



MRC GUIDELINES FOR “AS-CONSTRUCTED” AND ADAC V5.0.1 SURVEY PICK- UP



Version 2023.06A (28 June 2023)

TABLE OF CONTENTS

1	Purpose	7
2	General Survey Requirements	7
2.1	Work must be carried out by a Registered Surveying Person.....	7
2.2	Survey Exceptions	7
2.3	Review and Approval	7
3	Survey Elements	8
4	Survey Data Standards	8
4.1	Survey Codes.....	8
4.2	Required Datum / Projection	8
4.3	Survey Quality.....	10
5	Scope of survey.....	10
6	“As-Constructed” Survey Requirements.....	10
	Top Cut / Fill	12
	Toe Cut / Fill	12
	Spot Level	12
	Change of Grade	12
	Permanent Survey Mark.....	13
	Survey Target.....	13
	Station	13
	Original Pegs and References	13
	Dumpy Peg.....	14
	Nail	14
	Spike	14
	Drill Hole.....	15
	Traverse Line	15
	Existing Property Boundary	15
	Existing Easement Boundary	15
	Small Tree < 0.3 dia.	16
	Large Tree.....	16
	Palm – all varieties	16
	Single Shrub < 5 m.....	17
	Garden Edge	17
	Edge of Vegetation.....	17
	Tree Drip Line.....	18
	Lip of Concrete Channel.....	18
	Invert of Concrete Channel	18
	Loose Rock e.g. Erosion Protection	18
	Watercourse Centreline.....	19

Pondage – dam/lake	19
Creek	19
Stormwater Pipe Invert Level	19
Box Culvert Invert Level	20
Pit without Grate	20
Pit with Grate	20
Stormwater Manhole	21
Stormwater Manhole Strung	21
Stormwater Underground	21
Culvert/Pipe Crown	22
Culvert/Pipe Obvert	22
Headwall &/or Wingwall	22
Property Drainage Connection	23
Maximum Height Gauge	23
Subsoil Flush Point	23
Stormwater Silt Trap	24
Stormwater Trash Rack	24
Gross Pollutant Trap – Manhole	24
Gross Pollutant Trap – Other	25
Stormwater Detention Basin	25
Centre of Bitumen	25
Change of Grade on Bitumen	25
Edge of Bitumen	26
Edge of Shoulder	26
Lip of K&C	26
Invert of K&C	27
Top of K&C	27
Back of K&C	27
Kerb Only	28
Footpath	28
Driveway	28
Driveway – Not on DTM	29
Tactile Ground Surface Indicators	29
Pram Ramp	29
Borehole – Geotechnical	29
Edge of Gravel Road	30
Centre of Gravel Road	30
Edge of Track	30
Guardrail	31
Large Signs Strung	31
Signs	31

Letterbox/Postbox	32
Traffic Light.....	32
Traffic Controller Box.....	32
Traffic Pit	32
Traffic Unclassified	33
Road Furniture Uncl	33
Monument	33
Joint Use Pole	33
Traffic Controller Box Strung	34
Red Light Camera	34
Guide Post.....	34
Chevrons & Symbols	35
Unbroken Line – All types, excl. Edge Line	35
Lane Line.....	35
Rumble Bars.....	35
Dividing Line 3 m 9 m	36
Barrier Line One Direction	36
Barrier Line Both Directions	36
Edge Line	36
Continuity Line.....	37
Turn Line	37
Stop Line	37
Give Way Line	37
Crosswalk Line	38
Parking Line	38
Exit line at multilane roundabout	38
Wall	38
Awning/Eaves.....	39
Shed	39
Building.....	39
Verandah	39
Steps	40
Bridge	40
Concrete Slab.....	40
Structure – Unclassified	41
Swimming Pool.....	41
Bore/Well.....	41
Sports Arena/Field.....	42
Retaining Wall	42
Tank - General	42
Floor Level.....	42

Park – Bench Seat	43
Park – Playground Equipment.....	43
Park – Table/Chairs on Slab	43
Park - Barbeque	44
Park – Rubbish Bin.....	44
Park – Shelter.....	45
Irrigation Sprinkler Head.....	45
Irrigation Pit	45
Irrigation Underground	46
Bus Shelter.....	46
Electricity Marker.....	46
Electricity Substation on ground.....	47
Staywire.....	47
Staypole	47
Electricity Manhole/Box Strung	47
Light Pole + no.	48
Electricity Pole Only + no.	48
Electricity Pole with Light + no.....	48
Electricity Unclassified.....	49
Electricity Pit.....	49
Electricity Line Overhead	49
Electricity Line Underground	49
Electricity Pillar	50
Communications Manhole/Box Strung	50
Communications Pit	50
Communications Pillar.....	51
Communications Marker	51
Communications Pole + no.	51
Communications Cabinet	51
Communications Unclassified	52
Communications Lines Overhead	52
Communications Lines Underground	52
Optic Fibre Underground.....	53
Electricity Conduit Crown	53
Communications Conduit Crown.....	53
Optic Fibre Crown	53
Gas Manhole/Box Strung	54
Gas Valve.....	54
Gas Marker.....	54
Gas Unclassified	55
Gas Underground.....	55

Sewer Manhole/Box Strung.....	55
Sewer Manhole	56
Sewer Unclassified	56
Sewer Underground	56
Sewer – Rising Main Valve	57
Sewer Invert	57
Sewer Crown.....	57
Sewer Vent Pole.....	58
Water Manhole/Box Strung	58
Water Valve.....	58
Water Tap.....	59
Fire Hydrant.....	59
Water Meter.....	59
Water Unclassified	59
Water Underground.....	60
Water – Reservoir	60
Watermain Crown.....	60
Water Marker.....	61
Water Service.....	61
Unclassified Pit.....	61
Unclassified Pole.....	62
Unclassified Utility	62
Unclassified Manhole/Box Strung	62
Railway Line	63
Railways Boom Gate	63
Railways Signals Pole	63
Railways Signal Box.....	63
Railways Switch	64
Railways Unclassified.....	64
Cattle Grid	64
Fence	64
Fence Post – Isolated.....	65
Gate.....	65
Bollard	65
Appendix A Example Sketches of Detail Codes.....	66

VERSION NO	DESCRIPTION AND DISTRIBUTION	DATE	COMMENTS
2017.06A	ORIGINAL ISSUE	02/06/2017	-
2019.12A	UPDATE SURVEY DATA STANDARDS, ADAC V5.0.1	18/12/2019	-
2020.06A	GDA2020 IMPLEMENTATION	22/06/2020	-
2023.06A	UPDATED SURVEY CODE LIBRARY	28/06/2023	-

1 PURPOSE

The purpose of this document is to act as a reference guide with respect to completing “As-Constructed” surveys of new donated civil infrastructure and associated assets handed over to the Mackay Regional Council (MRC).

The “As-Constructed” survey data shall accurately reflect the location of all infrastructure installed and earthworks completed and will form the basis of any “As-Constructed” drawings and plans and ADAC XML file(s).

Note: Specific details regarding the preparation and presentation of any required “As-Constructed” drawings, plans, and XML files should be produced as per Mackay Regional Council’s Engineering Design Guidelines (D20), Drawings and Documentation Guidelines and the MRC Guidelines for the Creation and Lodgement of ADAC XML Files.

2 GENERAL SURVEY REQUIREMENTS

2.1 Work must be carried out by a Registered Surveying Person

All “As-Constructed” works (except for the cases listed below) must be surveyed by a Surveying Associate, Graduate or Surveyor registered with the Surveyors Board of Queensland.

The Registered Surveying Person shall certify the details upon completion of the project. Their certification must note that the “As-Constructed” survey data represents the true and accurate location of the relevant construction element presented in the data, relative to the appropriate survey data (i.e. the exact location in space of each construction element/entity).

The Registered Surveying Person certification must accompany the “As-Constructed” plans and electronic file to Council. Refer to per Mackay Regional Council’s Engineering Design Guidelines (D20), Drawings and Documentation Guidelines for an example of an acceptable Registered Surveying Person’s Certification.

2.2 Survey Exceptions

All “As-Constructed” plans submitted to Council must be based on a physical survey with the following exceptions:

1. Pre-fabricated assets with no underground services (e.g. bus shelters, waste collection points, bicycle fittings etc.). In this situation, a site map with GPS coordinates will suffice.
2. Other low risk asset types as determined by Technical Services (e.g. footpaths). If you are in doubt whether a survey is required, please contact Technical Services for advice.

2.3 Review and Approval

Council will conduct random site audits to confirm that submitted data conforms to requirements, including positional accuracies and tolerances, as well as the submission of all required objects and attributes.

Release / Sealing of subdivisional title plans and approval of construction project milestones will not occur until all required “As-Constructed” information is received in the manner prescribed in this manual.

3 SURVEY ELEMENTS

The “As-Constructed” survey will include the following details at the Chainages or Point Numbers as shown on the “For Construction” plans:

1. Road centreline
2. Change of grade of finished surface, earthworks batter interface points
3. Edge of bitumen
4. Lip, Invert and top of kerb and channel
5. Lip of kerb on median strips
6. Line marking including chevrons
7. Gully pits, headwalls, stormwater manholes/chambers, and field inlet pits
8. Subsoil drains and flush points
9. Invert levels of pipes and box culverts
10. Road shoulder
11. Top and invert of drains
12. New Signs placed
13. Concrete driveways, and invert crossings
14. Kerb ramps
15. Crash barriers
16. Fencing
17. Road and park furniture and concrete pathways
18. New sewer lines and manholes
19. New water lines, valves, hydrants, water meters, and water services
20. New Telecommunications services
21. New electrical services including street lighting
22. Corners of bridge deck and abutments
23. Retaining wall bases and any steps along the top and changes in direction
24. Trees

4 SURVEY DATA STANDARDS

Digital “As-Constructed” data recorded and supplied to Council by the Submitter shall be in accordance with Section 6 - “As-Constructed” Survey Requirements

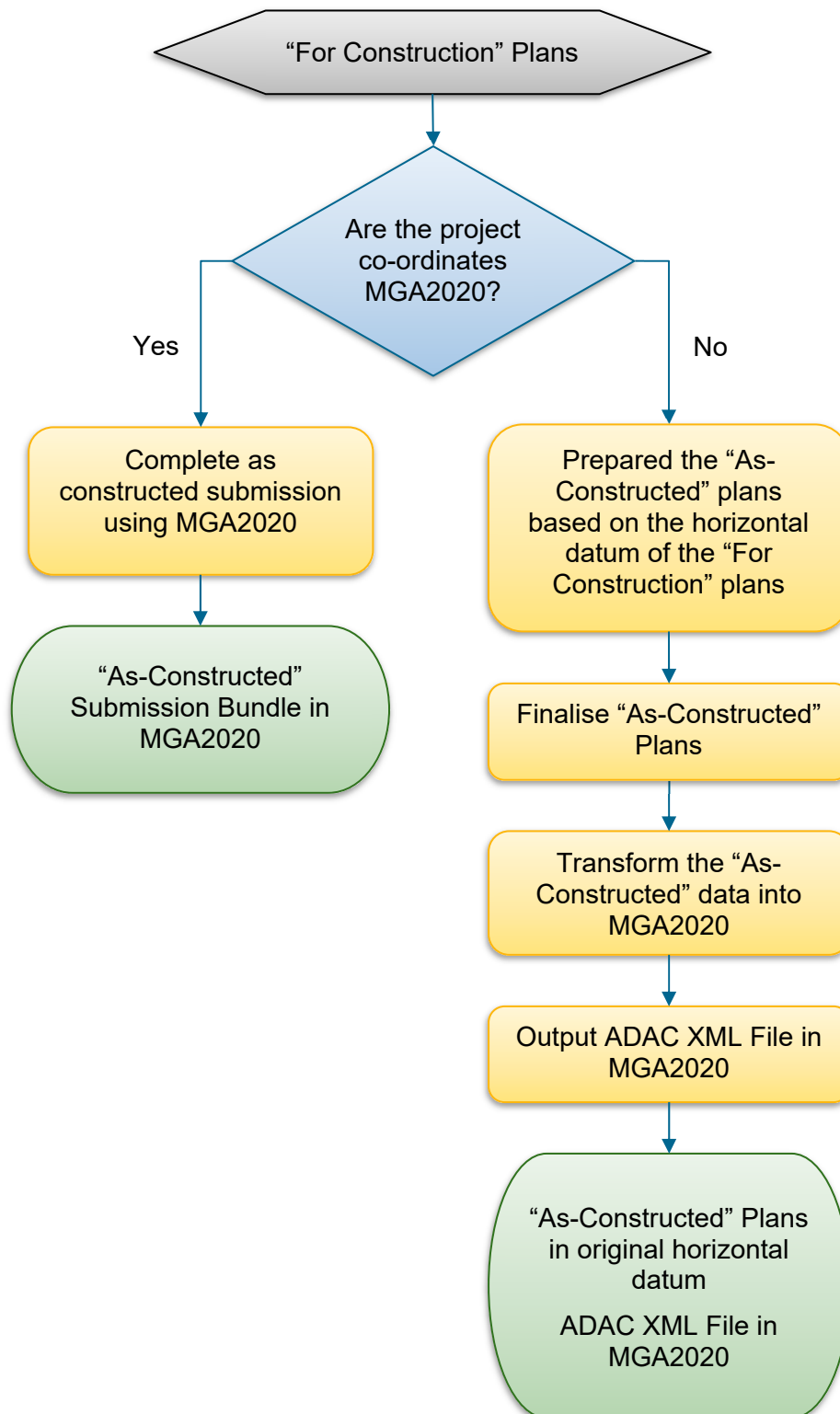
4.1 Survey Codes

When picking up detail, all points shall be coded in accordance with Council's Standard Survey Codes. Council's standard survey codes and layers are shown in [MRC Survey Codes and Layers.pdf](#)

4.2 Required Datum / Projection

The horizontal datum for “As-Constructed” surveys is dependent on the original project datum. The required vertical datum for “As-Constructed” surveys is AHD71. All ADAC XML files are to be submitted with MGA2020 co-ordinates.

