	*Class X (Reinforced Concrete)*
						Y	*Class Y(Reinforced Concrete)*
						Z	*Class Z(Reinforced Concrete)*
						4.8mm	*4.8mm wall thickness Class (Mild Steel)*
						5mm	*5mm wall thickness Class (Mild Steel)*
						6mm	*6mm wall thickness Class (Mild Steel)*
						7mm	*7mm wall thickness Class (Mild Steel)*
						8mm	*8mm wall thickness Class (Mild Steel)*
						9mm	*9mm wall thickness Class (Mild Steel)*
						10mm	*10mm wall thickness Class (Mild Steel)*
						11mm	*11mm wall thickness Class (Mild Steel)*
						12mm	*12mm wall thickness Class (Mild Steel)*
						16mm	*16mm wall thickness Class (Mild Steel)*
						Unknown	*Class unknown at time of data submission*
						Other	*A Class uther than those currently provided for in the Schema*
				Lining	*The internal corrosion protection method employed on the pipe material.*	CL	*Cement Lined Normal. Cetrifugally spun cement mortar (default for Ductile Iron and Mild Steel)*
						CL_SR	*Cement Lined - Sulphate Resistant (DI and MS)*
						CL_AC	*Cement Lined - Calcium Aluminate (DI and MS)*
						PVC	*Plasticised PVC (includes Humes Plastiline)*
						FBE	*Fusion Bonded Epoxy*
						Unlined	*Unlined*
						Unknown	*Lining type unknown at time of data submission*
						Other	*Another type of liner that is not currently in the Schema*
				Protection	*The external protection for the pipe.*	FBE	*Fusion Bonded Epoxy*
						FBPE	*Fusion Bonded Polyethylene (Includes the product known commercially as Sintakote)*
						Plastic Wrapped	*Plastic Wrapped*
						Tape Wrapped	*Tape Wrapped*
						Concrete Encased	*Concrete Encased*
						Sheathed	*Sheathed*
						Epoxy Paint	*Epoxy Paint*
						Uncoated	*Uncoated*
						P_1	*A new protection type not yet in the schema as agreed with the data receiving entity*
						P_2	*A new protection type not yet in the schema as agreed with the data receiving entity*
						Zinc	*Galvanized or zinc painted*
						Zinc-Aluminium Alloy	*Zinc Aluminium alloy coating (Petair Saint-Gobain)*
						Unknown	*Protection type unknown at time of data submission*
						Other	*Another type of protection not covered by the schema*
				JointType	*Pipe to pipe join method.*	RRJ	*Rubber Ring*
						RRRJ	*Rubber Ring Restrained Joint (Ductile Iron)*
						SWJ	*Solvent Welded Joint (PVC)*
						WJ	*Welded Joint (Mild Steel pipe)*
						FJ	*Flanged Joint*
						MCJ	*Mechanical Compression Joint (PE pipe and Copper)*
						BW	*Butt Weld (PE pipe)*
						EFW	*Electrofusion Weld (PE pipe)*
						JT_1	*A new joint type not yet included in the Schema used by agreement with the receiving entity.*
						Unknown	*Joint type unknown at time of data submission*
						Other	*A joint type not already included in the above choices*
				Alignment_m	*Average offset distance from casdastre boundary to the main.*		Float_Positive_NonZero
				Depth_m	*Nominal depth in metres to the top of the pipe.*		Float
				Embedment	*Embedment type.*	Natural	*Pipe laid directly on natural in-situ material*
						GBH	*Granular bed and haunch*
						GBS	*Granular bed and surround*
						GBSonConc	*Granular bed and surround on concrete support*
						GBSonGTP	*Granular bed and surround on geo-textile pillow*
						GBSonCSS	*Granular bed and surround on cement stabilised support*
						GBSonPiles	*Granular bed and surround on piles*
						CemStabBS	*Cement stabilised bed and surround*
						ConcBS	*Concrete bed and surround*
						ConcBSonPiles	*Concrete bed and surround on piles*
						Enveloped	*Within an enveloper pipe*
						Above Ground	*Pipe is above ground on piers or a bridge deck*
						None	*Thrust bored or Trenchless method*
						Unknown	*Embedment Type unknown at time of data submission*
						Other	*Another type of embedment type that is not already includesd in the standard types*
						EB_1	*A non-standard or new type of embedment as agreed with the data receiving entity*
						EB_2	*A non-standard or new type of embedment as agreed with the data receiving entity*
				RockExcavated	*Value indicating whether rock was excavated from the pipe channel.*		boolean
				Length_m	*Actual material length of the pipe. Not the horizontal length of the geometry.*		Float_Positive_NonZero