Refer to flowchart below for guidance for correct horizontal datum selection for the “As-Constructed” submission.



4.3 Survey Quality

All engineering surveys undertaken which are used as the basis of “As-Constructed” plans to be submitted to Council shall comply with the following:

1. Datum shall be established by connecting to existing permanent survey marks designated as “Datum” or existing permanent survey marks with “Derived” coordinates of 2nd order/class B or better in Queensland’s survey control database. Where existing control does not exist, as a minimum, datum shall be established by using the GNSS equipment and observation techniques (excepting double occupations) for real-time surveys as per the *Guideline for Control Surveys by GNSS**.
2. The azimuth shall be established from the end coordinates of the longest observable line in the control traverse. When using real-time GNSS, this distance should be greater than 200 m and never less than 100 m.
3. All survey stations shall be traversed using the equipment recommendations and observation techniques for SU < 10 mm and RU < 10 mm or 30 ppm as per the *Guideline for Conventional Traverse Surveys**. A current (within 12 months) EDM Calibration Certificate for instrument used must be provided on request.
4. All survey stations and bench marks shall be levelled using the differential levelling equipment recommendations (excepting staff calibration) and observation techniques for $12 \text{ mm} \cdot \sqrt{k} \text{ (km)}$ as per the *Guideline for Control Surveys by Differential Levelling**.
5. The farthest distance measured from a setup station to a feature (sideshots) shall not exceed 100 m to achieve height accuracy. In general, the relative uncertainty of 95% of reduced levels on hard structures shall not exceed 10 mm and on natural surface shall not exceed 25 mm. Refer to Section 6 - “As-Constructed” Survey Requirements for more specific details

5 SCOPE OF SURVEY

The survey must include all new; modified; removed; and abandoned infrastructure associated with the physical works that is, or will be, the responsibility of MRC. These assets can potentially be within easements, private property, Council’s local government road reserves and Queensland State controlled road reserves.

The “As-Constructed” data must include all asset types, earthworks information, and property boundary information that is relevant to the submission even when no ADAC attribute information is required.

If an asset type is not listed in Section 6 - “As-Constructed” Survey Requirements, contact Council’s Survey Coordinator for more information

6 “AS-CONSTRUCTED” SURVEY REQUIREMENTS

The table below contains Council’s survey requirements for “As-Constructed” plan assets / objects.

The required horizontal survey accuracies (XY) and vertical survey accuracies (Z) listed below are for “As-Constructed” surveys of projects built to a design and refers to the relative uncertainty of measurements at the 95% confidence level.

* As defined by Intergovernmental Committee on Surveying and Mapping (ICSM) Standard for the Australian Control Network Special Publication 1 (SP1) Version 2.1 October 2014 – www.icsm.gov.au

However, it is recognised some small projects built in isolation based on a standard drawing (e.g., bus stops) do not need to be located to this high level of accuracy for asset management purposes. In such instances, a second set of accuracies has been listed.

Refer also to the example sketch plans for Road, Open Space, and Services for guidance regarding Council’s survey methodology.

Notes:

1. Since Council has adopted the Asset Design As Constructed (ADAC) data specification published by the Institute of Public Works Engineering (IPWEA), there may be two sets of survey location data required (i.e., Council’s standard asset pick-up points and additional ADAC data points).
2. Not all surveyed objects have corresponding asset data attributes in Council’s “As-Constructed” Data Specification (Refer to MRC Guidelines for the Creation and Lodgement of ADAC XML Files). Where an object requires additional attribute data, the Asset Class and Asset Type are shown.
3. The structure of the table is as follows:

Description	The survey code description	
Survey Code	The three digit survey code	
Layer Name	The drafting package layer name	
Surveyed Location	MRC	The survey pick up method as required by MRC
	ADAC	The survey pick up method as required by ADAC
Required Survey Accuracy	Horizontal (XY)	The required MRC “As-Constructed” horizontal survey accuracy relative to the survey control
	Vertical (Z)	The required MRC “As-Constructed” vertical survey accuracy relative to the survey control
Required Accuracy for Asset Management Purposes	Horizontal (XY)	The maximum horizontal survey accuracy of assets located purely for asset management purposes
	Vertical (Z)	The maximum vertical survey accuracy of assets located purely for asset management purposes
Object Type	The geometry type (point, line or polygon)	
Asset Class/ADAC Element	The corresponding ADAC Class and Element	
Extra Comments:	Any additional comments e.g., regarding the survey pick up method	

Description	Top Cut / Fill	
Survey Code	102	
Layer Name	BATTER TOP	
Surveyed Location	MRC	String most abrupt change of aspect
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 100 mm
	Vertical (Z)	± 25 mm
Object Type	Polyline	
Asset Class/ADAC Element	Supplementary PolylineFeature	
Extra Comments:		
Description	Toe Cut / Fill	
Survey Code	103	
Layer Name	BATTER TOE	
Surveyed Location	MRC	String most abrupt change of aspect
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 100 mm
	Vertical (Z)	± 25 mm
Object Type	Polyline	
Asset Class/ADAC Element	Supplementary PolylineFeature	
Extra Comments:	To define the toe of bank in detention basins use code 326 (SW BASIN) instead	
Description	Spot Level	
Survey Code	104	
Layer Name	SPOT LEVEL	
Surveyed Location	MRC	Single surface shot
	ADAC 5.0.1	Same as MRC
Required Survey Accuracy	Horizontal (XY)	± 100 mm
	Vertical (Z)	± 25 mm
Object Type	Point	
Asset Class/ADAC Element	Surface SpotHeight	
Extra Comments:		
Description	Change of Grade	
Survey Code	105	
Layer Name	CH GRADE	
Surveyed Location	MRC	String change of aspect
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 100 mm
	Vertical (Z)	± 25 mm
Object Type	Polyline	

Asset Class/ADAC Element	<i>Supplementary PolylineFeature</i>	
Extra Comments:		
Description	Permanent Survey Mark	
Survey Code	111	
Layer Name	SURV PSM	
Surveyed Location	MRC	Locate centre of mark, record PSM number
	ADAC 5.0.1	Same as MRC
Required Survey Accuracy	Horizontal (XY)	± 5 mm
	Vertical (Z)	± 2 mm
Object Type	Point	
Asset Class/ADAC Element	<i>Cadastre SurveyMark</i>	
Extra Comments:	When the PSM is occupied as a survey station use code 114. Pole check shots may have a horizontal accuracy (XY) of ± 10 mm and a vertical accuracy (Z) of ± 7 mm	
Description	Survey Target	
Survey Code	112	
Layer Name	SURV TRGT	
Surveyed Location	MRC	Locate centre of mark
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 5 mm
	Vertical (Z)	± 2 mm
Object Type	Point	
Asset Class/ADAC Element	<i>Supplementary PointFeature</i>	
Extra Comments:	When the TRGT is occupied as a survey station use code 114. Pole check shots may have a horizontal accuracy (XY) of ± 10 mm and a vertical accuracy (Z) of ± 7 mm	
Description	Station	
Survey Code	114	
Layer Name	SURV STN	
Surveyed Location	MRC	Locate centre of mark
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 5 mm
	Vertical (Z)	± 2 mm
Object Type	Point	
Asset Class/ADAC Element	<i>Supplementary PointFeature</i>	
Extra Comments:		
Description	Original Pegs and References	
Survey Code	115	
Layer Name	SURV CADST	

Surveyed Location	MRC	Locate centre of mark, record station number and survey plan number
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Point	
Asset Class/ADAC Element	<i>Supplementary PointFeature</i>	
Extra Comments:	Mainly used to record the position of original boundary pegs	
Description	Dumpy Peg	
Survey Code	116	
Layer Name	SURV DUMPY	
Surveyed Location	MRC	Locate centre of peg
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Point	
Asset Class/ADAC Element	<i>Supplementary PointFeature</i>	
Extra Comments:	Dumpy pegs are not acceptable for use as survey stations except in isolated cases to acquire small amounts of detail	
Description	Nail	
Survey Code	117	
Layer Name	SURV NAIL	
Surveyed Location	MRC	Locate centre of mark
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 5 mm
	Vertical (Z)	± 2 mm
Object Type	Point	
Asset Class/ADAC Element	<i>Supplementary PointFeature</i>	
Extra Comments:	When the nail is a survey station use code 114. Mainly used to record check measurements. Pole check shots may have a horizontal accuracy (XY) of ± 10 mm and a vertical accuracy (Z) of ± 7 mm	
Description	Spike	
Survey Code	118	
Layer Name	SURV SPIKE	
Surveyed Location	MRC	Locate centre of mark
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 5 mm
	Vertical (Z)	± 2 mm
Object Type	Point	
Asset Class/ADAC Element	<i>Supplementary PointFeature</i>	

Extra Comments:	When the spike is a survey station use code 114. Mainly used to record check measurements. Pole check shots may have a horizontal accuracy (XY) of ± 10 mm and a vertical accuracy (Z) of ± 7 mm	
Description	Drill Hole	
Survey Code	119	
Layer Name	SURV DRILL	
Surveyed Location	MRC	Locate centre of mark
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Point	
Asset Class/ADAC Element	Supplementary PointFeature	
Extra Comments:	When the drill hole is a survey station use code 114. Mainly used to record check measurements. Pole check shots may have a horizontal accuracy (XY) of ± 10 mm and a vertical accuracy (Z) of ± 7 mm	
Description	Traverse Line	
Survey Code	150	
Layer Name	SURV TRAV	
Surveyed Location	MRC	Line from boundary corner to boundary corner or survey mark to survey mark
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	N/A – Dependant on accuracy of end points
	Vertical (Z)	N/A – Dependant on accuracy of end points
Object Type	Polyline	
Asset Class/ADAC Element	Supplementary PolylineFeature	
Extra Comments:		
Description	Existing Property Boundary	
Survey Code	151 or 151 gis	
Layer Name	RP BDY E or RP BDY E gis	
Surveyed Location	MRC	The property boundary
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	151: ± 10 mm (assuming lots close within acceptable limits) 151 gis: ± 100 mm (urban areas) 151 gis: ± 500 mm (rural areas)
	Vertical (Z)	N/A – Null all heights
Object Type	Polyline	
Asset Class/ADAC Element	N/A	
Extra Comments:	Use 151 (RP BDY E) when boundaries are plotted from cadastral connections. Use 151 gis (RP BDY E gis) when boundaries are imported from the DCDB.	
Description	Existing Easement Boundary	

Survey Code	154 or 154 gis	
Layer Name	EASE BDY E or EASE BDY E gis	
Surveyed Location	MRC	The easement boundary
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	154: ± 10 mm (assuming lots close within acceptable limits) 154 gis: ± 100 mm (urban areas) 154 gis: ± 500 mm (rural areas)
	Vertical (Z)	N/A – Null all heights
Object Type	Polyline	
Asset Class/ADAC Element	N/A	
Extra Comments:	Use 154 (EASE BDY E) when boundaries are plotted from cadastral connections. Use 154 gis (EASE BDY E gis) when boundaries are imported from the DCDB.	
Description	Small Tree < 0.3 dia.	
Survey Code	201	
Layer Name	TREE SMALL	
Surveyed Location	MRC	Centre of trunk
	ADAC 5.0.1	Same as MRC
Required Survey Accuracy	Horizontal (XY)	± 20 mm
	Vertical (Z)	± 50 mm (see extra comments)
Object Type	Point	
Asset Class/ADAC Element	OpenSpace Tree	
Extra Comments:	The tree height at ground level is preferred, but not necessary. If the recorded height is not indicative of the ground surface, null the height.	
Description	Large Tree	
Survey Code	202	
Layer Name	TREE LARGE	
Surveyed Location	MRC	Centre of Trunk
	ADAC 5.0.1	Same as MRC
Required Survey Accuracy	Horizontal (XY)	± 100 mm
	Vertical (Z)	± 50 mm (see extra comments)
Object Type	Point	
Asset Class/ADAC Element	OpenSpace Tree	
Extra Comments:	The tree height at ground level is preferred, but not necessary. If the recorded height is not indicative of the ground surface, null the height.	
Description	Palm – all varieties	
Survey Code	203	
Layer Name	TREE PALM	
Surveyed Location	MRC	Centre of Trunk

	ADAC 5.0.1	Same as MRC
Required Survey Accuracy	Horizontal (XY)	± 100 mm
	Vertical (Z)	± 50 mm (see extra comments)
Object Type	Point	
Asset Class/ADAC Element	<i>OpenSpace</i> Tree	
Extra Comments:	The tree height at ground level is preferred, but not necessary. If the recorded height is not indicative of the ground surface, null the height.	
Description	Single Shrub < 5 m	
Survey Code	204	
Layer Name	SHRUB	
Surveyed Location	MRC	Centre of Shrub
	ADAC 5.0.1	Same as MRC
Required Survey Accuracy	Horizontal (XY)	± 100 mm
	Vertical (Z)	± 50 mm (see extra comments)
Object Type	Point	
Asset Class/ADAC Element	<i>OpenSpace</i> Tree	
Extra Comments:	The tree height at ground level is preferred, but not necessary. If the recorded height is not indicative of the ground surface, null the height.	
Description	Garden Edge	
Survey Code	205	
Layer Name	GARDEN EDG	
Surveyed Location	MRC	String along outermost edge of the garden at ground level
	ADAC 5.0.1	For new landscaped areas within open space areas, string around the outermost edge of landscaped areas using code A205 instead
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Polyline/Polygon	
Asset Class/ADAC Element	205 <i>Supplementary</i> PolylineFeature, <i>Supplementary</i> PolygonFeature A205 <i>OpenSpace</i> LandscapeArea	
Extra Comments:		
Description	Edge of Vegetation	
Survey Code	206	
Layer Name	VEGETATION	
Surveyed Location	MRC	String along the outermost edge of the cultivated area
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 100 mm
	Vertical (Z)	± 50 mm
Object Type	Polyline/Polygon	

Asset Class/ADAC Element	<i>Supplementary PolylineFeature, Supplementary PolygonFeature</i>	
Extra Comments:		
Description	Tree Drip Line	
Survey Code	207	
Layer Name	TREE DRIP LINE	
Surveyed Location	MRC	String along the outermost edge of the cultivated area
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 300 mm
	Vertical (Z)	N/A
Object Type	Polyline/Polygon	
Asset Class/ADAC Element	<i>Supplementary PolylineFeature, Supplementary PolygonFeature</i>	
Extra Comments:		
Description	Lip of Concrete Channel	
Survey Code	280	
Layer Name	CONCHN LIP	
Surveyed Location	MRC	String along top edge of concrete channel
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Polyline	
Asset Class/ADAC Element	<i>Supplementary PolylineFeature</i>	
Extra Comments:		
Description	Invert of Concrete Channel	
Survey Code	281	
Layer Name	CONCHN INV	
Surveyed Location	MRC	String along bottom of concrete channel
	ADAC 5.0.1	Same as MRC
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Polyline	
Asset Class/ADAC Element	<i>StormWater SurfaceDrain</i>	
Extra Comments:		
Description	Loose Rock e.g. Erosion Protection	
Survey Code	282	
Layer Name	ROCK AREA	
Surveyed Location	MRC	Locate perimeter of rock area
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 100 mm

	Vertical (Z)	± 50 mm
Object Type	Polyline/Polygon	
Asset Class/ADAC Element	<i>Supplementary PolylineFeature, Supplementary PolygonFeature</i>	
Extra Comments:	Mainly used to locate the extent of areas of loose rock placed at stormwater outlets	
Description	Watercourse Centreline	
Survey Code	290	
Layer Name	WCOURSE CL	
Surveyed Location	MRC	String along lowest point of channel
	ADAC 5.0.1	Same as MRC
Required Survey Accuracy	Horizontal (XY)	± 50 mm
	Vertical (Z)	± 20 mm
Object Type	Polyline	
Asset Class/ADAC Element	<i>StormWater SurfaceDrain</i>	
Extra Comments:	Mainly used to show flow paths that are not clearly defined drains with top and bottom banks	
Description	Pondage – dam/lake	
Survey Code	291	
Layer Name	POND	
Surveyed Location	MRC	String around contour of water level
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 100 mm
	Vertical (Z)	± 20 mm
Object Type	Polyline/Polygon	
Asset Class/ADAC Element	<i>Supplementary PolylineFeature, Supplementary PolygonFeature</i>	
Extra Comments:		
Description	Creek	
Survey Code	292	
Layer Name	CREEK	
Surveyed Location	MRC	String along contour of water level
	ADAC 5.0.1	String along lowest point of channel
Required Survey Accuracy	Horizontal (XY)	± 100 mm
	Vertical (Z)	± 20 mm
Object Type	Polyline	
Asset Class	<i>StormWater SurfaceDrain</i>	
Extra Comments:	Usually only used when the water level is specifically requested as part of a brief	
Description	Stormwater Pipe Invert Level	
Survey Code	304	
Layer Name	SW PIPE INV	

Surveyed Location	MRC	Locate invert of pipe, record material and diameter as vertex text e.g., “375RCP”
	ADAC 5.0.1	For a single pipe, join the inverts using a polyline coded 312. For multiple pipes, join the inverts of the middle pipe using a polyline coded 312 and record the number of pipes.
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Point	
Asset Class/ADAC Element	304 <i>Supplementary</i> PointFeature 312 <i>StormWater</i> Pipe	
Extra Comments:		
Description	Box Culvert Invert Level	
Survey Code	305	
Layer Name	SW RCBC INV	
Surveyed Location	MRC	Locate invert of box culvert at centre of cell, record material and dimensions as vertex text e.g., “1200w × 900h RCBC”
	ADAC 5.0.1	For a single cell, join the invert of box culvert at the centre of cell using a polyline coded 312. For multiple cells, join the invert of box culvert at the centre of the middle cell using a polyline coded 312 and record the number of pipes.
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Point	
Asset Class/ADAC Element	305 <i>Supplementary</i> PointFeature 312 <i>StormWater</i> Pipe	
Extra Comments:		
Description	Pit without Grate	
Survey Code	308	
Layer Name	PIT OTHER	
Surveyed Location	MRC	Closed figure around extents of pit. For gully pits, also string single line across top of kerb and across invert of kerb
	ADAC 5.0.1	Using code A310, locate a single point representing the centre of the chamber
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Polyline/Polygon	
Asset Class/ADAC Element	308 <i>Supplementary</i> PolylineFeature, <i>Supplementary</i> PolygonFeature A310 <i>StormWater</i> Pit	
Extra Comments:		
Description	Pit with Grate	

Survey Code	309	
Layer Name	PIT GRATED	
Surveyed Location	MRC	Closed figure around extents of pit. For gully pits, also string single line across top of kerb and across invert of kerb
	ADAC 5.0.1	Using code A310, locate a single point representing the centre of the chamber
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Polyline/Polygon	
Asset Class/ADAC Element	309 <i>Supplementary PolylineFeature, Supplementary PolygonFeature</i> A310 <i>StormWater Pit</i>	
Extra Comments:		
Description	Stormwater Manhole	
Survey Code	310	
Layer Name	SW MH	
Surveyed Location	MRC	Single point in centre of round lid
	ADAC 5.0.1	Using code A310, locate a single point representing the centre of chamber
Required Survey Accuracy	Horizontal (XY)	± 30 mm
	Vertical (Z)	± 7 mm
Object Type	Point	
Asset Class/ADAC Element	310 <i>Supplementary PointFeature</i> A310 <i>StormWater Pit</i>	
Extra Comments:		
Description	Stormwater Manhole Strung	
Survey Code	311	
Layer Name	SW MH STR	
Surveyed Location	MRC	String around edge of lid
	ADAC 5.0.1	Using code A310, locate a single point representing the centre of chamber
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Polygon	
Asset Class/ADAC Element	311 <i>Supplementary PolygonFeature</i> A310 <i>StormWater Pit</i>	
Extra Comments:		
Description	Stormwater Underground	
Survey Code	312	
Layer Name	SW UNDERG	

Surveyed Location	MRC	String centreline of pipe/cell, record vertical surveyed location as a note e.g., paint mark on surface
	ADAC 5.0.1	String centreline of pipe from invert of pipe to invert of pipe. Locate any fittings using code A312.
Required Survey Accuracy Refer to AS 5488.1:2019 <i>Classification of Subsurface Utility Information</i>	Horizontal (XY)	Quality Level A – ± 50 mm Quality Level B – ± 300 mm Quality Level C – ± 300 mm Quality Level D – Existing Record
	Vertical (Z)	Quality Level A – ± 50 mm Quality Level B – ± 500 mm Quality Level C – N/A Quality Level D – Existing Record
Object Type	Polyline	
Asset Class/ADAC Element	312 StormWater Pipe A312 StormWater Fitting	
Extra Comments:		
Description	Culvert/Pipe Crown	
Survey Code	316	
Layer Name	SW CULV CROWN	
Surveyed Location	MRC	Locate crown of pipe or crown of culvert at centre of cell
	ADAC 5.0.1	N/A – not a mandatory inclusion Refer to code 312 (SW UNDERG)
Required Survey Accuracy	Horizontal (XY)	± 50 mm
	Vertical (Z)	± 7 mm
Object Type	Point	
Asset Class/ADAC Element	<i>Supplementary Point</i> Feature	
Extra Comments:	Mainly used to record the location of underground services that have been vacuum excavated.	
Description	Culvert/Pipe Obvert	
Survey Code	317	
Layer Name	SW CULV OBVT	
Surveyed Location	MRC	Locate obvert of pipe or obvert of culvert at centre of cell
	ADAC 5.0.1	N/A – not a mandatory inclusion Refer to code 312 (SW UNDERG)
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Point	
Asset Class/ADAC Element	<i>Supplementary Point</i> Feature	
Extra Comments:	304 (SW PIPE INV) or 305 (SW RCBC INV) are preferred	
Description	Headwall &/or Wingwall	

Survey Code	318	
Layer Name	HEADWALL	
Surveyed Location	MRC	String around: inside edge at base of structure; inside edge at top of structure; and, where accessible, back edge at top of structure
	ADAC 5.0.1	Using code A318, locate a single point at the top of the structure in the centre
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Polyline/Polygon	
Asset Class/ADAC Element	318 <i>Supplementary PolylineFeature, Supplementary PolygonFeature</i> A318 <i>StormWater EndStructure</i>	
Extra Comments:	If the top of the structure is higher than the surrounding natural surface, string the back of the structure at ground level using 105 (CH GRADE)	
Description	Property Drainage Connection	
Survey Code	319	
Layer Name	PROP DRCON	
Surveyed Location	MRC	Locate the invert of the drainage connection pipe at outlet point
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Point	
Asset Class/ADAC Element	<i>Supplementary PointFeature</i>	
Extra Comments:		
Description	Maximum Height Gauge	
Survey Code	320	
Layer Name	MAX HT GUA	
Surveyed Location	MRC	Locate centre of gauge at ground level
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Point	
Asset Class/ADAC Element	<i>Supplementary PointFeature</i>	
Extra Comments:	Mainly used to locate flood level indicators	
Description	Subsoil Flush Point	
Survey Code	321	
Layer Name	SUBSOIL PT	
Surveyed Location	MRC	Locate centre top of flush point box
	ADAC 5.0.1	Same as MRC
Required Survey Accuracy	Horizontal (XY)	± 10 mm

	Vertical (Z)	± 20 mm
Object Type	Point	
Asset Class/ADAC Element	321 <i>Transport FlushPoint</i> SubSoilDrain <i>Transport SubSoilDrain</i>	
Extra Comments:		
Description	Stormwater Silt Trap	
Survey Code	322	
Layer Name	SW STRAP	
Surveyed Location	MRC	String the edge of the trap
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Required Accuracy for Asset Management Purposes	Horizontal (XY)	± 100 mm
	Vertical (Z)	N/A
Object Type	Polyline/Polygon	
Asset Class/ADAC Element	<i>Supplementary PolylineFeature, Supplementary PolygonFeature</i>	
Extra Comments:		
Description	Stormwater Trash Rack	
Survey Code	323	
Layer Name	SW TRACK	
Surveyed Location	MRC	Locate a single point in the centre of the visible rack
	ADAC 5.0.1	Locate single point representing the centre of the chamber
Required Survey Accuracy	Horizontal (XY)	± 100 mm
	Vertical (Z)	± 20 mm
Required Accuracy for Asset Management Purposes	Horizontal (XY)	± 100 mm
	Vertical (Z)	N/A
Object Type	Point	
Asset Class/ADAC Element	<i>StormWater GPTComplex</i>	
Extra Comments:		
Description	Gross Pollutant Trap – Manhole	
Survey Code	324	
Layer Name	GPT MH	
Surveyed Location	MRC	Locate a single point in the centre of the manhole lid
	ADAC 5.0.1	Locate single point representing the centre of the chamber
Required Survey Accuracy	Horizontal (XY)	± 100 mm
	Vertical (Z)	± 20 mm
Required Accuracy for Asset Management Purposes	Horizontal (XY)	± 100 mm
	Vertical (Z)	N/A