ASSET TYPE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
				Geometry	*The linear geometry of the pipe feature in coordinate space. At version 4.1.0 these features may include cruves due to modern flexible materials.*		geometry_linear_singlepath_complex
Valves	***Element representing the feature class of Sewerage Valves***	Valve	*Element representing a sewer valve fitting*	Use	*The function of this valve in the network.*	Non-Return	*Used to prevent backlow can be of type Generic, Rubber Gate or Swing Check*
						Service	*Used to isolate a service on a pressure sewer or vacuum sewerage system*
						Stop	*Used to stop flow in a pipeline*
						Scour	*Used to open and close access to a scour pipe*
						Diversion	*Used to divert flow along another route*
						Zone Boundary	*Used to isolate sewer catchments or service zones*
						Flow Control	*Used to control the rate of flow in a pipe*
						Pressure Control	*Used to control or maintain the pressure in a pipeline; can be of the type Overflow, Pressure Relief or Vacuum Release.*
						Gas Release	*Used to release gas or air from a pipeline and should be of type Air Valve*
						Other	*Used to for some other purpose not provided for in the Schema and can bee of Type Special*
						Unknown	*Use is unknown at time of data submission*
				Type	*The physical configuration of the valve*	Generic	*Non-return valve of an unknown or generic type. Also control or stop valve of a generic type*
						Rubber Gate	*Non-return valve of a the rubber gate type*
						Swing Check	*Non-return valve of the swing check type*
						Gate	*Gate Valve*
						Butterfly	*Butterfly Valve*
						Knife Gate	*Knife Gate Valve*
						Eccentric Plug	*Eccentric Plug valve*
						Globe	*Globe Valve*
						Ball	*Ball Valve*
						Penstock	*A Penstock formally known as Penstock Gate*
						Overflow	*An overflow valve*
						Pressure Release	*A pressure release valve*
						Vacuum Release	*A vacuum release valve*
						Air Valve	*A proprietary valve for releasing gas or air*
						Special	*A Specialist type of valve not covered in the Schema*
				Diameter_mm	*The nominal bore diameter of the valve*		positiveInteger
				Lining	*The internal corrosion protection method employed on the pipe material.*		*Cement Lined Normal. Centrifugally spun cement mortar (default for Ductile Iron and Mild Steel)*
						CL	*Cement Lined - Sulphate Resistant (DI and MS)*
						CL_SR	*Cement Lined - Calcium Aluminate (DI and MS)*
						CL_AC	*Plasticised PVC (includes Humes Plastiline)*
						PVC	*Fusion Bonded Epoxy*
						FBE	*Unlined (Default for plastic pipes)*
						Unlined	*Lining type unknown at time of data submission*
						Unknown	*Another type of liner that is not currently in the Schema*
						Other	
				Protection	*The external protection for the pipe.*	FBE	*Fusion Bonded Epoxy*
						FBPE	*Fusion Bonded Polyethylene (Includes the product known commercially as Sintakote)*
						Plastic Wrapped	*Plastic Wrapped*
						Tape Wrapped	*Tape Wrapped*
						Concrete Encased	*Concrete Encased*
						Sheathed	*Sheathed*
						Epoxy Paint	*Epoxy Paint*
						Uncoated	*Uncoated*
						P_1	*A new protection type not yet in the schema as agreed with the data receiving entity*
						P_2	*A new protection type not yet in the schema as agreed with the data receiving entity*
						Zinc	*Galvanized or zinc painted*
						Zinc-Aluminium Alloy	*Zinc Aluminium alloy coating (Petair Saint-Gobain)*
						Unknown	*Protection type unknown at time of data submission*
						Other	*Another type of protection not covered by the schema*
				Manufacturer	*The Manufacturer of the unit*		String_64
				ModelNumber	*The standard code, model number or part number for the unit*		String_64
				Rotation	*Rotation angle (cartesian - anti-clockwise 0 degrees = East)*		Float_Direction
				Geometry	*The geometry representing this feature in coordinate space.*		geometry_point_singlepoint
Fittings	***Element representing the feature class of Sewerage Fittings***	Fitting	*Element representing a sewer fitting other than a valve*	Type	*The physical configuration of the fitting*	Bend	*Bend fitting usually with change of direction of more than 11 degrees but may be less in plastic pipes*