Object Type	Point	
Asset Class/ADAC Element	<i>StormWater</i> GPTSimple	
Extra Comments:		
Description	Gross Pollutant Trap – Other	
Survey Code	325	
Layer Name	GPT OTHER	
Surveyed Location	MRC	Locate a single point in the centre of the visible trap
	ADAC 5.0.1	Locate single point representing the centre of the chamber
Required Survey Accuracy	Horizontal (XY)	± 100 mm
	Vertical (Z)	± 20 mm
Required Accuracy for Asset Management Purposes	Horizontal (XY)	± 100 mm
	Vertical (Z)	N/A
Object Type	Point	
Asset Class/ADAC Element	<i>StormWater</i> NonGPTSimple	
Extra Comments:		
Description	Stormwater Detention Basin	
Survey Code	326	
Layer Name	SW DBASIN	
Surveyed Location	MRC	String around the toe of bank
	ADAC 5.0.1	Same as MRC
Required Survey Accuracy	Horizontal (XY)	± 100 mm
	Vertical (Z)	± 50 mm
Object Type	Polygon	
Asset Class/ADAC Element	<i>StormWater</i> WSUDArea	
Extra Comments:		
Description	Centre of Bitumen	
Survey Code	401	
Layer Name	RD CN BITU	
Surveyed Location	MRC	String along crown of road
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 25 mm
	Vertical (Z)	± 7 mm
Object Type	Polyline	
Asset Class/ADAC Element	<i>Supplementary</i> PolylineFeature	
Extra Comments:	Used to define centre of bitumen when no line marking is present	
Description	Change of Grade on Bitumen	
Survey Code	402	
Layer Name	CH GRD BIT	

Surveyed Location	MRC	String along change of aspect, change in seal
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 25 mm
	Vertical (Z)	± 7 mm
Object Type	Polyline	
Asset Class/ADAC Element	<i>Supplementary PolylineFeature</i>	
Extra Comments:		
Description	Edge of Bitumen	
Survey Code	403	
Layer Name	RD ED BITU	
Surveyed Location	MRC	String along edge of bitumen where no kerb is present
	ADAC 5.0.1	Same as MRC. Use where appropriate to generate a polygon in the office representing an area of pavement or parking with code “Pavement” or “Parking”. The original edge of bitumen polyline is not a mandatory inclusion in the ADAC XML file.
Required Survey Accuracy	Horizontal (XY)	± 25 mm
	Vertical (Z)	± 7 mm
Object Type	Polyline	
Asset Class/ADAC Element	403 <i>Supplementary PolylineFeature</i> Pavement Transport Pavement Parking Transport Parking	
Extra Comments:		
Description	Edge of Shoulder	
Survey Code	405	
Layer Name	RD ED SHDR	
Surveyed Location	MRC	String along change of aspect closest to edge of bitumen
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 25 mm
	Vertical (Z)	± 20 mm
Object Type	Polyline	
Asset Class/ADAC Element	<i>Supplementary PolylineFeature</i>	
Extra Comments:	May be used instead of 102 (BATTER TOP) for the road side of table drains	
Description	Lip of K&C	
Survey Code	406	
Layer Name	KC LIP	
Surveyed Location	MRC	String part of kerb closest to carriageway
	ADAC 5.0.1	Same as MRC. Use where appropriate on <u>existing</u> kerb to generate a polygon in the office representing an area of pavement or parking with the code

		“Pavement” or “Parking”. The original lip of K&C polyline is not a mandatory inclusion in the ADAC XML.
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Polyline	
Asset Class/ADAC Element	406 <i>Supplementary PolylineFeature</i> Pavement Transport Pavement Parking Transport Parking	
Extra Comments:		
Description	Invert of K&C	
Survey Code	407	
Layer Name	KC INVERT	
Surveyed Location	MRC	String lowest point of kerb
	ADAC 5.0.1	Same as MRC. Use where appropriate on <u>new</u> kerb to generate a polygon in the office representing an area of pavement or parking with the code “Pavement” or “Parking”. The original invert of K&C polyline is not a mandatory inclusion in the ADAC XML.
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Polyline	
Asset Class/ADAC Element	407 <i>Supplementary PolylineFeature</i> Pavement Transport Pavement Parking Transport Parking	
Extra Comments:		
Description	Top of K&C	
Survey Code	408	
Layer Name	KC TOP	
Surveyed Location	MRC	String highest point of kerb
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Polyline	
Asset Class/ADAC Element	<i>Supplementary PolylineFeature</i>	
Extra Comments:		
Description	Back of K&C	
Survey Code	409	
Layer Name	KC BACK	
Surveyed Location	MRC	String the part of kerb the farthest from the carriageway

	ADAC 5.0.1	Same as MRC
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Polyline	
Asset Class/ADAC Element	<i>Transport RoadEdge</i>	
Extra Comments:		
Description	Kerb Only	
Survey Code	410	
Layer Name	KERB ONLY	
Surveyed Location	MRC	String around the part of the kerb closest to the carriageway at the level of the bitumen
	ADAC 5.0.1	Using code A410, string around the back of kerb of traffic islands. Create a new polygon for changes in material type e.g., concrete to grass; stencilled to plain.
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Polyline/Polygon	
Asset Class/ADAC Element	410 <i>Supplementary PolylineFeature, Supplementary PolygonFeature</i> A410 <i>Transport RoadIsland</i>	
Extra Comments:	Mainly used to locate concrete traffic islands	
Description	Footpath	
Survey Code	411	
Layer Name	FOOTPATH	
Surveyed Location	MRC	String the edges of the footpath
	ADAC 5.0.1	Create a polyline in the office with code “Pathway” or “RoadPathway” representing the centreline of the footpath or on-road pathway
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Required Accuracy for Asset Management Purposes	Horizontal (XY)	± 100 mm
	Vertical (Z)	N/A
Object Type	Polyline	
Asset Class/ADAC Element	411 <i>Supplementary PolylineFeature</i> Pathway <i>Transport Pathway</i> RoadPathway <i>Transport RoadPathway</i>	
Extra Comments:		
Description	Driveway	
Survey Code	414	
Layer Name	DRIVEWAY	
Surveyed Location	MRC	String the edges of the structure

	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Polyline/Polygon	
Asset Class/ADAC Element	<i>Supplementary PolylineFeature, Supplementary PolygonFeature</i>	
Extra Comments:		
Description	Driveway – Not on DTM	
Survey Code	415	
Layer Name	DRIVEWAY N	
Surveyed Location	MRC	String around the top edge of the structure or along the centreline of wheel tracks
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Polyline/Polygon	
Asset Class/ADAC Element	<i>Supplementary PolylineFeature, Supplementary PolygonFeature</i>	
Extra Comments:	Mainly used to locate wheel tracks and concrete bridge crossovers	
Description	Tactile Ground Surface Indicators	
Survey Code	416	
Layer Name	TACTILE	
Surveyed Location	MRC	String around perimeter of TGSi area
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Polygon	
Asset Class/ADAC Element	<i>Supplementary PolygonFeature</i>	
Extra Comments:		
Description	Pram Ramp	
Survey Code	417	
Layer Name	PRAM RAMP	
Surveyed Location	MRC	String around the edges of the structure
	ADAC	Using code A417, locate point in centre of pram ramp at invert of kerb
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Polyline/Polygon	
Asset Class/ADAC Element	417 <i>Supplementary PolylineFeature, Supplementary PolygonFeature</i> A417 <i>Transport PramRamp</i>	
Extra Comments:		
Description	Borehole – Geotechnical	

Survey Code	418	
Layer Name	BOREH GEOT	
Surveyed Location	MRC	Locate centre of borehole
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Point	
Asset Class/ADAC Element	<i>Supplementary</i> PointFeature	
Extra Comments:		
Description	Edge of Gravel Road	
Survey Code	419	
Layer Name	RD ED GRAV	
Surveyed Location	MRC	String along edge of gravel
	ADAC 5.0.1	Same as MRC. Use where appropriate to generate a polygon in the office representing an area of pavement or parking with code “Pavement” or “Parking”. The original edge of gravel road polyline is not a mandatory inclusion in the ADAC XML file.
Required Survey Accuracy	Horizontal (XY)	± 25 mm
	Vertical (Z)	± 20 mm
Object Type	Polyline	
Asset Class/ADAC Element	419 <i>Supplementary</i> PolylineFeature Pavement <i>Transport</i> Pavement Parking <i>Transport</i> Parking	
Extra Comments:		
Description	Centre of Gravel Road	
Survey Code	420	
Layer Name	RD CN GRAV	
Surveyed Location	MRC	String along crown of gravel road
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 25 mm
	Vertical (Z)	± 20 mm
Object Type	Polyline	
Asset Class/ADAC Element	<i>Supplementary</i> PolylineFeature	
Extra Comments:		
Description	Edge of Track	
Survey Code	421	
Layer Name	RD ED TRAC	
Surveyed Location	MRC	String along edge of unformed trafficked area

	ADAC 5.0.1	Use where appropriate to generate a polyline in the office with code “PathStructure” representing the centreline of a beach access ramp.
Required Survey Accuracy	Horizontal (XY)	± 50 mm
	Vertical (Z)	± 20 mm
Object Type	Polyline	
Asset Class/ADAC Element	421 <i>Supplementary PolylineFeature</i> PathStructure <i>Transport PathStructure</i>	
Extra Comments:		
Description	Guardrail	
Survey Code	501	
Layer Name	GUARDRAIL	
Surveyed Location	MRC	String around edge of guardrail closest to carriageway
	ADAC 5.0.1	Same as MRC; preferably record point at each upright
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Polyline	
Asset Class/ADAC Element	<i>Transport RoadSafetyBarrier</i>	
Extra Comments:		
Description	Large Signs Strung	
Survey Code	502	
Layer Name	SIGNS STR	
Surveyed Location	MRC	Locate support posts of sign
	ADAC 5.0.1	Locate single point in centre of sign (refer to code 503)
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Polyline	
Asset Class/ADAC Element	<i>Supplementary PolylineFeature</i>	
Extra Comments:		
Description	Signs	
Survey Code	503	
Layer Name	SIGNS	
Surveyed Location	MRC	Locate support post of sign (single)
	ADAC 5.0.1	Same as MRC
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Point	
Asset Class/ADAC Element	<i>OpenSpace Sign</i>	

Extra Comments:		
Description	Letterbox/Postbox	
Survey Code	504	
Layer Name	LETTERBOX	
Surveyed Location	MRC	Locate centre of letterbox/postbox
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Point	
Asset Class/ADAC Element	Supplementary PointFeature	
Extra Comments:		
Description	Traffic Light	
Survey Code	505	
Layer Name	TR SIGNAL	
Surveyed Location	MRC	Locate centre of traffic light post
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Point	
Asset Class/ADAC Element	Supplementary PointFeature	
Extra Comments:		
Description	Traffic Controller Box	
Survey Code	506	
Layer Name	TR CON BOX	
Surveyed Location	MRC	Locate centre of box
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Point	
Asset Class/ADAC Element	Supplementary PointFeature	
Extra Comments:		
Description	Traffic Pit	
Survey Code	507	
Layer Name	TR PIT	
Surveyed Location	MRC	Locate centre of pit lid
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Point	

Asset Class/ADAC Element	<i>Supplementary PointFeature</i>	
Extra Comments:		
Description	Traffic Unclassified	
Survey Code	508	
Layer Name	TR UNC	
Surveyed Location	MRC	Locate centre of feature
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Point	
Asset Class/ADAC Element	<i>Supplementary PointFeature</i>	
Extra Comments:		
Description	Road Furniture Uncl	
Survey Code	509	
Layer Name	FURN RD UN	
Surveyed Location	MRC	Locate centre of feature
	ADAC 5.0.1	N/A – not a mandatory inclusion Use code A509 to locate the centre of bicycle fittings
Required Survey Accuracy	Horizontal (XY)	± 100 mm
	Vertical (Z)	± 20 mm
Object Type	Point	
Asset Class/ADAC Element	509 <i>Supplementary PointFeature</i> A509 <i>OpenSpace BicycleFitting</i>	
Extra Comments:		
Description	Monument	
Survey Code	510	
Layer Name	MONUMENT	
Surveyed Location	MRC	String around outside edge of monument
	ADAC	Using code A510, locate single point in centre of artwork
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Required Accuracy for Asset Management Purposes	Horizontal (XY)	± 500 mm
	Vertical (Z)	N/A
Object Type	Polygon	
Asset Class/ADAC Element	510 <i>Supplementary PolygonFeature</i> A510 <i>OpenSpace Artwork</i>	
Extra Comments:		
Description	Joint Use Pole	
Survey Code	511	

Layer Name	TR JU POLE	
Surveyed Location	MRC	Locate centre of pole used for both traffic signals and street lighting
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Point	
Asset Class/ADAC Element	Supplementary PointFeature	
Extra Comments:		
Description	Traffic Controller Box Strung	
Survey Code	512	
Layer Name	TR CON BOX STR	
Surveyed Location	MRC	String around outside of large box
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Polygon	
Asset Class/ADAC Element	Supplementary PolygonFeature	
Extra Comments:		
Description	Red Light Camera	
Survey Code	515	
Layer Name	TR RED CAM	
Surveyed Location	MRC	Locate centre of support post
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Point	
Asset Class/ADAC Element	Supplementary PointFeature	
Extra Comments:		
Description	Guide Post	
Survey Code	519	
Layer Name	GUIDE POST	
Surveyed Location	MRC	Locate centre of post
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Point	
Asset Class/ADAC Element	Supplementary PointFeature	
Extra Comments:		

Description	Chevrons & Symbols	
Survey Code	530	
Layer Name	PMARK CHEV	
Surveyed Location	MRC	String centre of white line around outside of chevrons; String outside edge of large painted signs and symbols; String the centre of turning arrows
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Polyline/Polygon	
Asset Class/ADAC Element	Supplementary PolylineFeature, Supplementary PolygonFeature	
Extra Comments:		
Description	Unbroken Line – All types, excl. Edge Line	
Survey Code	531	
Layer Name	PMARK SLIN	
Surveyed Location	MRC	String centre of line
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Polyline	
Asset Class/ADAC Element	Supplementary PolylineFeature	
Extra Comments:		
Description	Lane Line	
Survey Code	532	
Layer Name	PMARK LANE	
Surveyed Location	MRC	String centre of line
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Polyline	
Asset Class/ADAC Element	Supplementary PolylineFeature	
Extra Comments:		
Description	Rumble Bars	
Survey Code	540	
Layer Name	PMARK RMBL	
Surveyed Location	MRC	Locate the end points of each string of rumble bars
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm

Object Type	Polyline	
Asset Class/ADAC Element	Supplementary PolylineFeature	
Extra Comments:		
Description	Dividing Line 3 m 9 m	
Survey Code	541	
Layer Name	PMARK SEP39	
Surveyed Location	MRC	String centre of line
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Polyline	
Asset Class/ADAC Element	Supplementary PolylineFeature	
Extra Comments:		
Description	Barrier Line One Direction	
Survey Code	543	
Layer Name	PMARK BARR1	
Surveyed Location	MRC	String centre of line
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Polyline	
Asset Class/ADAC Element	Supplementary PolylineFeature	
Extra Comments:		
Description	Barrier Line Both Directions	
Survey Code	544	
Layer Name	PMARK BARR2	
Surveyed Location	MRC	String centre of line
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Polyline	
Asset Class/ADAC Element	Supplementary PolylineFeature	
Extra Comments:		
Description	Edge Line	
Survey Code	545	
Layer Name	PMARK EDGE	
Surveyed Location	MRC	String centre of line
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm

	Vertical (Z)	± 7 mm
Object Type	Polyline	
Asset Class/ADAC Element	Supplementary PolylineFeature	
Extra Comments:		
Description	Continuity Line	
Survey Code	546	
Layer Name	PMARK CONT	
Surveyed Location	MRC	String centre of line
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Polyline	
Asset Class/ADAC Element	Supplementary PolylineFeature	
Extra Comments:		
Description	Turn Line	
Survey Code	547	
Layer Name	PMARK TURN	
Surveyed Location	MRC	String centre of line
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Polyline	
Asset Class/ADAC Element	Supplementary PolylineFeature	
Extra Comments:		
Description	Stop Line	
Survey Code	548	
Layer Name	PMARK STOP	
Surveyed Location	MRC	String centre of line
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Polyline	
Asset Class/ADAC Element	Supplementary PolylineFeature	
Extra Comments:		
Description	Give Way Line	
Survey Code	550	
Layer Name	PMARK GIVE	
Surveyed Location	MRC	String centre of line
	ADAC 5.0.1	N/A – not a mandatory inclusion

Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Polyline	
Asset Class/ADAC Element	Supplementary PolylineFeature	
Extra Comments:		
Description	Crosswalk Line	
Survey Code	551	
Layer Name	PMARK CROSS	
Surveyed Location	MRC	String centre of line
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Polyline	
Asset Class/ADAC Element	Supplementary PolylineFeature	
Extra Comments:		
Description	Parking Line	
Survey Code	552	
Layer Name	PMARK PARK	
Surveyed Location	MRC	String centre of line
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Polyline	
Asset Class/ADAC Element	Supplementary PolylineFeature	
Extra Comments:		
Description	Exit line at multilane roundabout	
Survey Code	553	
Layer Name	PMARK EXIT	
Surveyed Location	MRC	String centre of line
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Polyline	
Asset Class/ADAC Element	Supplementary PolylineFeature	
Extra Comments:		
Description	Wall	
Survey Code	600	
Layer Name	WALL	
Surveyed Location	MRC	String outside edge of wall at ground level

	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Polyline	
Asset Class/ADAC Element	<i>Supplementary PolylineFeature</i>	
Extra Comments:		
Description	Awning/Eaves	
Survey Code	601	
Layer Name	AWNING	
Surveyed Location	MRC	String bottom, outside edge of awning
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Polyline/Polygon	
Asset Class/ADAC Element	<i>Supplementary PolylineFeature, Supplementary PolygonFeature</i>	
Extra Comments:		
Description	Shed	
Survey Code	602	
Layer Name	SHED	
Surveyed Location	MRC	String outside edge of structure at ground level
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Polyline/Polygon	
Asset Class/ADAC Element	<i>Supplementary PolylineFeature, Supplementary PolygonFeature</i>	
Extra Comments:		
Description	Building	
Survey Code	603	
Layer Name	BUILDING	
Surveyed Location	MRC	String outside edge of structure at ground level
	ADAC 5.0.1	Same as MRC
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Polygon	
Asset Class/ADAC Element	<i>OpenSpace Building</i>	
Extra Comments:		
Description	Verandah	
Survey Code	604	
Layer Name	VERANDAH	

Surveyed Location	MRC	String the outside edge of verandah at the deck level
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Polyline/Polygon	
Asset Class/ADAC Element	<i>Supplementary PolylineFeature, Supplementary PolygonFeature</i>	
Extra Comments:		
Description	Steps	
Survey Code	605	
Layer Name	STEPS	
Surveyed Location	MRC	String each tread
	ADAC 5.0.1	Using code “PathStructure” create a polyline in the office representing the longitudinal centreline of the steps when they form part of a pathway
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Polyline/Polygon	
Asset Class/ADAC Element	605 <i>Supplementary PolylineFeature, Supplementary PolygonFeature</i> PathStructure <i>Transport PathStructure</i>	
Extra Comments:		
Description	Bridge	
Survey Code	606	
Layer Name	BRIDGE	
Surveyed Location	MRC	String the top of the bridge structure recording changes of level i.e., string the bridge deck and the top of the bridge abutments
	ADAC 5.0.1	Road – N/A Footbridge - Using code “PathStructure” create a polyline in the office representing the longitudinal centreline of the bridge
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Polyline/Polygon	
Asset Class/ADAC Element	606 <i>Supplementary PolylineFeature, Supplementary PolygonFeature</i> PathStructure <i>Transport PathStructure</i>	
Extra Comments:		
Description	Concrete Slab	
Survey Code	607	
Layer Name	SLAB CONC	
Surveyed Location	MRC	String top, outside edge of slab
	ADAC 5.0.1	N/A – not a mandatory inclusion

		Use where appropriate to generate a polygon in the office representing a boat ramp with the code “BoatingFacility”
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Polyline/Polygon	
Asset Class/ADAC Element	607 <i>Supplementary PolylineFeature, Supplementary PolygonFeature</i> BoatingFacility <i>OpenSpace</i> BoatingFacility	
Extra Comments:	When the top of a concrete slab is higher than the surrounding ground level, use 105 (CH GRADE) to string around the base of the slab	
Description	Structure – Unclassified	
Survey Code	610	
Layer Name	STRUCT UNC	
Surveyed Location	MRC	String around the outside of the structure
	ADAC 5.0.1	Pathway Structure – Using code “PathStructure” create a polyline in the office representing the longitudinal centreline of the structure if it is part of a pathway
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Polyline/Polygon	
Asset Class/ADAC Element	610 <i>Supplementary PolylineFeature, Supplementary PolygonFeature</i> PathStructure <i>Transport</i> PathStructure	
Extra Comments:		
Description	Swimming Pool	
Survey Code	611	
Layer Name	SWIM POOL	
Surveyed Location	MRC	String around the edge of the pool
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Polyline/Polygon	
Asset Class/ADAC Element	<i>Supplementary PolylineFeature, Supplementary PolygonFeature</i>	
Extra Comments:		
Description	Bore/Well	
Survey Code	613	
Layer Name	WELL BORE	
Surveyed Location	MRC	Locate the outside edge of the bore
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm

Object Type	Polyline/Polygon	
Asset Class/ADAC Element	<i>Supplementary PolylineFeature, Supplementary PolygonFeature</i>	
Extra Comments:		
Description	Sports Arena/Field	
Survey Code	616	
Layer Name	OVAL SPORT	
Surveyed Location	MRC	String around the perimeter of the open area
	ADAC 5.0.1	Same as MRC
Required Survey Accuracy	Horizontal (XY)	± 100 mm
	Vertical (Z)	± 25 mm
Object Type	Polyline/Polygon	
Asset Class/ADAC Element	<i>OpenSpace ActivityArea</i>	
Extra Comments:		
Description	Retaining Wall	
Survey Code	620	
Layer Name	RET WALL	
Surveyed Location	MRC	String around the outside edge of the retaining wall at top and bottom
	ADAC 5.0.1	String the outside edge of the retaining wall at ground level. If the retaining wall changes height over its length, the highest point of the wall is adopted as the height.
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Polyline	
Asset Class/ADAC Element	<i>OpenSpace RetainingWall</i>	
Extra Comments:		
Description	Tank - General	
Survey Code	625	
Layer Name	TANK ABOVE	
Surveyed Location	MRC	String around outside edge of tank
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Polyline/Polygon	
Asset Class/ADAC Element	<i>Supplementary PolylineFeature, Supplementary PolygonFeature</i>	
Extra Comments:		
Description	Floor Level	
Survey Code	628	
Layer Name	FLOOR LEVE	

Surveyed Location	MRC	Locate single point at floor level
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Point	
Asset Class/ADAC Element	<i>Supplementary Point</i> Feature	
Extra Comments:	Also used to record the floor level of manhole chambers and stormwater pits when required in addition to pipe inverts	
Description	Park – Bench Seat	
Survey Code	629	
Layer Name	PARK SEAT	
Surveyed Location	MRC	String outside edge of seat - usually the top of the concrete slab upon which the seat sits
	ADAC 5.0.1	Using code A629, locate a single point in the centre of the (isolated) seat
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Required Accuracy for Asset Management Purposes	Horizontal (XY)	± 500 mm
	Vertical (Z)	N/A
Object Type	Polygon	
Asset Class/ADAC Element	629 <i>Supplementary Polygon</i> Feature A629 <i>OpenSpace</i> Seat	
Extra Comments:		
Description	Park – Playground Equipment	
Survey Code	630	
Layer Name	PARK EQUIP	
Surveyed Location	MRC	String around the outside edge of the soft fall area
	ADAC 5.0.1	Same as MRC. In addition, using code A630, locate the centre of each piece of equipment
Required Survey Accuracy	Horizontal (XY)	± 100 mm
	Vertical (Z)	± 20 mm
Required Accuracy for Asset Management Purposes	Horizontal (XY)	± 500 mm
	Vertical (Z)	N/A
Object Type	Polygon	
Asset Class/ADAC Element	630 <i>OpenSpace</i> ActivityArea A630 <i>OpenSpace</i> ActivityPoint	
Extra Comments:		
Description	Park – Table/Chairs on Slab	
Survey Code	631	
Layer Name	PARK TABLE	

Surveyed Location	MRC	String outside edge of the table and chairs – usually the top of the concrete slab when the table and chairs are sitting on an individual slab
	ADAC 5.0.1	Using code A631, locate a single point in the centre of the table
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Required Accuracy for Asset Management Purposes	Horizontal (XY)	± 500 mm
	Vertical (Z)	N/A
Object Type	Polygon	
Asset Class/ADAC Element	631 <i>Supplementary PolygonFeature</i> A631 <i>OpenSpace Table</i>	
Extra Comments:	When multiple tables and chairs are sitting on a concrete slab with other park equipment, string the outside edge of the table and chairs and use 607 (SLAB CONC) to record the location of the single slab	
Description	Park - Barbeque	
Survey Code	632	
Layer Name	PARK BBQ	
Surveyed Location	MRC	String the outside edge of the BBQ – usually the top of the concrete slab when the BBQ is sitting on an individual slab
	ADAC 5.0.1	Using code A632, locate a single point in the centre of the BBQ
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Required Accuracy for Asset Management Purposes	Horizontal (XY)	± 500 mm
	Vertical (Z)	N/A
Object Type	Polygon	
Asset Class/ADAC Element	632 <i>Supplementary PolygonFeature</i> A632 <i>OpenSpace Barbeque</i>	
Extra Comments:	When a BBQ is sitting on a concrete slab with other park equipment, string the outside edge of the BBQ and use 607 (SLAB CONC) to record the location of the single slab	
Description	Park – Rubbish Bin	
Survey Code	633	
Layer Name	PARK RUBBI	
Surveyed Location	MRC	String the outside edge of the bin – usually the top of the concrete slab upon which the bin sits
	ADAC 5.0.1	Using code A633, locate a single point in the centre of the bin
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
	Horizontal (XY)	± 500 m