						Connector	*Straight connector with no direction change*
						Connector Thrust	*Straight connector capable of transmitting axial thrust*
						Dismantling Joint	*Straight connector specifically included to facilitate future dismantling of pumps or complex pipe layouts.*
						Duck Bill	*Duck Bill fitting typically located at the end of a pipe feature.*
						Frog Flap	*Frog Flap fitting typically located at the end of a pipe feature.*
						Gibault	*Standard gibault connection*
						Taper	*Fitting with differing inlet and outlet diameters*
						Tee	*Tee-fitting with 3 arms or branches where one arm is at 90 degrees to the other 2.*
						Wye	*Y-fitting with three arms where the arms is are not all separated by integer multiples of 90 degrees*
						Cathodic Protection Point	*An electrical connection point for cathodic protection*
						Dead Plate	*A Dead Plate or blank flange secured to one arm of another fitting*
						External Dead End	*An external fitting incorporating a dead end such as a dead end cap.*

ASSET TYPE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
						Tee Branch Dead End	*A dead end plate pre-fitted to one branch of a Tee for access or future connection*
						Tee Branch Ext Dead End	*An end cap pre fitted externally to to a Tee Branch for access or future connection*
						Puddle Flange	*A Puddle Flange fitted externally to a pipe to transmit axial thrust into a structure or to provide sealing with a structure*
						Sampling Point	*A point designed for taking sewage or effluent samples*
						Booster Pump	*A pump providing the motive force to move sewage through a pressure main against the force of gravity*
						Inspection Opening	*An Inspection Opening on a pressure pipe*
				Material	*Fitting material*	ABS	*Acrylonitrile Butadiene Styrene*
						Aluminium	*Aluminium*
						GRP	*Glass Reinforced Plastic (includes the product known commercially as Hobas)*
						DI	*Ductile Iron*
						MS	*Mild Steel*
						PE-100	*Polyethylene (100)*
						PE-80B	*Polyethylene (80B)*
						PVC-M	*Polyvinyl Chloride (Modified)*
						PVC-O	*Polyvinyl Chloride (Oriented)*
						PVC-U	*Polyvinyl Chloride (Unplasticised)*
						Rubber	*Rubber*
						SS	*Stainless Steel*
						VC	*Vitreous Clay*
						Concrete	*Concrete*
						AC	*Asbestos Cement (Existing infrastructure only)*
						FRC	*Fibre reinforced concrete*
						M_1	*New material not included in schema as agreed with data recieiving entity*
						M_2	*New material not included in schema as agreed with data recieiving entity*
						Unknown	*Material type unknown at time of data submission*
						Other	*A material not included in schema types provided above*
				Lining	*The internal corrosion protection material or method for the fitting.*		*Cement Lined Normal. Centrifugally spun cement mortar (default for Ductile Iron and Mild Steel)*
						CL	
						CL_SR	*Cement Lined - Sulphate Resistant (DI and MS)*
						CL_AC	*Cement Lined - Calcium Aluminate (DI and MS)*
						PVC	*Plasticised PVC (includes Humes Plastiline)*
						FBE	*Fusion Bonded Epoxy*
						Unlined	*Unlined (Default for plastic pipes)*
						Unknown	*Lining type unknown at time of data submission*
						Other	*Another type of liner that is not currently in the Schema*
				Protection	*The external protection for the fitting.*	FBE	*Fusion Bonded Epoxy*
						FBPE	*Fusion Bonded Polyethylene (Includes the product known commercially as Sintakote)*
						Plastic Wrapped	*Plastic Wrapped*
						Tape Wrapped	*Tape Wrapped*
						Concrete Encased	*Concrete Encased*
						Sheathed	*Sheathed*
						Epoxy Paint	*Epoxy Paint*
						Uncoated	*Uncoated*
						P_1	*A new protection type not yet in the schema as agreed with the data receiving entity*
						P_2	*A new protection type not yet in the schema as agreed with the data receiving entity*
						Zinc	*Galvanized or zinc painted*
						Zinc-Aluminium Alloy	*Zinc Aluminium alloy coating (Petair Saint-Gobain)*
						Unknown	*Protection type unknown at time of data submission*
						Other	*Another type of protection not covered by the schema*
				BodySize_mm	*The nominal diameter of the major connecting pipe.*		positiveInteger
				BranchSize_mm	*The nominal diameter of the minor connecting pipe.*		positiveInteger
				Rotation	*Rotation angle (cartesian - anti-clockwise 0 degrees = East)*		Float_Direction
				Geometry	*The geometry representing this feature in coordinate space.*		geometry_point_singlepoint
Connections	***Element representing the feature class of sewer property connections***	Connection	*Element representing a sewer property connection*	SurfaceLevel_m	*Surface level of this feature (in metres against the vertical datum).*		Float
				InvertLevel_m	*Invert level of this feature (in metres against the vertical datum).*		Float
				Use	*The function of the house connection in the network.*	House	*House Drain - standard sanitary drain conveying sewage only*
						Combined	*Combined House Drain - a sanitary drain conveying both sewage and storm water in a combined sewerage system*
				Diameter_mm	*The nominal diameter of the connection conduit.*		positiveInteger
				Material	*The material of the connection conduit.*	PVC-U	*PolyVinylChloride Orientated*
						PVC-M	*PolyVinylChloride Modified*
						PVC-O	*PolyVinylChloride Orientated*
						Cast Iron	*Cast Iron*
						RCP	*Steel Reinforced Concrete Pipe*
						DI	*Ductile Iron*
						FRC	*Fibre Reinforced Concrete*
						FRP	*Fibre Reinforced Plastic*
						PE	*Polyethylene*
						VC	*Vitrified Clay*
						M_1	*A new material not yet in the Schema as agreed with the receiving entity*

ASSET TYPE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
						M_2	*A new material not yet in the Schema as agreed with the receiving entity*
						Unknown	*Lid Material is unknown at time of data submission*
						Other	*Another material not included in the Schema*
				Class	*The pipe class as specified by the manufacture. Pipe class refers to the wall thickness and performance of the material.*	SH	*Sewer Heavy*
						SEH	*Sewer Extra Heavy*
						SN4	*SN4*
						SN6	*SN6*
						SN8	*SN8*
						SN10	*SN10*
						SN12	*SN12*
						SDR21	*SDR21*
						Unknown	*Material class unknown at time of data submission*
						Other	*Some other class not included in the standard Schema*
				Length_m	*The material length in metres of the house connection branch conduit.*		Float_Positive_NonZero
				Type	*Physical configuration of connection.*	Sloped Branch	*Sloped Branch connection*
						Ramp Riser	*Ramp Riser connection*
						Jump Up	*Jump Up connection*
						Stub	*Connection straight into Maintenance Hole*
						Twin Jump Up	*Twin Jump Up connection*
						Twin Ramp Riser	*Twin Ramp Riser connection*
				Chainage_m	*The distance in metres from the centre of the downstream manhole to the point of connection of the offshoot branch.*		Float_Positive_Zero
				Offset_m	*The distance measured square from the centre of the sewer main to the point of connection.*		Float_Positive_NonZero
				LineNumber	*The line identifier of the sewer main.*		String_32
				DSMHID	*Downstream manhole identifier.*		String_32
				IO_Distance_m	*Distance from a point perpendicular to the inspection opening to the centre of the downstream manhole along the axis of the sewer main.*		Float_Positive_NonZero
				SO_Nearest_m	*Perpendicular distance from the inspection opening to the nearest cadastral boundary.*		Float_Positive_NonZero
				SO_Other_m	*Perpendicular distance from the inspection opening to the next nearest cadastral boundary.*		Float_Positive_NonZero
				Sediment_Trap	*True indicates that the connection includes an inline sediment trap.*		boolean
				Geometry	*The linear geometry of the house connection feature in coordinate space. Digitise this line downstream from the inspection opening to the pipe or pit* *If a point is desired, the inspection opening position may be taken as the start of the line* *At version 4.1.0 these features may include curves due to modern flexible materials.*		geometry_linear_singlepath_complex

ASSET GROUP	Cadastre	DESCRIPTION	Data structure constraining information for Cadastre features.