Required Accuracy for Asset Management Purposes	Vertical (Z)	N/A
Object Type	Polygon	
Asset Class/ADAC Element	633 <i>Supplementary PolygonFeature</i> A633 <i>OpenSpace WasteCollectionPoint</i>	
Extra Comments:		
Description	Park – Shelter	
Survey Code	636	
Layer Name	PARK SHELTER	
Surveyed Location	MRC	String the roofline of the shelter
	ADAC 5.0.1	Using code A636, locate a single point in the centre of any Open Space Shelters
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Required Accuracy for Asset Management Purposes	Horizontal (XY)	± 500 m
	Vertical (Z)	N/A
Object Type	Polygon	
Asset Class/ADAC Element	636 <i>OpenSpace Shelter_Polygon</i> A636 <i>OpenSpace Shelter</i>	
Extra Comments:		
Description	Irrigation Sprinkler Head	
Survey Code	640	
Layer Name	IRR SPRINKLER	
Surveyed Location	MRC	Locate the centre of the sprinkler head
	ADAC 5.0.1	Same as MRC
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Point	
Asset Class/ADAC Element	<i>WaterSupply</i> IrrigationFitting	
Extra Comments:		
Description	Irrigation Pit	
Survey Code	641	
Layer Name	IRR PIT	
Surveyed Location	MRC	Locate the centre of the pit lid
	ADAC 5.0.1	Same as MRC
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Point	
Asset Class/ADAC Element	<i>Supplementary</i> PointFeature	
Extra Comments:		

Description	Irrigation Underground	
Survey Code	645	
Layer Name	IRR UNDERG	
Surveyed Location	MRC	Locate the centreline of the pipework
	ADAC 5.0.1	String the centreline of the pipe; Using code A755, locate the centre of any fittings e.g., Tees and Tapping Bands
Required Survey Accuracy Refer to AS 5488.1:2019 Classification of Subsurface Utility Information	Horizontal (XY)	Quality Level A – ± 50 mm Quality Level B – ± 300 mm Quality Level C – ± 300 mm Quality Level D – Existing Record
	Vertical (Z)	Quality Level A – ± 50 mm Quality Level B – ± 500 mm Quality Level C – N/A Quality Level D – Existing Record
Object Type	Polyline	
Asset Class/ADAC Element	645 WaterSupply Pipe A755 WaterSupply Fitting	
Extra Comments:		
Description	Bus Shelter	
Survey Code	650	
Layer Name	BUS SHELTR	
Surveyed Location	MRC	String the outside edge of the shelter – usually the top of the concrete slab upon which the shelter sits
	ADAC 5.0.1	Using code A636, locate single point in centre of bus/general shelter structure
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Required Accuracy for Asset Management Purposes	Horizontal (XY)	± 500 mm
	Vertical (Z)	N/A
Object Type	Polygon	
Asset Class/ADAC Element	650 Supplementary PolygonFeature A636 OpenSpace Shelter	
Extra Comments:		
Description	Electricity Marker	
Survey Code	706	
Layer Name	EL MARK P	
Surveyed Location	MRC	Locate the centre of the marker
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Point	

Asset Class/ADAC Element	<i>Supplementary PointFeature</i>	
Extra Comments:		
Description	Electricity Substation on ground	
Survey Code	707	
Layer Name	EL SUBSTN	
Surveyed Location	MRC	Locate the outside edge of the substation – usually the top of the concrete slab upon which the substation sits
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Polygon	
Asset Class/ADAC Element	<i>Supplementary PolygonFeature</i>	
Extra Comments:		
Description	Staywire	
Survey Code	708	
Layer Name	STAY	
Surveyed Location	MRC	Locate the end of the staywire where it meets the ground and string to the pole
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Polyline	
Asset Class/ADAC Element	<i>Supplementary PolylineFeature</i>	
Extra Comments:		
Description	Staypole	
Survey Code	709	
Layer Name	EL STAYPOL	
Surveyed Location	MRC	Locate the centre of the pole and record the pole number as vertex text
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 30 mm
	Vertical (Z)	± 20 mm
Object Type	Point	
Asset Class/ADAC Element	<i>Supplementary PointFeature</i>	
Extra Comments:		
Description	Electricity Manhole/Box Strung	
Survey Code	710	
Layer Name	EL MH STR	
Surveyed Location	MRC	String around edge of lid

	ADAC 5.0.1	Using code 716, locate a single point in the centre of the manhole
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Polygon	
Asset Class/ADAC Element	710 <i>Supplementary</i> PolygonFeature 716 <i>OpenSpace</i> ElectricalFitting	
Extra Comments:		
Description	Light Pole + no.	
Survey Code	711	
Layer Name	EL PP	
Surveyed Location	MRC	Locate the centre of the pole and record the pole number as vertex text
	ADAC 5.0.1	Locate the centre of the pole
Required Survey Accuracy	Horizontal (XY)	± 30 mm
	Vertical (Z)	± 20 mm
Object Type	Point	
Asset Class/ADAC Element	<i>OpenSpace</i> ElectricalFitting	
Extra Comments:		
Description	Electricity Pole Only + no.	
Survey Code	712	
Layer Name	EL PP	
Surveyed Location	MRC	Locate the centre of the pole and record the pole number as vertex text
	ADAC 5.0.1	Locate the centre of the pole
Required Survey Accuracy	Horizontal (XY)	± 30 mm
	Vertical (Z)	± 20 mm
Object Type	Point	
Asset Class/ADAC Element	<i>OpenSpace</i> ElectricalFitting	
Extra Comments:		
Description	Electricity Pole with Light + no.	
Survey Code	713	
Layer Name	EL PLP	
Surveyed Location	MRC	Locate the centre of the pole and record the pole number as vertex text
	ADAC 5.0.1	Locate the centre of the pole
Required Survey Accuracy	Horizontal (XY)	± 30 mm
	Vertical (Z)	± 20 mm
Object Type	Point	
Asset Class/ADAC Element	<i>OpenSpace</i> ElectricalFitting	

Extra Comments:		
Description	Electricity Unclassified	
Survey Code	715	
Layer Name	EL UNC	
Surveyed Location	MRC	Locate the centre of the feature
	ADAC 5.0.1	Same as MRC
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Point	
Asset Class/ADAC Element	OpenSpace ElectricalFitting	
Extra Comments:		
Description	Electricity Pit	
Survey Code	716	
Layer Name	EL PIT	
Surveyed Location	MRC	Locate the centre of the pit lid
	ADAC 5.0.1	Same as MRC
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Point	
Asset Class/ADAC Element	OpenSpace ElectricalFitting	
Extra Comments:		
Description	Electricity Line Overhead	
Survey Code	717	
Layer Name	EL OVERHEA	
Surveyed Location	MRC	String the overhead line between poles
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Polyline	
Asset Class/ADAC Element	Supplementary PolylineFeature	
Extra Comments:	Mainly used to record the sag of overhead lines where the line crosses a road	
Description	Electricity Line Underground	
Survey Code	718	
Layer Name	EL UNDERG	
Surveyed Location	MRC	String the centreline of the cable/conduit, record vertical surveyed location as a note e.g., paint mark on surface
	ADAC 5.0.1	String the centreline of the cable/conduit
Required Survey Accuracy	Horizontal (XY)	Quality Level A – ± 50 mm

Refer to AS 5488.1:2019 Classification of Subsurface Utility Information		Quality Level B – ± 300 mm Quality Level C – ± 300 mm Quality Level D – Existing Record
	Vertical (Z)	Quality Level A – ± 50 mm Quality Level B – ± 500 mm Quality Level C – N/A Quality Level D – Existing Record
Object Type	Polyline	
Asset Class/ADAC Element	OpenSpace ElectricalConduit	
Extra Comments:		
Description	Electricity Pillar	
Survey Code	719	
Layer Name	EL PILLAR	
Surveyed Location	MRC	Locate the centre of the pillar
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Point	
Asset Class/ADAC Element	OpenSpace PointFeature	
Extra Comments:		
Description	Communications Manhole/Box Strung	
Survey Code	720	
Layer Name	COMMS MH STR	
Surveyed Location	MRC	String around edge of lid/s
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Polygon	
Asset Class/ADAC Element	Supplementary PolygonFeature	
Extra Comments:	For single (usually concrete) lids, see 721 (COMMS PIT)	
Description	Communications Pit	
Survey Code	721	
Layer Name	COMMS PIT	
Surveyed Location	MRC	Locate the centre of the pit
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Point	
Asset Class/ADAC Element	Supplementary PointFeature	
Extra Comments:	For large multiple lids, see 720 (COMMS MH STR)	

Description	Communications Pillar	
Survey Code	722	
Layer Name	COMMS PILLAR	
Surveyed Location	MRC	Locate the centre of the pillar
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Point	
Asset Class/ADAC Element	Supplementary PointFeature	
Extra Comments:		
Description	Communications Marker	
Survey Code	723	
Layer Name	COMMS MARK P	
Surveyed Location	MRC	Locate the centre of the marker
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Point	
Asset Class/ADAC Element	Supplementary PointFeature	
Extra Comments:		
Description	Communications Pole + no.	
Survey Code	724	
Layer Name	COMMS POLE	
Surveyed Location	MRC	Locate the centre of the pole and record the pole number as vertex text
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 30 mm
	Vertical (Z)	± 20 mm
Object Type	Point	
Asset Class/ADAC Element	Supplementary PointFeature	
Extra Comments:		
Description	Communications Cabinet	
Survey Code	725	
Layer Name	COMMS PHONEB	
Surveyed Location	MRC	Locate the outside edge of the phone box – usually the top of the concrete slab upon which the phone box sits
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm

Object Type	Polygon	
Asset Class/ADAC Element	<i>Supplementary Polygon</i> Feature	
Extra Comments:		
Description	Communications Unclassified	
Survey Code	726	
Layer Name	COMMS UNC	
Surveyed Location	MRC	Locate the centre of the feature
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Point	
Asset Class/ADAC Element	<i>Supplementary Point</i> Feature	
Extra Comments:		
Description	Communications Lines Overhead	
Survey Code	727	
Layer Name	COMMS OVERHE	
Surveyed Location	MRC	String the overhead line between poles
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Polyline	
Asset Class/ADAC Element	<i>Supplementary Polyline</i> Feature	
Extra Comments:	Mainly used to record the sag of overhead lines where the line crosses a road	
Description	Communications Lines Underground	
Survey Code	728	
Layer Name	COMMS UNDERG	
Surveyed Location	MRC	String the centreline of the cable/conduit
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy Refer to AS 5488.1:2019 Classification of Subsurface Utility Information	Horizontal (XY)	Quality Level A – ± 50 mm Quality Level B – ± 300 mm Quality Level C – ± 300 mm Quality Level D – Existing Record
	Vertical (Z)	Quality Level A – ± 50 mm Quality Level B – ± 500 mm Quality Level C – N/A Quality Level D – Existing Record
Object Type	Polyline	
Asset Class/ADAC Element	<i>Supplementary Polyline</i> Feature	
Extra Comments:		

Description	Optic Fibre Underground	
Survey Code	729	
Layer Name	OPT UNDERG	
Surveyed Location	MRC	String the centreline of the cable/conduit
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy Refer to AS 5488.1:2019 Classification of Subsurface Utility Information	Horizontal (XY)	Quality Level A – ± 50 mm Quality Level B – ± 300 mm Quality Level C – ± 300 mm Quality Level D – Existing Record
	Vertical (Z)	Quality Level A – ± 50 mm Quality Level B – ± 500 mm Quality Level C – N/A Quality Level D – Existing Record
Object Type	Polyline	
Asset Class/ADAC Element	Supplementary PolylineFeature	
Extra Comments:		
Description	Electricity Conduit Crown	
Survey Code	730	
Layer Name	EL CROWN	
Surveyed Location	MRC	Locate the crown of the conduit
	ADAC 5.0.1	N/A – not a mandatory inclusion Refer to code 718 (EL UNDERG)
Required Survey Accuracy	Horizontal (XY)	± 50 mm
	Vertical (Z)	± 7 mm
Object Type	Point	
Asset Class/ADAC Element	Supplementary PointFeature	
Extra Comments:	Mainly used to record the location of underground services that have been vacuum excavated.	
Description	Communications Conduit Crown	
Survey Code	731	
Layer Name	COMMS CROWN	
Surveyed Location	MRC	Locate the crown of the conduit
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 50 mm
	Vertical (Z)	± 7 mm
Object Type	Point	
Asset Class/ADAC Element	Supplementary PointFeature	
Extra Comments:	Mainly used to record the location of underground services that have been vacuum excavated.	
Description	Optic Fibre Crown	
Survey Code	732	