ASSET ELEMENT	DESCRIPTION	FEATURE	DESCRIPTION	DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION	ENUMERATION \ DETAIL	DESCRIPTION
Cadastre	***Data structure constraining information***	LandParcels	*Represents the feature class of cadastral parcels*	Lot	*Represents a cadastral lot feature.* *Represents the boundary of a titled, or proposed lot*	LotNo	*The lot number as described on the originating survey plan*		String_32
						PlanNo	*The plan number of the originating survey plan.*		String_32
						CancelledLotPlan	*The lot on plan cancelled by this boundary if applicable.*		String_32
						TitledArea_sqm	*The area in square metres enclosed by the boundary, as described by the survey plan.*		Float_Positive_NonZero
						Geometry	*The geometry of this feature in coordinate space. May contain holes and islands. Boundaries must consist of straight lines.*		geometry_area_multipatch_simple
				WaterCourseReserve	*Represents the boundary of a Water Course Reserve.*	Name	*The name of the watercourse reserve represented by this boundary*		String_128
						Geometry	*The geometry of this feature in coordinate space. May contain holes and islands. Boundaries must consist of straight lines.*		geometry_area_multipatch_simple
				RoadReserve	*Represents the boundary of a Road Reserve.*	Name	*The name of the road reserve represented by this boundary*		String_128
						Geometry	*The geometry of this feature in coordinate space. May contain holes and islands. Boundaries must consist of straight lines.*		geometry_area_multipatch_simple
		Easements	*Represents the feature class of cadastral easements*	Easement	*Represents a cadastral easement feature.* *Represents the boundary of a existing or new easement*	LotNo	*The lot number as described on the originating survey plan*		String_32
						PlanNo	*The plan number of the originating survey plan.*		String_32
						Geometry	*The geometry of this feature in coordinate space. May contain holes and islands. Boundaries must consist of straight lines.*		geometry_area_multipatch_simple
		SurveyMarks	*Represents the feature class of Survey Marks*	SurveyMark	*Represents a cadastral SurveyMark feature.*	MarkName	*The name by which the survey mark may be uniquely identified from control records.*		String_64
						Geometry	*The geometry of this feature in coordinate space.*		geometry_point_singlepoint
		Connections	*Represents the feature class of cadastral Connections*	Connection	*Represents an observed and reduced cadastral connection feature.* *A connection must run from the survey mark to the connected feature. If this feature is used, the bearing and*	Bearing	*The bearing in decimal degrees clockwise from North in the coordinate system of this project.*		Float_Positive_Zero
						Distance_m	*The distance in metres on the coordinate system of this project.*		Float_Positive_NonZero
						Geometry	*The geometry of this feature in coordinate space.*		geometry_linear_segment_simple
		ChainageLines	*Represents the feature class of cadastral Connections*	ChainageLine	*A line of measured chainage with a defined start and end value. Polyline shape is only an approximation of true curve geometry, but the start and end points should coincide exactly with the actual start and end of chainage*	ChainageID	*Unique ID of this chainage line.*		String_64
						StartChainage_m	*Start Chainage in metres of this section.*		Float_Positive_Zero
						EndChainage_m	*End Chainage in metres of this section.*		Float_Positive_Zero
						Geometry	*The geometry of this feature in coordinate space.*		geometry_linear_singlepath_complex