Layer Name	OPT CROWN	
Surveyed Location	MRC	Locate the crown of the conduit
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 50 mm
	Vertical (Z)	± 7 mm
Object Type	Point	
Asset Class/ADAC Element	<i>Supplementary</i> PointFeature	
Extra Comments:	Mainly used to record the location of underground services that have been vacuum excavated.	
Description	Gas Manhole/Box Strung	
Survey Code	734	
Layer Name	GAS MH STR	
Surveyed Location	MRC	String around edge of lid
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Polygon	
Asset Class/ADAC Element	<i>Supplementary</i> PolygonFeature	
Extra Comments:		
Description	Gas Valve	
Survey Code	735	
Layer Name	GAS VALVE	
Surveyed Location	MRC	Locate the centre of the valve
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Required Accuracy for Asset Management Purposes	Horizontal (XY)	± 50 mm
	Vertical (Z)	± 100 mm
Object Type	Point	
Asset Class/ADAC Element	<i>Supplementary</i> PointFeature	
Extra Comments:		
Description	Gas Marker	
Survey Code	736	
Layer Name	GAS MARK P	
Surveyed Location	MRC	Locate the centre of the marker
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Point	

Asset Class/ADAC Element	<i>Supplementary PointFeature</i>	
Extra Comments:		
Description	Gas Unclassified	
Survey Code	737	
Layer Name	GAS UNC	
Surveyed Location	MRC	Locate the centre of the feature
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Point	
Asset Class/ADAC Element	<i>Supplementary PointFeature</i>	
Extra Comments:		
Description	Gas Underground	
Survey Code	738	
Layer Name	GAS UNDERG	
Surveyed Location	MRC	String the centreline of the pipe
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy Refer to AS 5488.1:2019 <i>Classification of Subsurface Utility Information</i>	Horizontal (XY)	Quality Level A – ± 50 mm Quality Level B – ± 300 mm Quality Level C – ± 300 mm Quality Level D – Existing Record
	Vertical (Z)	Quality Level A – ± 50 mm Quality Level B – ± 500 mm Quality Level C – N/A Quality Level D – Existing Record
Object Type	Polyline	
Asset Class/ADAC Element	<i>Supplementary PolylineFeature</i>	
Extra Comments:		
Description	Sewer Manhole/Box Strung	
Survey Code	740	
Layer Name	SEW MH STR	
Surveyed Location	MRC	String around edge of lid
	ADAC 5.0.1	Using code A741, locate a single point representing the centre of chamber
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Polygon	
Asset Class/ADAC Element	740 <i>Supplementary PolygonFeature</i> A741 <i>Sewerage MaintenanceHole</i>	
Extra Comments:		

Description	Sewer Manhole	
Survey Code	741	
Layer Name	SEW MH	
Surveyed Location	MRC	Single point in centre of round manhole lid
	ADAC 5.0.1	Using code A741, locate a single point representing the centre of chamber
Required Survey Accuracy	Horizontal (XY)	± 30 mm
	Vertical (Z)	± 7 mm
Required Accuracy for Asset Management Purposes	Horizontal (XY)	± 50 mm
	Vertical (Z)	± 100 mm
Object Type	Point	
Asset Class/ADAC Element	741 <i>Supplementary</i> PointFeature A741 <i>Sewerage</i> MaintenanceHole	
Extra Comments:	If part of the chamber is above the surrounding ground level, string around the top edge of the chamber using 607 (SLAB CONC) and string around the chamber at ground level using 105 (CH GRADE)	
Description	Sewer Unclassified	
Survey Code	742	
Layer Name	SEW UNC	
Surveyed Location	MRC	Locate the centre of the feature
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Point	
Asset Class/ADAC Element	<i>Supplementary</i> PointFeature	
Extra Comments:		
Description	Sewer Underground	
Survey Code	743	
Layer Name	SEW UNDERG	
Surveyed Location	MRC	String the centreline of the pipe, record vertical surveyed location as a note e.g., paint mark on surface
	ADAC 5.0.1	String the centreline of the pipe using code 743 for pipes and code A743 for connections breaking the polyline where there are changes in pipe size, material, class embedment, direction etc.; Using code A742, locate the centre of any fittings
Required Survey Accuracy Refer to AS 5488.1:2019 <i>Classification of Subsurface Utility Information</i>	Horizontal (XY)	Quality Level A – ± 50 mm Quality Level B – ± 300 mm Quality Level C – ± 300 mm Quality Level D – Existing Record
	Vertical (Z)	Quality Level A – ± 50 mm Quality Level B – ± 500 mm

		Quality Level C – N/A Quality Level D – Existing Record
Object Type	Polyline	
Asset Class/ADAC Element	743 Sewerage Pipe NonPressure, Sewerage PipePressure A743 Sewerage Connection A742 Sewerage Fitting	
Extra Comments:		
Description	Sewer – Rising Main Valve	
Survey Code	744	
Layer Name	SEW VALVE	
Surveyed Location	MRC	Locate the centre of the valve lid
	ADAC 5.0.1	Using code A744, locate the centre of the valve body
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Required Accuracy for Asset Management Purposes	Horizontal (XY)	± 50 mm
	Vertical (Z)	± 100 mm
Object Type	Point	
Asset Class/ADAC Element	744 Supplementary Point Feature A744 Sewerage Valve	
Extra Comments:		
Description	Sewer Invert	
Survey Code	745	
Layer Name	SEW INV	
Surveyed Location	MRC	Locate invert of pipe, record diameter as vertex text
	ADAC 5.0.1	NA – not a mandatory inclusion Refer to code 743 (SEW UNDERG)
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Point	
Asset Class/ADAC Element	Supplementary PointFeature	
Extra Comments:		
Description	Sewer Crown	
Survey Code	746	
Layer Name	SEW CROWN	
Surveyed Location	MRC	Locate the crown of the conduit
	ADAC 5.0.1	N/A – not a mandatory inclusion Refer to code 743 (SEW UNDERG)
Required Survey Accuracy	Horizontal (XY)	± 50 mm
	Vertical (Z)	± 7 mm
Object Type	Point	

Asset Class/ADAC Element	<i>Supplementary PointFeature</i>	
Extra Comments:	Mainly used to record the location of underground services that have been vacuum excavated.	
Description	Sewer Vent Pole	
Survey Code	747	
Layer Name	SEW VENT	
Surveyed Location	MRC	Locate the centre of vent pole
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 30 mm
	Vertical (Z)	± 20 mm
Object Type	Point	
Asset Class/ADAC Element	<i>Supplementary PointFeature</i>	
Extra Comments:		
Description	Water Manhole/Box Strung	
Survey Code	750	
Layer Name	WAT MH STR	
Surveyed Location	MRC	Locate edge of the lid
	ADAC 5.0.1	Using code A750, locate a single point representing the centre of chamber
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Required Accuracy for Asset Management Purposes	Horizontal (XY)	± 50 mm
	Vertical (Z)	± 100 mm
Object Type	Polygon	
Asset Class/ADAC Element	750 <i>Supplementary PolygonFeature</i> A750 <i>WaterSupply MaintenanceHole</i>	
Extra Comments:		
Description	Water Valve	
Survey Code	751	
Layer Name	WAT VALVE	
Surveyed Location	MRC	Locate the centre of the valve lid
	ADAC 5.0.1	Using code A751, locate the top of spindle
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Required Accuracy for Asset Management Purposes	Horizontal (XY)	± 50 mm
	Vertical (Z)	± 100 mm
Object Type	Point	
Asset Class/ADAC Element	751 <i>Supplementary PointFeature</i> A751 <i>WaterSupply Valve</i>	
Extra Comments:		

Description	Water Tap	
Survey Code	752	
Layer Name	WAT TAP	
Surveyed Location	MRC	Locate the centre of the tap post
	ADAC 5.0.1	Same as MRC, otherwise locate centre of feature
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Point	
Asset Class/ADAC Element	WaterSupply ServiceFitting	
Extra Comments:	Also used to record the location of beach showers	
Description	Fire Hydrant	
Survey Code	753	
Layer Name	WAT HYDRNT	
Surveyed Location	MRC	Locate the centre of the hydrant lid
	ADAC 5.0.1	Using code A753, locate the centre of the vertical hydrant branch
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Required Accuracy for Asset Management Purposes	Horizontal (XY)	± 50 mm
	Vertical (Z)	± 100 mm
Object Type	Point	
Asset Class/ADAC Element	753 Supplementary PointFeature A753 WaterSupply Hydrant	
Extra Comments:		
Description	Water Meter	
Survey Code	754	
Layer Name	WAT METER	
Surveyed Location	MRC	Locate centre of meter
	ADAC 5.0.1	Same as MRC
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Required Accuracy for Asset Management Purposes	Horizontal (XY)	± 50 mm
	Vertical (Z)	± 100 mm
Object Type	Point	
Asset Class/ADAC Element	WaterSupply Meter	
Extra Comments:		
Description	Water Unclassified	
Survey Code	755	
Layer Name	WAT UNC	

Surveyed Location	MRC	Locate centre of feature
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Point	
Asset Class/ADAC Element	<i>Supplementary PointFeature</i>	
Extra Comments:		
Description	Water Underground	
Survey Code	756	
Layer Name	WAT UNDERG	
Surveyed Location	MRC	String the centreline of the pipe, record vertical surveyed location as a note e.g., paint mark on surface
	ADAC 5.0.1	String the centreline of the pipe; Using code A755, locate the centre of any fittings e.g., Tees and Tapping Bands
Required Survey Accuracy Refer to AS 5488.1:2019 <i>Classification of Subsurface Utility Information</i>	Horizontal (XY)	Quality Level A – ± 50 mm Quality Level B – ± 300 mm Quality Level C – ± 300 mm Quality Level D – Existing Record
	Vertical (Z)	Quality Level A – ± 50 mm Quality Level B – ± 500 mm Quality Level C – N/A Quality Level D – Existing Record
Object Type	Polyline	
Asset Class/ADAC Element	<i>WaterSupply Pipe</i>	
Extra Comments:		
Description	Water – Reservoir	
Survey Code	757	
Layer Name	WAT RESERV	
Surveyed Location	MRC	String chords around the outside edge of the reservoir at ground level
	ADAC 5.0.1	Locate a single point in the centre of the tank
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Required Accuracy for Asset Management Purposes	Horizontal (XY)	± 500 mm
	Vertical (Z)	N/A
Object Type	Polyline/Polygon	
Asset Class/ADAC Element	757 <i>Supplementary PolylineFeature, Supplementary PolygonFeature</i> A757 <i>WaterSupply StorageTank</i>	
Extra Comments:		
Description	Watermain Crown	

Survey Code	758	
Layer Name	WAT CROWN	
Surveyed Location	MRC	Locate the crown of the pipe
	ADAC 5.0.1	N/A – not a mandatory inclusion Refer to code 756 (WAT UNDERG)
Required Survey Accuracy	Horizontal (XY)	± 50 mm
	Vertical (Z)	± 7 mm
Object Type	Point	
Asset Class/ADAC Element	<i>Supplementary PointFeature</i>	
Extra Comments:	Mainly used to record the location of underground services that have been vacuum excavated.	
Description	Water Marker	
Survey Code	759	
Layer Name	WAT MARK P	
Surveyed Location	MRC	Locate the centre of the marker
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Point	
Asset Class/ADAC Element	<i>Supplementary PointFeature</i>	
Extra Comments:		
Description	Water Service	
Survey Code	760	
Layer Name	WAT SERVICE	
Surveyed Location	MRC	String the centreline of the domestic sized service, record vertical surveyed location as a note e.g., paint mark on surface
	ADAC 5.0.1	String the centreline of the domestic sized service; Using code 752, locate the centre of any service fittings e.g., Taps
Required Survey Accuracy Refer to AS 5488.1:2019 <i>Classification of Subsurface Utility Information</i>	Horizontal (XY)	Quality Level A – ± 50 mm Quality Level B – ± 300 mm Quality Level C – ± 300 mm Quality Level D – Existing Record
	Vertical (Z)	Quality Level A – ± 50 mm Quality Level B – ± 500 mm Quality Level C – N/A Quality Level D – Existing Record
Object Type	Polyline	
Asset Class/ADAC Element	<i>WaterSupply Service</i>	
Extra Comments:		
Description	Unclassified Pit	

Survey Code	762	
Layer Name	UNCL PIT	
Surveyed Location	MRC	Locate the centre of the pit
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Point	
Asset Class/ADAC Element	<i>Supplementary PointFeature</i>	
Extra Comments:		
Description	Unclassified Pole	
Survey Code	763	
Layer Name	UNCL POLE	
Surveyed Location	MRC	Locate the centre of the pole
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Point	
Asset Class/ADAC Element	<i>Supplementary PointFeature</i>	
Extra Comments:		
Description	Unclassified Utility	
Survey Code	764	
Layer Name	UNCL UTILI	
Surveyed Location	MRC	Locate the centre of the utility
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Point	
Asset Class/ADAC Element	<i>Supplementary PointFeature</i>	
Extra Comments:		
Description	Unclassified Manhole/Box Strung	
Survey Code	765	
Layer Name	UNCL MHSTR	
Surveyed Location	MRC	String around edge of lid
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Polygon	
Asset Class/ADAC Element	<i>Supplementary PolygontFeature</i>	

Extra Comments:		
Description	Railway Line	
Survey Code	801	
Layer Name	RLY LINE	
Surveyed Location	MRC	String along top of each track
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Polyline	
Asset Class/ADAC Element	Supplementary PolylineFeature	
Extra Comments:		
Description	Railways Boom Gate	
Survey Code	802	
Layer Name	RLY BOOMGA	
Surveyed Location	MRC	Locate the centre of the support post of the boom gate
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 30 mm
	Vertical (Z)	± 20 mm
Object Type	Point	
Asset Class/ADAC Element	Supplementary PointFeature	
Extra Comments:		
Description	Railways Signals Pole	
Survey Code	803	
Layer Name	RLY SIGPOL	
Surveyed Location	MRC	Locate the centre of the pole
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 30 mm
	Vertical (Z)	± 20 mm
Object Type	Point	
Asset Class/ADAC Element	Supplementary PointFeature	
Extra Comments:		
Description	Railways Signal Box	
Survey Code	804	
Layer Name	RLY SIGBOX	
Surveyed Location	MRC	Locate the centre of the box
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm

Object Type	Point	
Asset Class/ADAC Element	Supplementary PointFeature	
Extra Comments:		
Description	Railways Switch	
Survey Code	805	
Layer Name	RLY SWITCH	
Surveyed Location	MRC	Locate the centre of the switch
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Point	
Asset Class/ADAC Element	Supplementary PointFeature	
Extra Comments:		
Description	Railways Unclassified	
Survey Code	806	
Layer Name	RLY UNC	
Surveyed Location	MRC	Locate the centre of the feature
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Point	
Asset Class/ADAC Element	Supplementary PointFeature	
Extra Comments:		
Description	Cattle Grid	
Survey Code	901	
Layer Name	GRID	
Surveyed Location	MRC	String edge of cattle grid at road level
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 7 mm
Object Type	Polygon	
Asset Class/ADAC Element	Supplementary PolygonFeature	
Extra Comments:		
Description	Fence	
Survey Code	902	
Layer Name	FENCE	
Surveyed Location	MRC	String along fence at ground level
	ADAC 5.0.1	Same as MRC; preferably record point at each upright. Use where appropriate to generate a

		polygon in the office representing an open space with the code “OpenSpaceArea”
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Polyline	
Asset Class/ADAC Element	902 <i>OpenSpace</i> BarrierContinuous OpenSpaceArea <i>OpenSpace</i> OpenSpaceArea	
Extra Comments:		
Description	Fence Post – Isolated	
Survey Code	903	
Layer Name	FENCE POST	
Surveyed Location	MRC	Locate the centre of the post
	ADAC 5.0.1	Same as MRC
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Point	
Asset Class/ADAC Element	<i>OpenSpace</i> BarrierPoint	
Extra Comments:		
Description	Gate	
Survey Code	904	
Layer Name	GATE	
Surveyed Location	MRC	Locate both sides of gate opening
	ADAC 5.0.1	N/A – not a mandatory inclusion
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Polyline	
Asset Class/ADAC Element	<i>Supplementary</i> PolylineFeature	
Extra Comments:		
Description	Bollard	
Survey Code	905	
Layer Name	BOLLARD	
Surveyed Location	MRC	Locate the centre of the bollard
	ADAC 5.0.1	Same as MRC
Required Survey Accuracy	Horizontal (XY)	± 10 mm
	Vertical (Z)	± 20 mm
Object Type	Point	
Asset Class/ADAC Element	<i>OpenSpace</i> BarrierPoint	
Extra Comments:		

APPENDIX A EXAMPLE SKETCHES OF DETAIL CODES

LEGEND

- A123 Additional ADAC Attribute Point and Survey Code
- Abc Additional ADAC Polyline/Polygon and ADAC Name (Office Edits)
- 123 Standard pick-up location for MRC Design and As Constructed and Survey Code

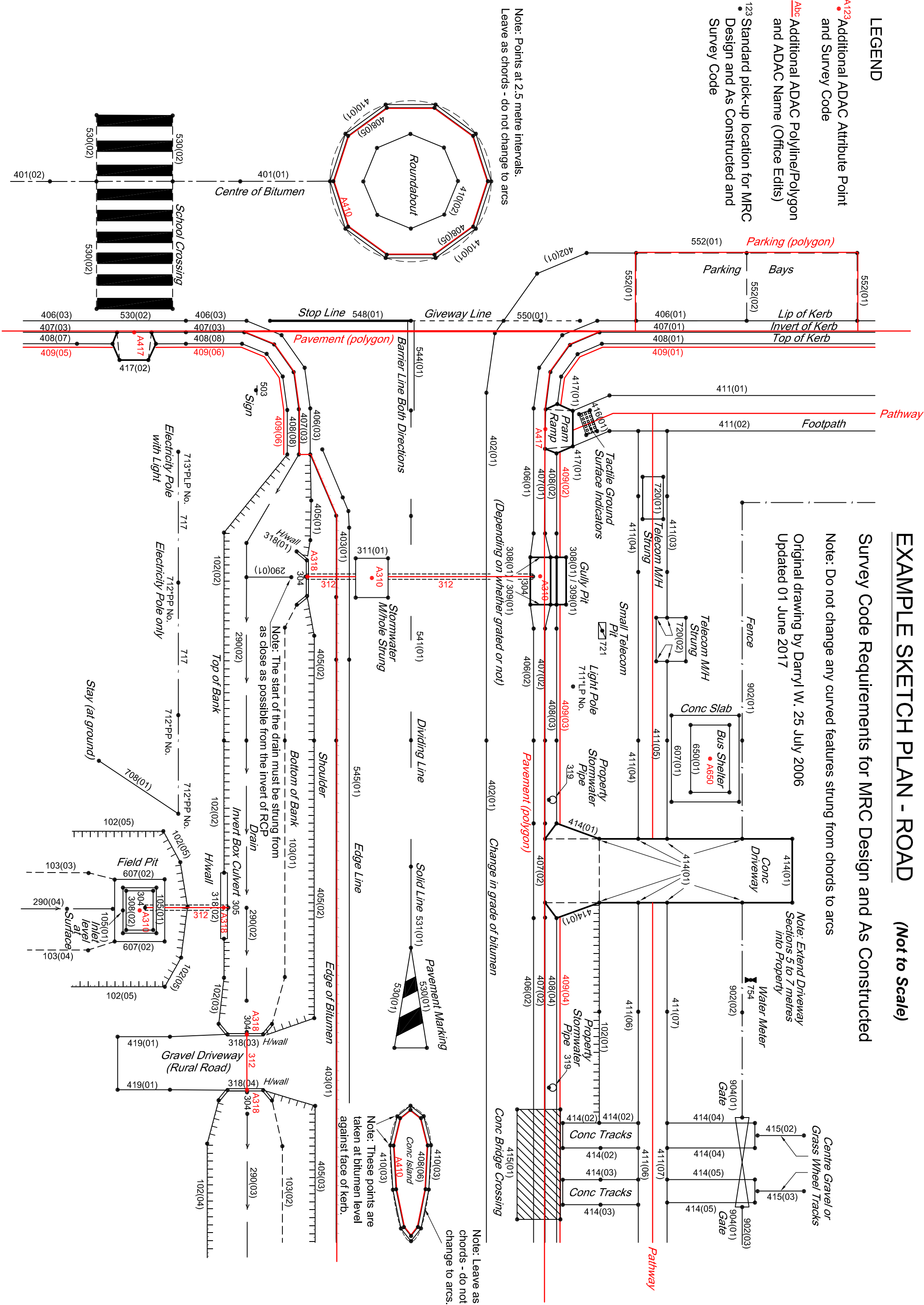
EXAMPLE SKETCH PLAN - ROAD

(Not to Scale)

Survey Code Requirements for MRC Design and As Constructed

Note: Do not change any curved features strung from chords to arcs

Original drawing by Darryl W. 25 July 2006
Updated 01 June 2017



LEGEND

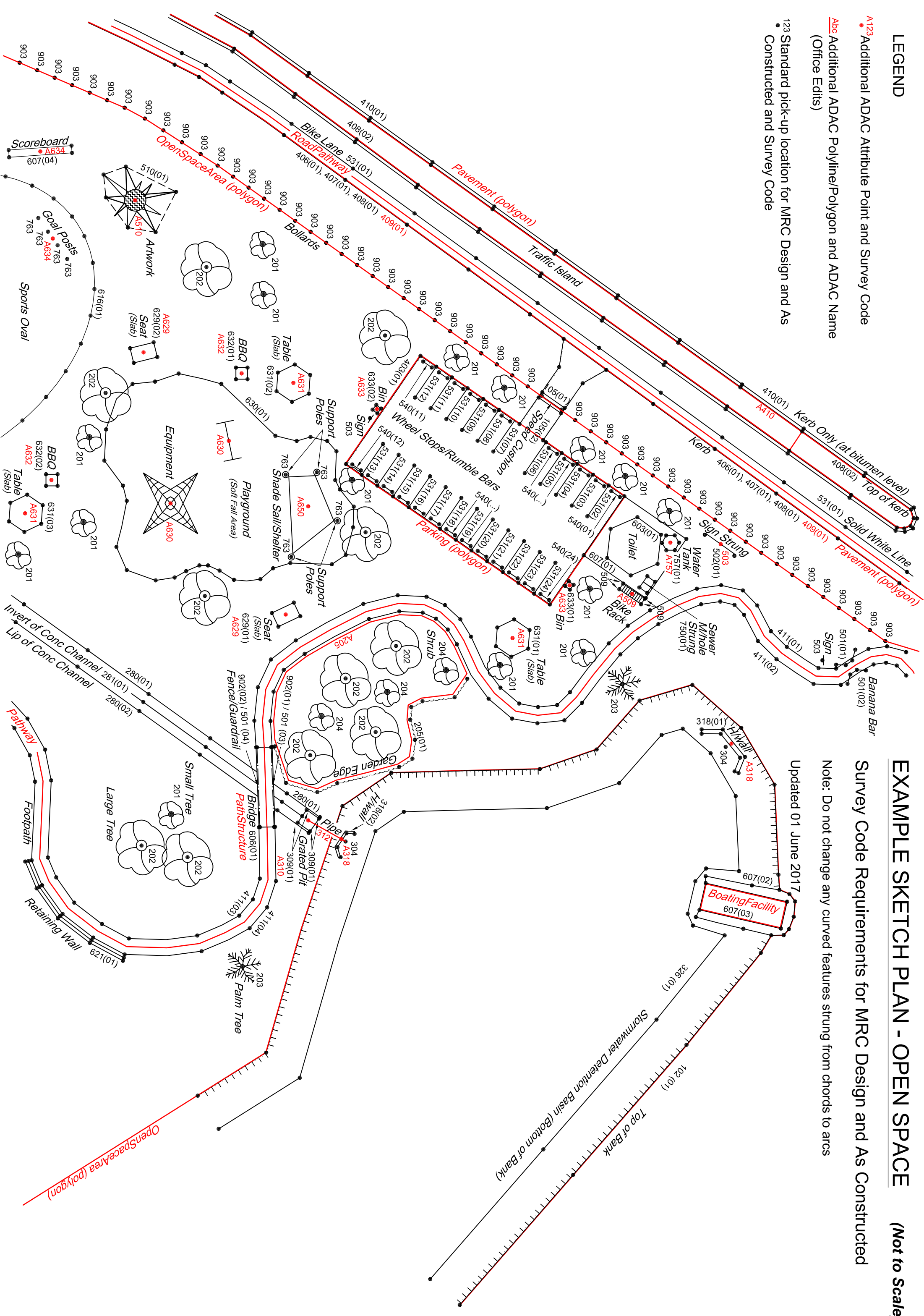
- ¹²³ Additional ADAC Attribute Point and Survey Code**
- Abc Additional ADAC Polyline/Polygon and ADAC Name (Office Edits)**
- ¹²³ Standard pick-up location for MRC Design and As Constructed and Survey Code**

EXAMPLE SKETCH PLAN - OPEN SPACE
(Not to Scale)

Survey Code Requirements for MRC Design and As Constructed

Note: Do not change any curved features strung from chords to arcs

Updated 01 June 2017



LEGEND

- A123 Additional ADAC Attribute Point and Survey Code

Abc Additional ADAC Polyline/Polygon and ADAC Name

- 123 Standard pick-up location for MRC Design and As Constructed and Survey Code

EXAMPLE SKETCH PLAN - SERVICES (Not to Scale)

Survey Code Requirements for MRC Design and As Constructed

Note: Do not change any curved features strung from chords to arcs

01 June 2017

